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## E-Governance and Civic Engagement Factors and Determinants of E-Democracy



**Aroon Manoharan & Marc Holzer** 

# E-Governance and Civic Engagement:

## Factors and Determinants of E-Democracy

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## **Table of Contents**

Preface	1X
1 1 Clace	. 17

#### Section 1 Transparency and Accountability

#### Chapter 1

The ARRA Websites through the Lens of Digital Accountability and Citizen Engagement	1
M. Ernita Joaquin, University of Nevada – Las Vegas, USA	
Thomas J. Greitens, Central Michigan University, USA	

#### Chapter 2

Exploring Determinants of Governmental Transparency: The Case of Municipal	
Websites as a Tool for Proactive Dissemination	25
Erin L. Borry, University of Kansas, USA	

#### Chapter 3

E-Government for Transparency in Mexico: Advances and Limits in Promoting	
Open Government and Citizen Engagement	48
Cristina Galíndez-Hernández, Cívicus Consultores, Mexico	
Ernesto Velasco-Sánchez, Cívicus Consultores, Mexico	

#### Chapter 4

E-Procurement: Understanding Implementation	72
Daniel Bromberg, Western Carolina University, USA	
Karina Saldivar, Rutgers University – Newark, USA	
Marc Fudge, Rutgers University – Newark, USA	

#### Chapter 5

E-Disclosure of Campaign Finance Information: Agenda Setting and Policy Change	
Ramona McNea, University of Northern Iowa, USA	

#### Chapter 6

Courts on Screen: E-Government and the Increase of Judicia	al Transparency11	2
Roberto Fragale Filho, Universidade Federal Fluminens	se, Brazil & Fundação Getúlio Vargas, Braz	zil

#### Section 2 Usability and Accessibility

Chapter 7	
Accessibility and Usability Issues	128
Eugene Monaco, University at Albany, State University of New York, USA	
Stephen Lackey, University at Albany, State University of New York, USA	
Edward Skawinski, University at Albany, State University of New York, USA	
Rebecca Stanley, University at Albany, State University of New York, USA	
Carol Day Young, University at Albany, State University of New York, USA	
Chapter 8	
Facilitating Knowledge Sharing in E-Governance: Online Spatial Displays as	
Translating Devices	149
Jarkko Bamberg, University of Tampere, Finland	
Pauliina Lehtonen, University of Tampere, Finland	
Chapter 9	
E-Governance in Slovenia: National Assembly and its Website as a Tool for Active Citizen	
Participation	173
Suzana Žilič Fišer, University of Maribor, Slovenia	
Sandra Bašič Hrvatin, University of Primorska, Slovenia	
Dejan Verčič, University of Ljubljana, Slovenia	
Petra Cafnik, University of Maribor, Slovenia	
Section 3	
Digital Divide	

Chapter 10 The Global Digital Divide and its Impact on E-Governance	
Michael Howell-Moroney, University of Alabama at Birmingham, USA	
Chapter 11	
Global Digital Divide: Language Gap and Post-Communism in Mongolia Undrahbuyan Baasanjav, Temple University, USA	
Chapter 12	
Internal Digital Divide in Organizations	
Kerstin Grundén, University West, Sweden	

#### Section 4 Local Government Civic Engagement

Chapter 13 Municipal Government and the Interactive Web: Trends and Issues for Civic Engagement
Chapter 14 Small Communities and the Limits of E-Government Engagement: A Northeast Ohio Case Study
Chapter 15 Internet and Citizen Participation: State of the Art, Factors and Determinants at Local Level in Catalonia

#### Section 5 Public Stakeholder Participation

#### Chapter 16

Who Participates Now and Why? A Case Study of Modern Interest Participation	
and Bureaucratic Decision-Making in the Age of E-Government	. 315
William G. Resh, Indiana University, USA	

#### Chapter 17

Introducing Psychological Factors into E-Participation Research	338
Noella Edelmann, Danube University Krems, Austria	
Peter Cruickshank, Edinburgh Napier University, UK	

#### Chapter 18

The Internet and Representative Democracy: A Doomed Marriage? Lessons Learned from the	
Downing Street E-Petition Website and the Case of the 2007 Road-Tax Petition	362
Giovanni Navarria, University of Westminster, UK	

#### Section 6 Advocacy Group Participation

#### 

#### Section 7 Young People and Use of ICT

#### Chapter 21

How Young People are Using Communication Technologies as Platforms and Pathways to	
Engagement: What the Research Tells Us	423
Christopher Peter Latimer, State University of New York College at Cortland, USA	
J. Richard Kendrick Jr., State University of New York College at Cortland, USA	

#### Chapter 22

E-Democracy Postponed: Public Policy Design the Key to UK E-Voting	447
Mark Liptrott, Edge Hill University, UK	

#### Chapter 23

#### Section 8 Social Media Engagement

#### Chapter 24

Empowering People Using Twitter: The Case of Mexico's Internet Tax	488
Rodrigo Sandoval-Almazan, State University of Mexico, Mexico	
Mario Arturo Gutierrez-Alonso, Tecnológico de Monterrey, Mexico	

Chapter 25 Local Government Use of Web 2.0: Los Angeles County Perspective Raoul J. Freeman, California State University, USA Peter Loo, Los Angeles County, USA	505
Chapter 26 The Obama Effect: The Perception of Campaigning 2.0 in Swedish National Election 2010 Anne Kaun, Södertörn University, Sweden Carina Guyard, Södertörn University, Sweden	524
Section 9 Performance Measurement and Citizen Satisfaction	
Chapter 27 Performance Measurement and E-Reporting: Exploring Trailblazing Programs <i>Kathryn Kloby, Monmouth University, USA</i>	544
Chapter 28 Democracy as the Missing Link: Global Rankings of E-Governance in Southeast Asia Jacques DM Gimeno, University of Asia and the Pacific, Philippines	561
Chapter 29 ICT, Unique Identity and Inclusive Growth: An Indian Perspective K. M. Mital, IILM Institute for Higher Education, India	584
Chapter 30 From E-Government to E-Governance: Winning People's Trust Mohammad Nabil Almunawar, Universiti Brunei Darussalam, Brunei Patrick Kim Cheng Low, Universiti Brunei Darussalam, Brunei Mohammad Habibur Rahman, Universiti Brunei Darussalam, Brunei Fadzliwati Mohiddin, Universiti Brunei Darussalam, Brunei	613
About the Contributors	637
Index	649

### Preface

Governments across the world are rapidly transforming to the Internet to provide public services and public administrators are increasingly implementing various strategies to enable this transformation. This phenomenon, broadly referred to as e-government, began in the early 1990s and was gradually adopted by governments and public agencies at federal, state, city, and county levels. Recently, the public sector has extended the scope of e-government to "e-governance," which includes civic engagement and citizen participation. The Internet is a convenient mechanism for citizen-users and advocacy groups to interact with their government, and numerous researchers have highlighted this potential. E-governance refers to both e-government (delivery of public services) and e-democracy (citizen participation in governance). Although, many scholars agree on the potential of e-governance, little has been written about the state of current e-governance practices with regard to online citizen engagement.

The primary purpose of the book is to chronicle the efforts by governments across the world to engage their citizens online. This book presents a wide range of research on different aspects of e-governance and civic engagement including transparency and accountability, usability and accessibility, digital divide, public stakeholder participation, social media engagement, local level government issues, and performance and citizen satisfaction. Focusing on the issues and challenges involving adoption and implementation of online civic engagement initiatives globally, the book should serve as a valuable guide to governments in their transformation to e-governance.

#### TRANSPARENCY AND ACCOUNTABILITY

In Chapter 1, *The ARRA Websites through the Lens of Digital Accountability and Citizen Engagement*, M. Ernita Joaquin and Thomas J. Greitens examine the U.S. state websites' commitment to improving transparency and accountability in light of the American Recovery and Reinvestment Act of 2009 (ARRA). The authors study and evaluate the extent to which state ARRA websites promote citizen engagement and government accountability, arguing that performance-based government accountability should accompany efforts to increase citizen engagement. The research reveals that states are better at including engagement data than at demonstrating performance-based accountability and that various public services are now more efficiently provided through the Internet, along with access to information, particularly those in regard to budgetary matters. The chapter concludes with suggestions for enhancing e-governmental aspects.

In Chapter 2, *Exploring Determinants of Governmental Transparency: The Case of Municipal Websites as a Tool for Proactive Dissemination*, Erin L. Borry examines the proactive dissemination behaviors of New Jersey's 566 municipalities through a content analysis of their websites. Arguing that transparency provides residents with information that has the potential to improve citizen participation and engagement, Borry focuses on proactive dissemination, one of the lesser studied of the five avenues of transparency. Based on her cluster analysis research, per capita income, population, age, and percentage of non-white and rural populations all have some degree of impact on the posting behaviors of municipalities. The author thereafter provides directions for further research on measuring proactive dissemination and encourages future researchers to include more governmental determinants for transparent behavior as well as to explore whether or not transparency translates into greater citizen participation.

In Chapter 3, *E-Government for Transparency in Mexico: Advances and Limits in Promoting Open Government and Citizen Engagement*, Cristina Galíndez-Hernández and Ernesto Velasco-Sánchez discuss the implications of e-government for transparency in Mexico together with the advances and limitations in promoting open government and citizen engagement. Galíndez-Hernández and Velasco-Sánchez provide a brief background on the development of e-government at that country's federal level and examine the use of information technology in the implementation of the Federal Law on Transparency and Access to Public Government Information in April 2002. This law highlights Mexico's efforts in the recognition and protection of the right to access government information. In concluding this chapter, the authors examine the institutional, structural, and behavioral factors affecting the use of ICTs for promoting transparency and fostering citizen engagement in Mexico.

In Chapter 4, *E-Procurement: Understanding Implementation*, its authors, Daniel Bromberg, Karina Saldivar, and Marc Fudge explore the phenomenon of electronic procurement at the municipal level in the United States and across the world. Apart from cost-savings, the authors found that many governments are recognizing e-procurement as a tool to achieve transparency and accountability, especially through the use of a centralized system to monitor contracts. Based on two sets of data from the E-Governance Institute at the School of Public Affairs and Administration, Rutgers-Newark, the authors provide a comparative analysis of the implementation of e-procurement within the U.S. and internationally. Their findings suggest a broad implementation of electronic procurement throughout the world; however, they also demonstrate that there is uneven implementation as to the details of adoption.

In Chapter 5, *E-Disclosure of Campaign Finance Information: Agenda Setting and Policy Change*, Ramona McNeal uses panel corrected cross-sectional time series analysis to examine the factors influencing increased interest in e-disclosure laws at the state level from 2005-2009. Throughout the United States, disclosure has long been a primary tool in fighting corruption, and recent scandals involving money in politics have only helped place disclosure back on the agenda of many of the 50 states. Moreover, with the adoption of e-governance, many new laws regulating disclosure have taken the form of e-disclosure. However, current e-disclosure policies at state levels differ in their requirements on posting campaign finance information and the level of donor employment information online. McNeal reports that the states also vary in their response to recent pressure to strengthen these policies. The author concludes with an analysis of the factors affecting the variation in legislative responsiveness to demand for greater transparency in the electoral process, followed by a general discussion on agenda setting theories and the history of campaign finance reform in the United States.

In Chapter 6, *Courts on Screen: E-Government and the Increase of Judicial Transparency*, Roberto Fragale Filho examines the role of *TV Justiça* – the official Brazilian court TV – in increasing judicial transparency and accountability. Filho argues that while public access to government information and

services and public scrutiny of governmental agenda are key issues for e-government in Brazil, the courts are also a part of government. Therefore, their compliance with e-government matters should not be limited to the existence of websites and the availability of information. The author believes that media convergence, the use of social media and live broadcasting on the web, reinvigorates the old debate on the presence of cameras in the courtrooms and challenges the secrecy of judicial deliberations. The chapter concludes with an examination of the phenomenon of *courts on screen - TV Justiça*, its recent arrival on *YouTube* and *Twitter*, and its implications for judicial transparency and accountability in Brazil.

#### USABILITY AND ACCESSIBILITY

In Chapter 7, *Accessibility and Usability Issues*, Eugene Monaco, Stephen Lackey, Edward Skawinski, Rebecca Stanley, and Carol Day Young examine issues surrounding accessibility and usability as gateways to e-governance. The authors take the position that democratic governments seek to serve all citizens equally and fairly. Thus, achieving this ideal in e-governance is dependent upon a government's commitment to the development of websites and web applications that encourage and enable participation by all. The authors argue that in the United States, accessibility is addressed as a civil right for individuals with disabilities as codified in Section 508 of the Rehabilitation Act. They then go on to examine the professional and legal standards for accessibility and usability as well as actual implementation based on a survey of New York State webmasters. Their study particularly focuses on the differences in perception between IT professionals and agency management with respect to the relative importance of accessibility and usability, and provision of resources to enhance usability.

In Chapter 8, *Facilitating Knowledge Sharing in e-Governance: Online Spatial Displays as Translating Devices*, Jarkko Bamberg and Pauliina Lehtonen introduce a case study on developing practices of neighborhood participation by utilizing ICTs in the city of Tampere, Finland. They report that a citizen panel organized by a participatory action research project attempted to determine meaningful ways for residents to influence the development of the Tesoma neighborhood in the city of Tampere. The authors' case study suggests that interactive online spatial displays such as interactive maps and simulations have the potential to facilitate meaningful exchange of information by three mechanisms of translation: 1) giving access to information from viewpoints familiar to the residents, 2) aiding the translation of technical-rational information of public administration for citizens with illustrative visualizations, and 3) giving residents multimodal means of producing input to administrators and planners.

In Chapter 9, *E-Governance in Slovenia: National Assembly and its Website as a Tool for Active Citizen Participation*, Suzana Žilič Fišer, Sandra Bašič Hrvatin, Dejan Verčič, and Petra Cafnik evaluate the usability of the website of the National Assembly of the Republic of Slovenia. With ICTs enabling increased political participation online, the authors argue that the inclusion of citizens in the working of their highest political body - the parliament- should be easier than ever. In this chapter, the authors analyze the usability, usefulness, and utility of the parliamentary website and examine the feasibility of citizen participation at each stage of the decision-making process. Lastly, the authors report on the limits of the current website of the National Assembly of Slovenia and propose guidelines for increasing usability and improving user experience.

#### DIGITAL DIVIDE

In Chapter 10, *The Global Digital Divide and Its Impact on E-Governance*, Michael Howell-Moroney explores the digital divide and the scholarly research investigating the factors affecting its explication. As technology advances across the globe, Howell-Moroney argues that it is accompanied by an increasing disparity in its diffusion, adoption, and utilization. The author then examines the evidence for the digital divide and the empirical research that has examined its causes and correlates. Howell-Moroney explores the connections between the digital divide and prospects for e-government and e-governance worldwide and finds that the digital divide is largely explained by variations in national wealth. He concludes his discussion with current policy choices and dilemmas posed by the digital divide.

In Chapter 11, *Global Digital Divide: Language Gap and Post-Communism in Mongolia*, Undrahbuyan Baasanjav examines the digital divide in the former socialist country of Mongolia and the language factors that exacerbate this divide. Despite the relatively high illiteracy rate, Baasanjav believes that Internet use is still low partly due to the use of the Cyrillic alphabet and the low degree of English knowledge among Mongolians. She then explores the influence of post-communist political setting, aid dependency, and international organizations on Internet development in Mongolia. Particularly, initiating non-western alphabet domain names and setting culturally inclusive non-western alphabet standards have been essential in achieving linguistic diversity on the Internet and overcoming the digital divide in countries like Mongolia.

In Chapter 12, *Internal Digital Divide in Organizations*, Kerstin Grundén examines the digital divide from an organizational perspective by studying the internal digital divide aspects in organizations, especially those involved in the implementation process of e-government. Grunden reports that research often ignores the internal digital divide in organizations: the divide between employees who are interested and motivated to engage in the implementation process of e-government, and those who are not. The chapter is based on a longitudinal case study focusing on the implementation of e-government at the County Administrative Board in Sweden and focuses upon various aspects related to the internal digital divide, such as learning, motivation, professionalization, management strategies, and organizational culture. In conclusion, Grundén examines the possibility of Soft Systems Methodology as a strategy for analysis and change of internal digital divide aspects together with a discussion among the concerned communities.

#### LOCAL GOVERNMENT CIVIC ENGAGEMENT

In Chapter 13, *Municipal Government and the Interactive Web: Trends and Issues for Civic Engagement*, Benedict S. Jimenez, Karen Mossberger, and Yonghong Wu look at the opportunities for citizens to interact online with local government within the United States. Based on a content analysis of the websites of the 75 largest U.S. cities, the authors identify the extent to which websites provide features that facilitate online information customization and online citizen participation. Their research discloses that many municipal governments have steadily developed their online capacity to provide information to local residents, but new media such as Facebook, Twitter, and YouTube remain underutilized. Moreover, their findings reveal that cities with large African-American and Latino populations tend to have less interactive websites, while the largest cities are more likely to have more participatory opportunities online.

In Chapter 14, Small Communities and the Limits of E-Government Engagement: A Northeast Ohio Case Study, John Hoornbeek, Kent Sowards, and Brian Kelley examine e-government engagement

among small communities in northeast Ohio. The chapter assesses the extent to which small communities in northeast Ohio use websites to engage their citizens. Additionally, the authors analyze factors specifically influencing small local governments to establish websites and develop them with multiple attributes to enable citizen engagement. Their findings indicate that limited capacities and uncertain demands contribute to the limitations of small community website operations. The authors also provide an understanding of constraints to e-government transformations as well as the inconsistent nature of online citizen engagements.

In Chapter 15, *Internet and Citizen Participation: State of the Art, Factors and Determinants at Local Level in Catalonia*, Clelia Colombo examines online and offline participatory experiences, as well as participatory functionalities through local government websites in Catalonia. Colombo finds that ICTs have been incorporated into politics and democratic innovation experiences, such as citizen participation in public decision-making. However, she states that there are important differences in the drive for and the development of electronic participatory experiences and that data collection methods are inconsistent. The author explores the nature of experiences being promoted online and determines the factors affecting participatory experiences including political affiliation of the mayor, electoral abstention rate, and the municipality or the population size.

#### PUBLIC STAKEHOLDER PARTICIPATION

In Chapter 16, *Who Participates Now... and Why? A Case Study of Modern Interest Participation and Bureaucratic Decision-Making in the Age of E-Government*, William G. Resh examines how technological changes to the opportunities for participation in the notice-and-comment stage of the rulemaking process impact the quality, quantity, and content of information provided by stakeholders to governmental decision-makers. Secondly the author examines how the dimensions of complexity and salience of policy issues affect the levels of stakeholder participation in regulatory policy-making. Based on interviews with regulatory analysts involved with the transition to www.regulations.gov, the author demonstrates that the pursuit of equity and securing the individual rights of citizens to participate is not necessarily compatible with the values of economy, efficiency, and effectiveness.

In Chapter 17, *Introducing Psychological Factors into E-Participation Research*, Noella Edelmann and Peter Cruickshank examine the process of e-petitioning as a successful application of e-participation from a psychological perspective. Among the various tools for e-participation, the authors present a persuasive discussion that online petitions, also called e-petitions, are considered to be one of the most mature and proven tools, with a comparatively long history as part of the established political processes. The authors present an analysis of the psychological dimensions such as personality, needs and self-efficacy affecting citizens' behaviors and intentions in engaging with an e-participation system. Their study provides an understanding of patterns of uptake, the use of e-petitioning systems, as well as the factors that influence the citizens' decision-making process.

In Chapter 18, *The Internet and Representative Democracy: A Doomed Marriage? Lessons Learned from the Downing Street E-Petition Website and the Case of the 2007 Road-Tax Petition*, Giovanni Navarria studies the Road Tax online-petition which attracted almost 2 million signatures on the UK Government e-Petition website in early 2007. He finds that while new communication media such as the Internet promises potential in the fight against the hubris of power, these same technologies can serve the agenda of those who want to influence popular consent in support of questionable politics. This

can hinder the representative system in its very essence. The author explains how simple and historical participation vehicles such as petitions can lead to unexpected outcomes when provided through Web technologies. Using the road-tax petition as an example, Navarria sets forth the possibilities embedded in the use of new technologies within representative democratic systems, the challenges they pose for democracy and their unforeseen consequences.

#### **ADVOCACY GROUP PARTICIPATION**

In Chapter 19, *ICTs for Empowerment? Disability Organizations and the Democratizing Potential of Web* 2.0 in Scotland, Filippo Trevisan analyzes the websites of Scottish disability organizations and explores the potential for more participatory relationships with disabled people. Trevisan discusses how voluntary organizations and advocacy groups have become increasingly influential in British politics as intermediaries between institutions and citizens. However, the public remains concerned on their representativeness, accountability, and the legitimacy of their role in governance. The author analyzes these issues through the results of an empirical study of Scottish disability organizations' websites. Trevisan concludes that while the Internet promises the potential of breaking down barriers, he also finds that disabled users seem at best to be mobilized around a pre-determined agenda rather than genuinely engaged as participants.

In Chapter 20, *A Longitudinal Study of Political Technology Use by Nonprofit Child Advocacy Organizations,* John McNutt and Janice Barlow address the use of technology by a group of state level nonprofit advocacy organizations over three periods of time. The authors posit that recent rents in devolution have resulted in many of the policy battles being conducted at the state level, with state advocacy organizations replacing national level organizations on the front lines. The research questions raised by the authors in this study are: (1) what types of high technology are state level child advocacy organizations using in their policy work and how has this differed over time? (2) What technologies have been adopted and then discarded? (3) What organizational and technology characteristics predict higher levels of adoption and institutionalization? The researchers report that technology remains active in most cases while new technology begins to emerge.

#### YOUNG PEOPLE AND USE OF ICT

In Chapter 21, *How Young People Are Using Communication Technologies as Platforms and Pathways to Engagement: What the Research Tells Us*, Christopher Peter Latimer and J. Richard Kendrick, Jr. examine how communication technologies are being used by young people as platforms and pathways for civic and political engagement. They report that previous research has often ignored the differences between individuals engaged only by using communication technologies (technology as a platform for participation) versus those engaged beyond the use of communication technologies (technology as a pathway for participation). According to the authors, clarifying this distinction will help government officials to develop appropriate strategies for engaging young people through technology. The authors also provide recommendations to policy and decision makers based on the results of their analysis of the extant literature.

In Chapter 22, *E-Democracy Postponed: Public Policy Design the Key to UK E-Voting*, Mark Liptrott discusses the strategy of the UK government in promoting e-democracy through the ballot box, arguing

that the design of the UK electoral modernization policy, which introduced e-voting, inhibits the development of e-democracy. Liptrott states that the UK government proposes to introduce e-voting through the public policy process as part of the strategy to enhance participation in representative democracy. However, the weaknesses and omissions in the design of the public policy influence e-voting adoption decisions of local authorities and their availability to the public. The chapter concludes with a recommendation to address policy weaknesses and a suggestion for future research along with emphasizing the need to evaluate Citizenship Education as a strategy to boost civic engagement.

In Chapter 23, *The Internet as the Public Sphere: Deliberative Democracy and Civic Engagement,* Jarice Hanson and Alina Hogea summarize some of the key perspectives of scholars and practitioners on the potential of the Internet to facilitate civic engagement and enable the public to form opinions. This facilitates civic discourse and the shaping of public opinion. The authors suggest that Internet has often been heralded as a tool for e-governance and public action because of its ubiquity, accessibility, and the ability for users to participate in online expressions of opinion. Based on the work of Jurgen Habermas to identify the preconditions for the functioning of a "public sphere," the authors address four distinctly different approaches to the discussion of the Internet's role as an effective tool for deliberative democracy.

#### SOCIAL MEDIA ENGAGEMENT

In Chapter 24, *Empowering People Using Twitter: The Case of Mexico's Internet Tax*, Rodrigo Sandoval-Almazan and Mario Arturo Gutierrez-Alonso explore the uses and misuses of Twitter in Mexican online protests and in common citizen-user interactions. The authors report that Twitter is being increasingly utilized in Mexico as a platform to form and push ideas regarding government policies. This technological tool enables citizens to pressure political actors and the media to clarify their positions on certain issues. The authors review the origins and fundamental principles of Twitter and social interaction, along with discussing the outcomes and possible implications of citizens' empowerment through Twitter. The authors conclude with an explanatory model of e-participation as a possible explanation of this phenomenon, and the promotion of ideas in order to utilize Twitter to its maximum potential.

In Chapter 25, *Local Government Use of Web 2.0: Los Angeles County Perspective*, Raoul J. Freeman and Peter Loo analyze the potential of Web 2.0 technologies for e-government applications in Los Angeles County. Web 2.0 refers to various networked applications utilizing technologies such as application mashups, content syndication, videocasts, wikis, blogs, social networking, user tagging, social bookmarks and content, and service rating. These technologies are used to reach or attract a greater audience, thereby enhancing citizen outreach, and increasing the effectiveness of e-government applications. Nevertheless, the authors argue, the utilization of seemingly attractive technological opportunities in government is often tempered by organizational, implementation, and social responsibility constraints. The chapter presents the opportunities for Web 2.0 capabilities for Los Angeles County and discusses the factors that should be considered in the adoption and implementation of Web 2.0 in local governments.

In Chapter 26, *The Obama Effect: The Perception of Campaigning 2.0 in Swedish National Election 2010*, Anne Kaun and Carina Guyard present a survey study on attitudes towards political campaigning in social media. Although several studies have focused on e-democracy at a macro level, few studies have examined the phenomenon of campaigning 2.0 as perceived by the actual voters. The chapter examines the perception of political campaigning through social media by voters in the 2010 national election in Sweden. The authors' main findings are that respondents, who were already interested and politically

engaged, considered campaigning 2.0 as a way to enhance democracy. Those who were neither interested nor engaged in politics showed little interest in this kind of communication. Moreover, their study confirms assumptions about digital divide and continued fragmentation of the citizenry.

#### PERFORMANCE MEASUREMENT AND CITIZEN SATISFACTION

In Chapter 27, *Performance Measurement and E-Reporting: Exploring Trailblazing Programs*, Kathryn Kloby explores the topic of e-reporting and its potential in engaging the public in the assessment of government performance. Kloby reports that in the public sector, administrators and the agency staff often design performance measurement systems without much citizen input. Additionally, even performance reports are typically treated as internal documents without any information on how government actions impact the lives of citizens. Kloby explores how performance measurement and e-government strategies intersect resulting in the phenomenon of e-reporting, particularly with the increasing public demand for transparency and accountability in government spending and services. She presents three leading models of e-reporting in the United States: Virginia Performs, Maryland's BayStat, and King County AIMs High, and examines their efforts in reporting performance results to the public via sophisticated e-reporting strategies.

In Chapter 28, *Democracy as the Missing Link: Global Rankings of E-Governance in Southeast Asia,* Jacques DM Gimeno discusses the impact of worldwide e-governance rankings on the perception of good governance, which in some cases may lead to the notion that effective e-governance, is a reflection of a truly democratic system. Gimeno's research focuses on countries in Southeast Asia that are regularly measured for good governance and the resulting difference between their ranks in effective traditional governance and e-governance provide grounds for contentious interpretation. The author specifically explores the possibility of reconciling traditional governance and e-governance really enabled a genuine democratic system? Gimeno concludes with an emphasis on the inclusion of e-democracy in the discussion of e-governance in Singapore, Malaysia, Thailand, Indonesia, and the Philippines.

In Chapter 29, *ICT, Unique Identity and Inclusive Growth: An Indian Perspective,* Krishna Mital reviews the role of ICT and UID numbers in achieving inclusive growth, efficiently accessing public services, and achieving higher standards of livelihood and quality-of-life sustained though different welfare schemes. The government of India has recently sought to establish identity of country's each resident including migratory population from one state to another through IT-enabled unique identification (UID) numbers under the aegis of Unique Identification Authority of India (UIDAI), which shall lead to inclusive growth.

In Chapter 30, *From E-Government to E-Governance: Winning People's Trust*, Mohammad Nabil Almunawar, Patrick Kim Cheng Low, Mohammad Habibur Rahman, and Fadzliwati Mohiddin discuss the various models of e-government and the differences between e-government and e-governance. They probe one of the key challenges facing e-governance today – building people's trust in governance - and argue that good governance features must be embedded in e-government in order to build a highly trusted e-government system. The authors also analyze the different elements of trust - reputation, performance, and appearance- and propose a trust model as a guideline to develop a trusted e-governance system.

Section 1 Transparency and Accountability

## Chapter 1 The ARRA Websites through the Lens of Digital Accountability and Citizen Engagement

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#### ABSTRACT

Modern information technology offers new ways of fulfilling democracy's goals. Various public services are now more efficiently facilitated through the Internet. Online information, particularly in regard to budgetary matters makes governments visible and open. Efforts remain inadequate, however, in harnessing electronic means to foster greater links between governments and citizens. In this chapter we argue that performance-based government accountability should accompany efforts to increase citizen engagement. We explore this area using a recent, intergovernmental arena of e-governance: the state websites for the American Recovery and Reinvestment Act of 2009 (ARRA). We find that states are better at including engagement data than at demonstrating performance-based accountability. At the end of the chapter we suggest enhancing e-governance relationships through a dialogue on performance and sustaining digital democracy, including its intergovernmental aspects.

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#### INTRODUCTION

As we are learning, transparent reporting is a challenging endeavor...plagued with a multitude of mistakes and missteps...Although there is much to do...we have accommodated the needs of technologically sophisticated users...helping us send a message to the American people that we are here to protect Recovery funds and...keep a close eye on ensuring that the processes related to their allocation and use are transparent and accountable. - Earl Devaney, Recovery Accountability & Transparency Board Report (Office of the Vice President, March 2010, p. 2)

When a recession hit the United States hard in 2008, electronic government or e-government came to the fore in government's execution of fiscal policy. With the nation suffering from severe unemployment and tightened credit, President Barack Obama in 2009 signed the American Recovery and Reinvestment Act (ARRA) to save jobs and stimulate public sector demand. ARRA injected a huge amount of funds to projects and services of federal agencies, the states, and local governments. To make the recovery effort transparent, the government monitored ARRA fund distribution and reported it publicly through a national electronic portal / recovery website.1 The Recovery Accountability and Transparency Board, consisting primarily of government Inspectors General was created to monitor spending and publicly release quarterly reports to the President and Congress. With the ARRA website and the continuous reporting of the flow of funds through the system, the board strived to meet its "ultimate goal" of providing "usable, readable data that informs people and allows them to view, question, and interpret the data" (Office of the Vice President, 2010, p.4). To encourage citizens to explore the government's Recovery.Org website and witness the government's commitment to transparency in spending matters, the website was bannered with the phrase, "Track the Money."

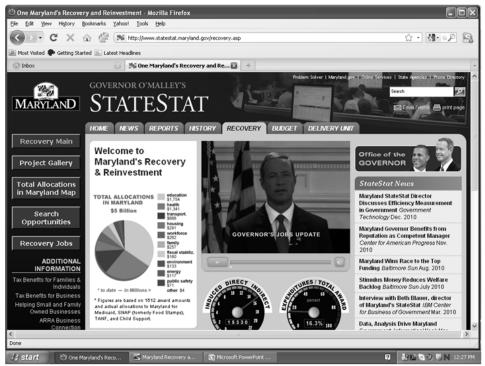
The recovery effort and its attendant commitment to transparency extended to the states. The White House directed state governments to develop and promote their own recovery websites in order to better communicate what the government was doing to improve the nation's economic condition. The state websites primarily reposted data from the federal site but as time went on, the quantity and type of the information on the sites seemed to diverge from one state to another. The states poured different levels of resources and e-government experiences into developing and maintaining their ARRA websites. One state whose ARRA site contained up-to-date and user-friendly information was that of Maryland 2 (see Figure 1). Because the state followed an award-winning performance-measurement and -management model or approach to e-government, their ARRA or Recovery website had a solid foundation in electronically communicating to citizens the federal government's stimulus policy.

ARRA spending captured a high volume of political attention about the government's role and performance in job creation. E-government reporting of ARRA spending allowed the public to scrutinize policy choices and implementation. But it also exposed the challenges in accomplishing e-democracy in fiscal policy, including its inter-governmental aspects.

#### BACKGROUND: ARRA AS A PLATFORM FOR E-DEMOCRACY

Worldwide, democratic governments are under pressure to improve accountability and transparency, particularly in matters of budget and finance. In some places, citizens feel an absence of control over public affairs, beyond the occasional means of voting. As it happens, advances in information technology promise to improve these dynamics. Egovernment "allows for greater...transparency and openness, which can lead to a better informed citizenry and increased accountability" (Carrizales,

Figure 1. Maryland's recovery and reinvestment website



2010 State of Maryland. Used with permission by the Office of Governor Martin O'Malley, State of Maryland.

2008, p. 15). What made ARRA an inviting case to study is that it stood at the intersection of the issues of e-democracy: accountability and transparency of government to its citizens, on one hand, and the challenges involved in effective e-government, on the other. Thus e-government became integral to the stimulus funding policy. As a survey of federal chief financial officers points out: "Transparency is the foundation for this approach to government, especially for financial and performance information, and is inextricably linked to fiscal recovery" (Association of Government Accountants & Grant Thornton, 2009, p. 1). The White House made it clear that a more transparent government leads to better results, that democratic openness is not anathema to more effective fiscal management and performance. Defining his administration's understanding of e-government's goals, the Obama administration declared that "Government should be transparent...Government should be participatory...Government should be collaborative" and that agencies should harness new technologies to solicit information, post decisions, and increase participation and collaboration among citizens and agencies online (Foltz et al., 2011, pp. 175-176). With ARRA's e-government component, there is now a test case for a preliminary assessment of the administration's goals for e-democracy. For greater relevance to citizens, we focus here on the states and their ARRA websites.

This chapter is organized in the following manner: our research goal is to evaluate the state ARRA websites on the extent to which they promote citizen engagement and government accountability. We explain why ARRA websites are significant in triangulating the issues of egovernment, transparency, and participation, and inter-governmental coordination in making implementation as transparent as possible in the case of the national recovery policy. Our review of the literature describes the progression of ideas in citizen participation and government accountability - rooted mainly in the budget decision making literature - and how these ideas acquire a new flavor when information technology is introduced in governance.

Following that is our methodology for evaluating the states' websites, which incorporate our notion of performance-driven accountability and engagement (Greitens & Roberson, 2010; Joaquin & Greitens, 2010). At the outset we need to point out that budgeting and the concept of performance figure prominently in our discussion. A maturing e-government system should involve, we believe, greater openness in fiscal / budgetary matters and it is from the budgeting field that the performance movement, so prevalent today (Moynihan, 2008) arose in large part. Performance measurement was borne of attempts to link agency budgets with agency performance, and the taxpayers' right to assess that performance. While we do not analyze budgets in this case, we do analyze ARRA website contents similarly to how we would analyze a budget. We consider both budgetary openness and accountability. We report our findings at the end and suggest some recommendations for practitioners.

#### SIGNIFICANCE OF THE STUDY

The importance of public scrutiny and open governments, achieved through e-government, insures the timeliness of studying the ARRA websites' presentation and contents. The 2008 recession birthed diverging views on the role of government in devoting public expenditures to stopping widening unemployment and preventing certain industrial collapse. Making the effort transparent through the ARRA websites, therefore invites a new way of appreciating the contributions of e-government. Good Jobs First, a coalition for government transparency, put it this way: The use of ARRA websites to inform the public is more than a matter of providing a service to state residents. The way in which the information is presented shapes public attitudes toward the stimulus and could play a significant role in debates over future government interventions in the economy. (Mattera et al., 2009, p. 6)

Conceptually, this study integrates the claims for e-government in a democracy: first, that democratic accountability is enhanced through transparency of public sector actions and performance. Second, citizen participation in policy deliberation, such as today's controversial fiscal policies, is simultaneously a goal and a manifestation of democracy. Information technology advances these claims. It potentially increases the level of trust and the ease with government can showcase performance, which is essential for meaningful accountability and participation. What has been lacking in research is a triangulation of these themes. As Justice, Melitski, and Smith (2006) found, the link between e-government reforms and fiscal transparency has been left unexplored for a long time. Scholars need to draw that connection. In the review that follows, we elaborate on these individual themes and the handful of studies that attempted to link these themes.

#### THE LITERATURE ON ACCOUNTABILITY, ENGAGEMENT, AND E-GOV

Drawing the connection between accountability, engagement, and e-government begins with a discussion of what accountability entails. Its essence is transparency or openness: a government could simply not be accountable when it is not transparent about its operations and results. "Transparency is fundamental to the legitimacy and effectiveness of any government" (Scott, 2005, p. 153). Democratic governments are constituted and operate on the assumption that they seek and represent the collective interest. Representation and interest aggregation require structures to channel preferences up and down and promote feedback from below on policies and action. To this end, legitimacy of policy deliberation, formulation and execution is aided by transparency.

In the language that e-government promoters use, transparency is the capacity of a government website to make it "easy for users to monitor official public records and to communicate with (government) officials" (Scott, 2005, p. 152). For example, an analysis in 2004 of 100 municipal websites found that of five indicators of the quality of websites, transparency is the easiest for municipalities to achieve3 (Scott, 2005). To that extent, e-government is a tremendously helpful tool for transparency and accountability.

Few public documents that embody governmental decisions are as important to the lives of citizens as the budget, with its mix of revenue and expenditure priorities. Transparency in this area is a perennial quest in democratic administration. Accountability entails making budget inputs, decisions, and outcomes more transparent and accessible to the public, a notion that is hardly new; since the Progressive Reform movement, demands for accountable government have always involved matters of transparent taxation and budgeting (Rubin, 2006). Accountable governments, especially during fiscal crises such as the one that had led to the enactment of the 2009 ARRA, are strongly associated with transparent budget stewardship. In the succeeding section, we review citizen engagement and the studies that put it in the context of budget deliberation and governments' fiscal responsibility.

#### Government Accountability + Citizen Engagement

The other side of accountability/ transparency is the level with which openness on the part of leaders is met with citizen attention and involvement. Openness can be a one-way mechanism whose impact is known only to policymakers through the ballot box. But effective democracy behooves spirited citizen participation in deliberative activities (Box et al., 2001). Accountability is not simply that of a government to its public; in the most fundamental sense it is the people that have to make a government accountable (see Berner & Smith, 2004; Ebdon & Franklin, 2004; Simonsen & Robbins, 2000). Deliberative democracy and transparency are faces of the same coin. But to what extent has this occurred?

The pros and cons of citizen participation are apparent from places that have tried using direct democratic tools. In the U.S., the mandate for public hearings can be traced to the requirements of the federal Housing Act of 1949 (Robbins et al., 2008). In the 1970s, local and state governments followed suit, using surveys, mainly, to determine citizens' preferences (Ebdon & Franklin, 2006). Various views on the merits of direct participation ensued. The "pro" arguments consist primarily of the legitimizing, empowering, and bonding functions of direct democracy (Roberts, 2004). This was echoed by scholars of budgeting (Bland & Rubin, 1997). Though there is always a struggle between transparency and political acceptability in budgeting, more transparency is still necessary (Rubin, 2006). But some places have less enthusiasm for citizen participation, arguing that citizens: lack the necessary deliberation expertise, are too emotional about issues, unfamiliar with bureaucratic routines, and too difficult to control. Hence, participation may increase the level of conflict and the amount of time it takes to reach decisions. "In an ideal bureaucracy," according to authors Kweit and Kweit, "there is no place for citizen participation" (1984, p. 235). Some administrators feel that input from citizens cannot be realistically incorporated into decision-making (Callahan, 2000).

Where fiscal stewardship is concerned, a baseline study of citizen participation in the states by Berner and Smith (2004) found that most states require local governments to provide notice of and hold a public hearing on their proposed budgets. In publicizing the document, many states require that they publish at a least a summary of the proposed budget; only about half require that the entire proposal be available; and very few require publishing the final budget (Berner & Smith, 2004, p. 147). State statutes provide for the timing of notices and hearings, and most are very specific about the information that should be in the notice of hearings (Berner & Smith, 2004, p. 17).

So far, openness has produced mixed effects. In a study of public managers, citizen participation was correlated with increased public trust, but not specifically for budgeting (Wang, 2001). Public hearings, the staple approach to participation in budgeting (Adams, 2004; Ebdon & Franklin, 2004), had questionable effects on policymaking (Cole & Caputo, 1984). Signs that openness does not always elicit participation, or that participation is not always effective, or welcome, appeared in a few other studies. Many people seemingly did not notice or care about budget transparency, for example when considering measures of budgetary performance that should help them better understand budgetary outcomes, according to studies (Lynn Jr. et al., 2000; Swindell & Kelly, 2000).

Could there have been structural reasons behind the low level of participation or the lack of effect? Carol Ebdon and Aimee Franklin have performed some of the most systematic studies on budget process openness and its gains (Ebdon, 2000; Ebdon, 2002; Ebdon & Franklin, 2004); Ebdon & Franklin, 2006). Ebdon (2000; 2002) tested the correlation of different variables to budget participation tools in local governments, such as the structure of local elections and the form of government. Some of the evidence revealed that council-manager cities were more likely to have mechanisms for budget participation. In a case study of two cities in Kansas, Ebdon and Franklin (2004) found limited effectiveness of participation, which might be attributed to factors such as timing of the input, unstated or unclear goals of participation, implementation difficulties, and political and environmental constraints. In the end, the authors saw no changes in public resource allocation that could be accounted for by citizen participation.

This kind of weak result from citizen participation stems from the high cost of participation compared to its perceived benefits, according to authors Irvin and Stansbury (2004). Weak effects can also result from inadequate invitation, or encouragement (Simonsen et al., 1996. For participatory mechanisms to succeed, administrative support must be present, first, despite the costs (Irvin & Stansbury, 2004), and any input from citizens must be shown later to affect policy or decision making tangibly, not just to ratify previously conceived decisions or satisfy legal requirements (Bland & Rubin, 1997; Daniels, 1999; Rowe & Frewer, 2000; King et al., 1998). Ideally, e-government should help transcend these barriers of costs, support, and legitimacy by allowing for an easily accessible online interface by all parties. However, as the ARRA experience would later show, when governments must deal with other governments and apply the same goals of accountability and engagement, the administrative hurdles can increase despite the technology.

#### Accountability + Engagement through E-Government

E-government may be defined as "the use of information and communication technologies by government" (Carrizales, 2008, p. 12) or "the delivery of government information and services online through the Internet or other digital means" (West, 2004, p. 16). Use of the Internet to find ways of making governing more efficient, effective, and closer to the people has become so widespread that research centers now periodically examine the "state of e-government" (West, 2001; West, 2008). But to what democratic causes should e-government be put? Does "digital democracy" really create more accountability (Moon, 2002)? Does it have the capacity to transform governance

and bring it closer to people, as many have claimed (Mälkiä et al., 2004; Fountain, 1999)?

E-democracy, according to Carrizales (2008, p. 15), "is the use of technology for increasing citizen participation in government decision making." Its inspiration can be traced to telecommunications first offering of cable television and tele-conferencing. E-government's rise has prompted many to examine its e-democracy potential due to its attractive features: "convenience, accessibility, and the possibility for a variety of interactive applications and links to database tools, economical unidirectional information dissemination, and simple transaction processing" (Justice et al., 2006, p. 302). In fact, some insist that e-government should strengthen government's efficiency and transparency (Pascual, 2003, p. 5). Others hold that information technology can potentially redistribute power (Fountain, 1999, p. 150). By reducing the cost of information, some argue that e-government facilitates public deliberation and civic engagement (Bimber, 2000; Resnick, 2004; Scott, 2005). Scholars have found evidence that governmental websites transform service delivery and increase citizen trust in government (Tolbert & Mossberger, 2006; West, 2004). In some federal agencies, for example, the use of "e-rulemaking" allows citizens to input comments on draft agency rules and monitor how those comments influence the final, promulgated rules (Schulman, 2005).

How might a movement toward e-democracy using websites be visualized? Keen observers have conceived of a stagist model of e-government operation, which often starts with impersonal data sharing, and ends with a sort of cyber-democracy. For example, Moon's framework (2002) consists of five stages: (1) information dissemination, (2) two-way communication, (3) services and financial transactions, (4) information-systems integration, and (5) political participation. Another five-stage model begins with (1) an emerging web presence with only one-way communication; (2) an enhanced web presence with more forms of communication such as e-mail and links to other

governmental agencies; (3) an interactive portal or gateway web presence with limited transactions; (4) a transactional web presence that allowed for all types of secure transactions; and finally, (5) a seamless web presence where a user could log in to one central portal system and access multi-governmental responses (Garson, 2006; Ho, 2002; United Nations & American Society for Public Administration, 2002). Darrell West revised this classification later with a four-stage model of website development. He called them (1) the billboard stage, (2) partial-service delivery stage, (3) portal stage, with fully executable and integrated service delivery, and (4) interactive democracy with public outreach and accountability enhancing features (West, 2004; West, 2005).

In practice, over the last decade, governments have slowly moved from billboard-type websites that simply provide information to citizens to interactive portal systems, which allow citizens to access different services and communicate with their elected officials (Garson, 2006; Ho, 2002; West, 2005). West's examination of federal and state government websites in 2000 and 2001 found that many lay "somewhere between partial service and fully functioning portals" (West, 2004, p. 20). West's subsequent report noted a decline in some of the state and federal websites' features on public outreach (including email updates to citizens, areas to post comments, use of message boards, surveys, and chat rooms) from 88 percent of the websites in 2007 to only 48 percent in 2008 (West, 2008, p. 7). Similarly, a 2003 analysis of 100 cities' website worldwide discovered that citizen participation scores were ranked next to lowest out of six evaluation criteria (Holzer et al., 2004).

Not everyone, of course, assumes the power of e-government to transform democracy or bridge citizen participation and budget accountability: skepticism arose out of evidence in Britain, at least, that revealed a "predominantly non-interactive and non-deliberative" character of e-government (Chadwick, 2001). Other scholars (Davis, 1999; Margolis & Resnick, 2000) argue that far from transformation, e-government reflects and reinforces the patterns and behaviors of the real bureaucracy and civic world.

We also must not forget that a digital divide still exists; the disparity between those who could participate and those who could not due to infrastructural and skills gap remains a significant problem. Many citizens face significant hurdles accessing the Internet (Norris 2001; Mossberger et al., 2003). An emerging concern is technological advance outpacing the growth in computer access and literacy; that is, e-government could contribute to greater confusion and information overload instead of increasing civic involvement first. Websites offering higher amounts of information and more sophisticated online tools and services may exacerbate the divide (Mossberger et al., 2003).

#### E-Government in Budget Accountability and Engagement

As fiscal problems grow in complexity, citizens need help to understand the issues and be stimulated to have an active interest in government, which e-government can provide (Parker, 1968, p. 123; Simonsen & Robbins, 2000, p. 26). Where stewardship of public funds is concerned, the theory is that e-government can promote more responsive deliberation and decision making by making information more accessible to the public --- and websites offer greater accessibility (Benito & Bastida, 2009; Perlman, 2009). E-government can make government more transparent and encourage meaningful participation in the budget process beyond simply providing information on budgetary timetables and budget actions (Berner, 2001).

There has definitely been uneven and inconsistent use of e-government for budget transparency and citizen input (Scott, 2006). Governments worldwide differ in the depth of engagement and budget transparency their e-government systems offer to the public. In countries like Russia, South Africa, and Thailand, e-government has been tapped to inform citizens of past budgetary decisions (Krylova, 2007; Shall, 2007; Suwanmala, 2007). For instance, Brazil has a long history of participatory budgeting. Currently its citizens can translate demands for certain projects via government websites, an example of direct citizen engagement (Wampler, 2007). In New York, state agencies webcast public meetings to engage citizens (Dawes, 2008).

The Internet has made surveys, an established means of garnering input, a lot easier. In a more recent test of the nexus of information technology with budget accountability and participation (Robbins et al., 2008), real-time, interactive surveys allowed respondents to appreciate how their choice of service levels for the town of West Hartford, Connecticut were considered by decision makers. Respondents balanced their tax levels and service levels, showing that a well-designed online tool could help citizens understand trade-offs in budget decision making.

However, e-government's enabling power for democratic accountability and citizen engagement is not yet fully achieved (Scott, 2006; Weber, 2002). Walters (2009) notes that when governments design innovative budgeting websites to make citizens participate, the results are usually disappointing with no discernable increase in citizen interest or participation in the budget process. Based on studies of cities and counties in North Carolina, the top five reasons for the lackluster effort to engage citizens in budgeting decisions were: lack of governing board interest, poor response from past experience, lack of citizen response, lack of time, and lack of personnel (Walters, 2009, p. 62). Several other variables including time constraints of modern society, structural exclusion from the world of digital government, lack of media coverage to e-government, or a citizen's lack of skill in using available information have hindered citizen participation in government, electronic or otherwise (Vigoda-Gadot, 2007; West, 2004; Justice et al.,

2006; Scott, 2006). On the part of government, barriers to the adoption of e-government, and therefore achieving its potential, include high costs, lack of expertise, increased staff demands, changing staff roles, and insufficient infrastructure (see Holden et al., 2003). Author Moon (2002) believes that governmental structure, size and forms are significant institutional factors influencing e-government's effectiveness. In many places, the gap therefore remains "between normative theory, which continues to stress the importance of using the Internet to facilitate democratic processes, and the actual practice of e-government" (Justice et al., 2006, p. 305).

#### E-GOVERNMENT AND THE ECONOMIC RECOVERY EFFORT

How can we make better use of technology for democracy? It is not enough to have governments create websites and assume that "if you build it, they will come." Accountability has a procedural logic such that to be effective, an account has to be readily available, intelligible, accurate, and sufficient to those who would use the information to compare expectation to performance (Justice et al., 2006).

The use of government websites according to the goals of the American Recovery and Reinvestment Act of 2009 (ARRA) illustrates the difficulties of demonstrating the dynamics of democracy using online technology. Problems arose early in the law's implementation when it became apparent to the White House that while tracking ARRA monies was hard, it was even more difficult to try to correlate performance outputs or the number of jobs created, to performance inputs or the actual ARRA funding. Second, the quality of ARRA websites at the state level showed inconsistencies, both in the appearance of the websites and the data that states posted about specific projects, as Barrett and Greene's (2010a) diligent tracking of ARRA websites revealed. The Recovery Accountability and Transparency Board's quarterly report recognized the complexity of the government's transparency effort:

Requiring transparency of government spending is a double-edged sword. Transparency promotes accountability...but it also reveals flaws and problems entrenched in our government processes...But simply placing mounds of spending data on a website does not meet the definition of transparency. In fact, as we have learned, if that data confuses the public the mission of transparency is harmed, not enhanced. (Office of the Vice President, 2010, p.4)

Thus, the basic challenge for the Board was realizing what kinds of accurate and meaningful ARRA information to put out there, and then how to coordinate the effort inter-governmentally, in a way that communicates accountability for the money while engaging citizens.

## Inter-Governmental Coordination for Accountability

The ARRA stimulus program was uniquely inter-governmental: it was not simply top-down or solely administered by the federal agencies. The recovery effort required all governmental systems' participation for the dollars to move as fast as possible among publicly-funded projects. The ARRA website efforts therefore mirrored these challenges. From the federal, down to the state governments, the level of details in reporting each category of ARRA information varied. As managers would reveal later on, there was continuous correction to data quality problems, such as double-counting of jobs, incorrect congressional districts and zip codes of recipients.

The inconsistencies on the web led to many highly publicized complaints that ARRA, as a policy, was not working. On state websites, citizens sometimes could not readily find accurate information or connect jobs to dollars. "Texas had a lot of graphics and flashy things, but it didn't provide a list of actual recipients" according to monitoring group ProPublica, which covered the stimulus aggressively (Barrett & Greene, 2010b, p. 1). Some states strived to be better. Nevada, for example, was the first state to issue a two-page "citizen-centric" report on the use of stimulus funds, according to the Association of Government Accountants (Barrett & Greene, 2010c). California's Recovery Task Force worked hard "to provide the utmost transparency" through their website. They redesigned their site to include success stories on the impact of ARRA funding, special opportunities resources for business, non-profits and disadvantaged business enterprises, and a map that sorts out ARRA data by city, county, or area of investment, and locations of every project with specific information on project budget, recipient, and description (Barrett & Greene, 2010d). The role of performance information was becoming clear.

#### **Performance Data for Accountability**

Decades ago, government scholar Harold Seidman (1970) called "coordination" the key to making sure that government works. Later, H. George Fredrickson (2005) wrote that "performance" has become the byword of those trying to ensure that bureaucracy is doing its job in an accountable manner. Performance and performance measurement have taken on a form of a movement in contemporary public administration (Radin, 2006, p. 4). The movement has come a long way since the 1950s when the Hoover Commission recommended performance budgeting (also known as performance-based budgeting) in the U.S. to modify the bias of government spending plans from one of input to one of goal achievement. This preoccupation with performance information - results - has led to an era of "governance by performance management" (Moynihan, 2008, p. 3). A recently released "Performance Management Framework for State and Local Governments,"

for example, by the National Management Performance Advisory Commission (2010) aims to ensure that a results focus permeates government strategies, processes, organizational culture, and decisions.

One way to make electronic budget information more useful is to move toward greater performance data sharing. In the case of the stimulus program, performance appeared to be key in demonstrating that the policy was working. At the national level, the Government Accountability Office (GAO, 2010) has recently recommended, in a report titled, Recovery Act: Increasing the public's understanding of what funds are being spent on and what outcomes are expected, that federal agencies expand their efforts at determining the long-term results of ARRA investments and provide a clear picture of how the funds met stated project goals. Using a Transparency Criteria for a sample of nine programs, GAO found that only 25 percent of the program descriptions had "sufficiently clear and complete information on the award's purpose, scope and nature of activities, location, cost, outcomes, and status of work" (GAO, 2010, p. 1). One reason behind this is that officials, in many programs, "did not typically include the narrative fields in their data quality reviews" (ibid.). GAO recommended that descriptions of awards be periodically reviewed to convey a basic understanding of the uses and outcomes of ARRA funding.

At the state level, early efforts to monitor the recovery websites focused on how the states posted categories of stimulus spending, the distribution of that spending in different parts of the state, and specific projects carried out by private contractors, including their employment impact (Mattera et al., 2010; 2009). Some of the reviewed items include:

• planned spending totals by broad categories (energy, housing, transportation, etc.) as well as more specific programs;

- data on the distribution of spending among the state's counties (or other geographic divisions);
- the inclusion of maps showing the location of the projects;
- descriptions of specific spending projects and the contracts associated with them;
- contract details, including dollar amounts, the name of the contractor and the text of the contract;
- data on the jobs created or retained by the project; and
- the status of the project (Mattera et al., 2009, p. 10).

This spurred our interest in the government's initiative to track ARRA stimulus dollars and how the dynamics played out online.

#### EVALUATING THE STATE ARRA WEBSITES

Information technology has contributed to dramatic changes in performance management (Brown, 1999). The next stage of online engagement will probably require more performance data to be given to citizens in more sophisticated ways. This will allow citizens to engage at some level of interactive accountability where citizens can observe in real time either program success or program failure and thus hold policymakers to account for efficient use of public resources (West, 2005).

To pursue this idea we examined state ARRA websites, from April-June 2010, using a coding framework that emphasized accountability and transparency. Compared to earlier studies of ARRA websites, our study looks at the aggregate picture, nationwide, of state websites' presentation and contents. Their studies mostly focused on evaluating the funding levels, targeted recipients, and project status, the emphasis being not just transparency of information but also the effectiveness of the policy, or the speed with which the stimulus dollars were distributed in the system to pump up the economy. They also focused on ranking the states, which we did not include in our research plan.

As shown in Table 1, we first analyzed ARRA data presentation. Using West's (2005) typology of websites, we coded the state ARRA websites based on how they presented ARRA program information. Assuming that greater searchability of the funded projects would promote more accountability, we coded the presentation of data on an ordinal scale. If no information on state ARRA projects were presented, then we gave the website a score of 0; if the website just displayed information on projects we gave it a score of 1; if the website had specific projects in hyperlinked sections (e.g., education projects, transportation projects) then we gave the website a score of 2; and if the website had a searchable database of state ARRA projects, we gave the website a score of 3. Note that these scores reflect increasing website complexity. That is, a website with a searchable database of state ARRA projects (a score of 3) will already have hyperlinked sections (a score of 2) and displayed information on projects (a score of 1).

Our methodology for evaluating the states' websites also incorporates our notion of performance-driven accountability and engagement (Greitens & Roberson, 2010; Joaquin & Greitens, 2010). We subsequently coded website data based on this notion. Previous research indicates that in order for transparency and accountability to be maximized, "elements" of both program performance-based data, as well as engagement information, have to be included (Greitens & Roberson, 2010; Joaquin & Greitens, 2010). Following that assumption, we examined the state ARRA websites for a variety of performance and engagement based data (see Table 1). These elements of performance and engagement included basic information:

Table 1. Coding framework for ARRA state websites

Website Presentation	0-3 Ordinal Scale
<ul> <li>No Information on ARRA</li> <li>Billboard-type information only</li> <li>Hyperlinked sections</li> <li>Online, searchable database</li> </ul>	0 1 2 3
Inclusion of Performance Data	0 = no / 1 = yes Nominal Scale
<ul> <li>Project summary</li> <li>Project goals/objectives</li> <li>Project inputs</li> <li>Project outputs (potential or achieved)</li> <li>Project outcomes (potential or achieved)</li> </ul>	
Inclusion of Engagement Information	0 = no / 1 = yes Nominal Scale
<ul> <li>Primer/FAQ on ARRA</li> <li>ARRA application process</li> <li>"Contact us" web form</li> <li>Spending map</li> <li>Spending graph by program category</li> </ul>	

- In the performance category, we examined the reporting of integral data elements such as inputs (most commonly the amount of ARRA funding per project), outputs (most commonly the number of jobs saved/created by the project), goals/objectives (such as employment targets or other specific effects of the project), and even potential or achieved outcomes (typically based in economic stimulus terms as lowering unemployment or enhancing economic development).
- In the engagement category, we evaluated if the state website explained to the user what ARRA was and if it encouraged them to be a part of the process. The websites should try to engage citizens on ARRA by giving them detailed information on the ARRA program, how they can apply for ARRA funding, and where ARRA funding is being spent in the state.

All of these data points were coded nominally as we were only concerned with the presence or absence of the information on the website. We then added each nominal score to construct an index for the inclusion of performance data and engagement information. If the ARRA program at the state level wanted to ensure both transparency and accountability, then we believe that all of these "elements" had to be presented on the website in some form. For instance, if transparency and accountability are goals of the ARRA policy, then citizens should be able to go to the state ARRA websites and easily search through projects to find: project inputs (in this case, the amount of government funding per project), project summaries (a brief, general description of what the project tries to accomplish and who is implementing the project), specific project goals/ objectives, project outputs (for ARRA, outputs were primarily conceived in number of jobs saved and/or created), and long-term outcomes (for ARRA, long-term outcomes were generally envisioned as enhancing some type of long-term public benefit).

#### **Findings and Analysis**

Our results are presented in Table 2 and Table 3. Index scores reveal that the state ARRA websites tended to do a better job of including engagement

	Highest Possible Score	Average Coding Score
Presentation of the ARRA Website	3.00	1.57
Performance Data on the ARRA Website	5.00	2.28
Citizen Engagement Data on the ARRA Website	5.00	3.12

Table 2. Average coding scores from the states and the District of Columbia

n= 51

information rather than performance data. That is, the state ARRA websites tried to engage citizens on ARRA projects by giving them detailed information on the ARRA program, how they could apply for ARRA funding, and where ARRA funding was being spent in the state. Performance based data are much more scarce on ARRA websites. Perhaps this is not surprising, as measurement of performance is often a challenging endeavor (Gilmour, 2008).

The most surprising finding is how performance data were presented and how the websites were constructed by the states. Most of the state websites simply listed data in a "billboard" style of webpage or a webpage with various hyperlinks. Online, searchable databases were definitely not the norm. In our analysis, we only discovered eight online searchable ARRA databases. The majority of states simply reported performance data in billboard style (performance data were merely listed for the web user to sift through). We therefore found that while state ARRA websites were doing a good job at engagement, they were not really doing a good job on performance.

As detailed in Table 3, a majority of states provided project outputs and project inputs data online, but often neglected to include the other necessary performance information that could provide some understandable context on performance to citizens. If we put it in e-democracy terms, the websites were engaging to citizens through their transparency, but not accountable enough with their weak use of performance data.

What explains this type of finding regarding transparency and accountability? The intergovernmental nature of the endeavor was appar-

Inclusion of Performance Data	State Websites with Data	Percentage
Project summary	23	45.1% 33.3%
<ul><li>Project goals/objectives</li><li>Project inputs</li></ul>	45	33.3% 88.2%
<ul><li>Project outputs (potential or achieved)</li><li>Project outcomes (potential or achieved)</li></ul>	27 2	52.9% 3.92%
Inclusion of Engagement Information	State Websites with Data	Percentage
Primer/FAQ on ARRA	36	70.6%
ARRA application process	23	45.1%
"Contact us" web form	34	66.7%
Spending map	37	72.5%
Spending graph by program category	33	64.7%

ently a huge challenge. Examining a variety of qualitative data sources previously published, we discovered that many state ARRA chiefs or "czars" questioned the necessity of having a state specific ARRA website and were frustrated that they were often left out of the ARRA process. As a result they were unable to validate ARRA data from the federal website. For example, Michelle Weber, Minnesota's ARRA czar observed that:

the states' ability to articulate what is happening on the federal website is lacking. What we're struggling with as states is to look at Recovery.gov and validate this information...It is sometimes hard to understand where they got the information that is on Recovery.gov. (Barrett & Greene, 2010d, p.1)

Florida's recovery czar, Don Winstead said he could have spotted obvious errors in congressional district reporting with early access. He wished that that there was "a way to give the governor's designee broader rights to go into the system and get aggregate information" so that they could have "a process in place to analyze the data before the phone starts ringing" (Barrett & Greene, 2010d, pp. 1-2). Additionally, Nebraska's state budget administrator openly questioned if states should supply the same information on their state website as the federal ARRA website (Barrett & Greene, 2010e). Their views indicate the frustration of many at having to create and maintain separate ARRA websites when they were left out of the process or could not independently validate ARRA data points.

In communicating good information to the public, perhaps one of the most important oversights in the ARRA transparency initiative was the failure to engage state administrators who were in charge of performance management programs in their areas to contribute or provide input on how to enhance the ARRA websites early on. Barrett and Greene (2010f) found that performance auditors, legislative evaluators, and performance budgeters could have been tapped but were not. Some of these managers felt that their goals were the same as those of the federal stimulus office but they were told that their focus was different (Barrett & Greene, 2010f).

Funding remains a real challenge for maintaining effective accountability and transparency measures on e-government websites. Website creation and maintenance costs money. As an example, the state of Nevada's managers estimated that creating its transparency website, Nevada Open Government, cost the state about \$112,000 during the 18 months from the issuance of the Open Government Initiative in March 2008, to October 2009 (Sunshine Review, 10/24/2009).

To help alleviate some of the funding concerns for ARRA state websites, the White House Office of Management and Budget (OMB) allowed states to recoup one-half of one-percent of the cost under the supplemental Statewide Cost Allocation Plan. The Plan was created to cover the cost of managing stimulus spending, counting jobs, and building the websites. But the requirements to apply for those dollars were so onerous that "it didn't seem worth going through that headache," as Washington State's financial manager noted (Barrett & Greene, 2010g). This problem of administrative capacity might only grow more challenging as states shift from tracking and managing spending to actually measuring performance outcomes (Barrett & Greene, 2010g). Given the constraints of design, access and funding, the final impact of the ARRA state websites on e-democracy was generally disappointing. As Beth Blauer, ARRA czar of Maryland noted:

I've been surprised that there hasn't been more public engagement. Every place on our map, we have a way that a user can directly communicate with us. I was looking forward to that public engagement as part of the transparency. But we're not getting the response we were expecting. That's an area in which we can really strengthen our program. (Barrett & Green, 2010h, p. 3)

Thus, on the engagement side, the ARRA websites could have done much better. On the accountability/ performance side, one must remember that the stimulus program had a lot of political detractors and that the Recovery Board desired to use the websites to help convince the nation of the effectiveness of the Obama administration's fiscal policy, performance-wise. The trend from the states, as we have found, however, is not encouraging. In fact, very recently (October 31, 2010), reports acknowledged that ARRA job reporting remains a perplexing endeavor. Some of the anomalies involve recipients that reported zero jobs from the funds and some that reported fractions of one full-time equivalent position (Mattera, 2010). According to a study:

Neither the Obama Administration nor the Recovery Board has offered an explanation of this puzzling trend. Thus no effort is being made to investigate whether employers are deliberately underreporting their employment figures or minimizing their actual hiring on ARRA projects, thus undermining the intentions of the entire stimulus program. (Mattera, 2010, p. 1)

This is a worrisome development for stimulus policy backers; the fact that this is occurring online and in real-time speaks to the challenges of e-government as well as its potential in informing citizens of matters addressing difficult national conditions. An economic recession could theoretically forge a stronger bond between governments and citizens; however, due to lots of factors that characterize the modern age, it appears that we have a long way to go in using e-government to enhance democratic relationships.

#### CONCLUSION AND FUTURE RESEARCH DIRECTIONS

The theoretical direction of e-government seems to have moved to a stage where easily accessing governance information is vital to notions of interactive democracy (West, 2005). The task of scholars therefore is to find out exactly what kind of information must be packaged and in what manner to help achieve e-democracy's goals. The U.S. government's website endeavor in pursuit of ARRA implementation in the states appeared to rest on the idea that demonstrating accountability meant collecting performance information and electronically publishing that information, as well as giving citizens directions how to get involved with ARRA issues. Part of that argument was awareness that the stimulus act was ideologically a lightning rod for political debate. If ARRA websites could somehow present the information that the stimulus program was about creating performance outcomes, then the government would have used e-government to shape policy opinion.

Our study indicates that states did publish a variety of ARRA information but the collection and dissemination of performance data online in connection with the nation's recovery project was problematic. States typically failed to collect (or show) many types of performance data and to present what was available in formats accessible to the public. Our methodology lacked the necessary strength to explain it but future studies could examine further the link between performance data and citizen engagement online. It is possible that the former enhances the latter, so that weaknesses in performance information collection and presentation online dampen digital citizen engagement. Without easily accessible performance information, citizens may feel a lack of authenticity for governments' efforts to encourage participation in policy making and implementation. For any type of engagement effort

to work, citizens have to believe in the authenticity of the process (Box, 1998). Future research may be able to provide empirical data to uncover this relationship. As our data did not truly account for quality of information in creating the index, a more in-depth content analysis of state websites in the future could investigate exactly if and how accessibility of performance information generates more success in online engagement.

Another potential offshoot of our study for other research to carry forward is a greater focus on the intergovernmental dimension of e-government. A dearth of studies tackling the governmentgovernment component of e-democracy exists. If virtual governance were to reflect reality, egovernment managers should conquer the same types of policy implementation and coordination obstacles in the governmental system. Most studies of e-government have looked at governments as unitary entities aiming to reach their particular audiences; the experience of several state managers from the 2009 ARRA website efforts shows that different entities come from a variety of backgrounds in e-government and devote different levels of resources into engaging and showing their constituents what their state governments were about. From what we found on the ARRA state websites and from what can be gleaned from the qualitative accounts on ARRA website management, accountability for outcomes is clearly an inter-governmental affair. Without adequate intergovernmental collaboration, efforts to infuse websites with performance data and engagement elements will come up short.

A few recommendations are in order. For transparency and accountability to be maximized on **any** e-government website, both performance data, for enhanced accountability, and citizen engagement elements have to be present. *To be effective at this in an inter-governmental setting*, we recommend that actors, before designing and launching any web pages, be able to (a) come to an agreement on what digital accountability actually entails, (b) establish what performance data to collect and disseminate, and (c) identify and confront sustainability issues in e-government endeavors. As democracy entails a lot of deliberation, we frame these goals in terms of three dialogues below.

#### A Dialogue on Digital Accountability and Engagement

Digital democracy, to a large extent, mirrors actual, real-world dynamics; if we are still grappling what constitutes useful and adequate expression of governmental transparency and citizen participation in the real world, the questions just spill over to the digital realm.

Creating and maintaining websites merely to have presence in the digital world does not do much to further democracy's cause. Accountability involves explaining for example, the workings of government so that citizens can make the connection between decisions and policy implementation in a federal system, such as in the United States. In the case of intergovernmental fiscal policy like the 2009 ARRA, explanations of how funds move among different channels and entities can help. Giving as much detail as possible about stimulus funded projects in their areas give the public an idea about equity and needs; it is better, however, if websites also enable them to see what bureaucratic processes and channels must be cleared in the process - and the rationale and faces behind it - before funds materialize in their localities. This educates citizens and provides them more realistic sets of expectations in the digital age; this provides a reasonable context for gauging performance and sending feedback.

Beyond a one-way design of information presentation in government websites, avenues should also be made online that check the pulse of the public using the website. Does a webpage presentation engage their attention? Once engaged, do they feel that the information does not lead them to a dead end? Users should be able to give feedback and simultaneously given ownership of their feedback. But how much of their input should be entertained by policy makers and managers? Does anonymous feedback provided through the Internet have the same value as a citizen's input in an actual public hearing? And what is the state of e-government when the consumers of the sites are other government entities?

#### A Dialogue on Government Performance

Performance measurement is so common that it is tempting to say that all that is needed is to post these data online. Which data would be meaningful to different sets of constituents?

Some performance documents may not be for public consumption; some need to be explained clearly so that citizens are not overwhelmed in connecting inputs with outputs/outcomes. Again, the collection and presentation of performance data may not automatically engage people. Constructing more user-friendly interfaces for performance data, such as an easily searchable online database system may help. In the case of the ARRA state websites, this was not adequately met. As a result, an opportunity for effective online citizen engagement that could emphasize both transparency and accountability was lost.

#### A Dialogue on Sustaining Digital Democracy

In our review we came across studies that verify a nagging concern about e-government: namely, it replicates some of the administrative tussles in the real world. This is apparent on studies of the costs of e-government (Irvin & Stansbury, 2004) and the reinforcing, rather than transforming, power of e-government, where the patterns of behaviors of real bureaucracies and the civic world are concerned (Davis, 1999; Margolis & Resnick, 2000). E-democracy goals will fail when agencies do not have enough resources to develop and maintain websites, and if those efforts suffer from the same problems of real-world red-tape, imbalance between centralized or decentralized control, linear strategies, and turf-protecting actions that could hinder effective communication of digital accountability and performance. For instance, in Virginia, the state's ARRA website has suffered from a lack of performance data updates when the governorship changed hands from a Democrat (who supported the stimulus policy) to a Republican (Barrett & Greene, 2010i). Can e-government become a neutral means of accountability and engagement, or is it also captive to political squabbles?

In conclusion, ours and earlier studies of ARRA websites indicate that governments have yet to see the fulfillment of digital democracy. Civicmindedness in the digital age requires that we be able to use technology to provide websites that are not merely clearinghouses of data but active portals that demonstrate government performance and the centrality of citizen engagement. We recommend continuing dialogue to see if e-government could be the tail that wags the dog to promote a rethinking of governance, or if e-government would be just another government program or project that rises and falls with politics, funding, and the customary challenges of public administration.

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# **KEY TERMS AND DEFINITIONS**

Accountability: A government's responsibility to give account of its plans, policies, programs, operations, resource management and the potential consequences and outcomes of its plans, in ways that are understandable to its citizens.

**Billboard Websites:** Online presence that only displays information on one web page.

**Citizen Engagement:** Attempts made by governments, often via websites, to inform citizens about governmental operations and the ability of citizens to participate in governmental processes. **Citizen Participation:** Actions taken by citizens to become involved in their government by serving on boards and commissions, or by becoming involved in public hearings.

**Database Websites:** Online presence that displays information via a searchable database.

**E-Government:** Online presence maintained by governments to facilitate better information sharing and more efficient and more effective service delivery to citizens.

**Hyperlinked Websites:** Online presence that displays information through hyperlinked web pages.

**Transparency:** When governments make their operations and decision-making processes open to the public by giving access to government documents and meeting.

# **ENDNOTES**

- <sup>1</sup> The webpage can be found at <<u>http://recov</u>ery.org>
- <sup>2</sup> The webpage can be found at http://statestat. maryland.gov/recovery.asp. The authors would like to acknowledge Director Beth Blauer of Maryland for her kind assistance.
- <sup>3</sup> Compared to provision of electronic transactions, connectivity, personalization, and usability features

# Chapter 2 Exploring Determinants of Governmental Transparency: The Case of Municipal Websites as a Tool for Proactive Dissemination

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### ABSTRACT

"Transparency" has recently become a popular buzzword in the United States while its normative value has been revered for decades. However, scholarly research of antecedents and effects of transparency—the ability to "see inside" government—has arisen only recently. Transparency can provide residents with information that can promote more fruitful citizen participation and engagement. This chapter looks into one of the lesser studied of the five avenues of transparency, as presented by Piotrowski (2007): proactive dissemination. It reports on the proactive dissemination behaviors of New Jersey's 566 municipalities resulting from a content analysis of their websites. Model results are reported to provide understanding of various factors that are found to impact a municipality's posting behavior. Lastly, the author encourages future research to consider other ways to measure proactive dissemination, to include more governmental determinants for transparent behavior, and to explore whether or not transparency translates into greater citizen participation.

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#### INTRODUCTION

Governmental transparency-the ability to see what government is doing-has been freshly placed on the agenda in the United States. Recently, the Obama administration began pushing for more transparency at the federal level, arguing that government should be transparent, participatory, and collaborative (Obama, 2009). But, why is transparency so valuable? To start, government accountability (Romzek and Dubnick, 1987; Dicke and Boonyarak, 2005) can be fostered by transparent government practices: citizens who have access to information can be better informed and hold governments accountable for their actions. Secondly, participation can be enhanced with transparency and access to information, particularly in the case of public meetings. Citizen participation is said to be one of the "ideals" of democratic morality (Redford, 1969), meaning it is a critical component to decision making at all levels of government in a democratic society. Richard Box (1998, p. 23) notes that "the 'best' public policy decisions are those resulting from public access to information and free and open discussion." We can reasonably expect, then, that citizen participation and engagement are enhanced with access to government information. Lastly, some argue that transparency can deter or help to uncover-and possibly deter-unethical behavior, particularly corruption (Anechiarico, 2005; Denhardt and Gilman, 2005). Denhardt and Gilman (2005, p. 267) posit that transparency's value "addresses issues of corruption and/or conflicts of interest through mechanisms that make the actions of government... open to inspection." In sum, transparency provides a mechanism for citizens to be informed participants in the decision making process and to hold governments accountable.

In practice, the 20<sup>th</sup> century saw considerable gains for putting the idea of transparency into law. The Administrative Procedure Act of 1946 (APA) requires governmental agencies to publish proposed rule changes in order to solicit comments from the public; the Government in the Sunshine Act of 1976 (GSA) requires that federal agencies hold their meetings publicly. These pieces of legislation provide transparency and mechanisms for participation in that it allows for citizens to see potential changes to rules and provide feedback if necessary. All 50 states and the District of Columbia have APA- and GSA-style laws. The 1966 Freedom of Information Act (FOIA) requires federal agencies and departments to release public documents upon request. The FOIA has seen several changes and updates over the vears, including the 1996 E-FOIA amendments, which requires federal agencies to make certain types of documents available online. Each of the 50 states and the District of Columbia has open public meetings and freedom of information laws, albeit of varying degree (Piotrowski and Borry, 2010). The passage of these and other statutes indicate that transparency is on the agenda for democratic government.

Christopher Hood states that "transparency denotes government according to fixed and published rules, on the basis of information and procedures that are accessible to the public..." (2006, p. 5). David Heald (2006) presents four directions of transparency. Transparency upwards refers to the ability of subordinates within an organization to see what their superiors are doing. *Transparency* outwards refers to the ability of those inside an organization to assess what others are doing on the outside of that organization. The final two directions best relate to governmental transparency as we know it: transparency inwards allows an organization to be observed by those on the outside and transparency downwards allows for the "ruled" to observe the actions of their "rulers" (Heald, 2006, p. 27). Most simply stated, transparency is the ability to see what government is doing and creates a way for political accountability to be achieved (see Romzek and Dubnick, 1987, for discussion of types of accountability). Suzanne J. Piotrowski postulates that transparency can be achieved "through avenues such as access to

government records, open meetings, and whistleblower protections" (Piotrowski, 2007, p. 10).

This chapter will first discuss the five avenues of transparency as proposed by Piotrowski (2007). Each of these avenues will be discussed in light of the literature, pointing to a gap in scholarly inquiry into one particular avenue: proactive dissemination. The third section of this chapter includes the research question and measurement of the dependent variable. Proactive dissemination is operationalized as the posting of information and documents on municipal websites, intersecting e-government and transparency literatures. Fourthly, I turn to the hypotheses of the control model, which explores potential demand sources and organizational arrangements that may foster proactive dissemination. The fifth and sixth sections of this chapter include the model results and discussion. Finally, the chapter concludes with some suggestions for further research.

# THE FIVE AVENUES OF TRANSPARENCY

Suzanne Piotrowski (2007, p. 91) proposes five avenues through which transparency can be achieved: the requestor model; proactive dissemination of information; open public meetings; whistleblower release; and leaks. The first two avenues of information release refer mainly to public documents. The requestor model is one in which a person submits a request-either formal or informal-for a document or information. Depending on the jurisdictional laws, a requestor is entitled to those records. Generally, there are exemptions under which records may not be released, common ones being to protect personal privacy and national security. On the other hand, proactive dissemination of information occurs when a government releases information and documents without first being asked. Proactive dissemination is, particularly at the local level, not necessarily required by law. Lack of statutory requirement to proactively release documents implies that a government, for some reason, chooses to release and maintain records using a website, a library, or other type of repository.

Open public meetings is an avenue of transparency because such "laws allow the public to observe firsthand the deliberations of government entities" (Denhardt and Gilman, 2005, p. 267). Citizen participation is typically what we think of when discussing public meetings, but meetings are also transparency mechanisms, since attendees and officials alike can gain valuable information about current topics on a community's radar (Adams, 2004; Piotrowski and Borry, 2010).

The final two avenues, which are less formal than the other three, are whistleblowing and leaks. A whistleblower is one who "make[s] revelations meant to call attention to negligence, abuses, or dangers that threaten the public interest. They sound an alarm based on their expertise or inside knowledge, often from within the very organization in which they work" (Bok, 1989, p. 211). Leaks, like whistleblowing, uncover wrongdoing, but are done so in a more "covert" manner (Bok, 1989, p. 216). Bok (1989, p. 216–217) argues that leaks are more likely when administrative secrets are present: "without secrecy, there would be no need to leak information." The identities of those who leak are typically unknown, even to persons on the receiving end of the leak. One of the most infamous leaks in the past few decades was that associated with Watergate, a case in which the leaker's identity was only in recent years revealed to the public (Von Drehle, 2005).

Treatment of transparency within the public administration literature has tended toward transparency in general, open public meetings and their participatory qualities, or whistleblowing and leaks. Some literature analyzes the advent and impact of various transparency-related laws or statutes, such as the creation of the Federal Register (Feinberg, 2001), the Administrative Procedure Act (Sherwood, 1946), and the Government in the Sunshine Act (Bradley, 1997). Other research is angled toward a specific topic relevant to transparency, such as national security and secrecy (Blanton, 2003; Roberts, 2006; Rourke, 1960). Transparency studies have only recently moved beyond solely national treatment to local levels of government (Otenyo and Lind, 2004; Piotrowski and Bertelli, 2008; Piotrowski and Borry, 2009; Piotrowski and Borry, 2010).

The requestor model of transparency has received mainly policy-focused treatment in the literature. Piotrowski (2007) examines the effects of the National Performance Review on freedom of information practices, while Feinberg (2004) assesses how freedom of information practices changed since the events of September 11<sup>th</sup>. In essence, both of these authors look at the effects of a particular event on freedom of information requests.

Open public meetings is one of the more widely studied avenues of transparency, receiving attention typically within the law and citizen participation literatures. Treatment of state open meetings laws can be found in numerous law reviews and journals (LaBelle, 1991; Pupillo, 1993; Davis, Chance, and Chamberlain, 1998; Bowen, 2002; Johnson, 2004; O'Connor and Baratz, 2004), while other literature seeks to advance the theory behind open meetings. For example, Adams (2004) sought to link public meetings to democratic practices and found that meetings are good channels for information release as well as to ensure governmental accountability and responsiveness. McComas (2001) and Baker, Addams, and Davis (2005) identified components of a good meeting based on qualitative studies. Citizen participation literature seeks to link how well public meetings improve public participation (King, Feltey, and Susel, 1998); identify who participates (Schlozman, Burns, Verba, and Donahue 1995); and enhance normative theory of participation (Webler and Tuler, 2000). Piotrowski and Borry (2010) move beyond the participation component of meetings and address the aspects of open meetings laws that can enhance transparent practices.

Another area of transparency that has received considerable attention is whistleblowing and leaks. Sissela Bok's Secrets (1989) includes a chapter on the subject, which discusses what these terms mean and how they take form in practice. In this chapter, she provides examples and cases of these actions and how they are impacted by administrative secrecy. Other whistleblowing literature has focused on the personal and organizational characteristics of whistleblowers, such as ethical characteristics (Brabeck, 1984), organizational position (Miceli, and Near, 1984), personal and organizational characteristics (Miceli and Near, 1988; Miceli, Near, and Schwenk, 1991; Jos, Tompkins, and Hays, 1989), and the link between whistleblowing and public service motivation (Brewer and Selden, 1998).

Less studied within the transparency arena is proactive dissemination of information. Public administration scholarship does not explicitly address this topic empirically, but we can make some reasonable parallels with business literature. Here, authors look at private firms (Boot and Thakor, 2001), financial disclosure (Singhvi and Desai, 1971; Brown, Taylor, and Walter, 1999; Dutta and Trueman, 2002), and the optimal degree of information release (Cornand and Heinemann, 2008). However, much of this literature focuses on aspects of private corporations that are not compatible with study of public organizations. Given the emphasis on information dissemination and governmental transparency in the 21st century, this gap in public administration literature is due to be filled.

# PROACTIVE DISSEMINATION: RESEARCH QUESTION AND MEASUREMENT

Because the nature of proactive dissemination as an avenue of transparency implies that governments release information without being required, it seems natural to wonder what factors serve as

catalysts for doing so. The motivation or reasons behind a government's choice to proactively release or post information is worth studying, particularly in the era of performance measurement, accountability, and citizen engagement, all of which can be enhanced with information access. As a result, this research serves as an exploratory venture to determine possible characteristics that influence proactive dissemination. The overarching research question in this chapter can be summed as the following: What influences a government's decision to employ proactive dissemination practices? Specifically, we can look at two different components: citizen demand and organizational factors. Therefore, what kinds of citizens are demanding that a government proactively disseminate information? and what organizational factors influence a government's proactive dissemination practices?

To measure proactive dissemination, this study uses municipalities as the unit of analysis. Doing so allows us variation of proactive dissemination behavior, since municipalities may not be expected to provide the same types of services or information as state and national governments. Additionally, municipalities are likely to have autonomy when it comes to the release of public documents and information; federal- and state-level data may not provide us with such a rich context. One way to explore the proactive dissemination practices of a government is to look at their website. Citizens use government websites mainly to obtain information (Thomas and Streib, 2003; Reddick, 2005; Scott, 2006). Using a website can also be considered a good communication practice on behalf of a government. Garnett (1992) argues that government should segment their audiences in order to reach the largest possible number of people. Maintaining a website along with other avenues of information release can increase the number of people reached. Currently, few other mediabesides the location of the government itself or a library-is as permanent, centrally located, and accessible when it comes to finding information about and directly from that government.

Utilizing websites as a way to proactively disseminate information has the potential to create a checks-and-balances mechanism between residents and their government. Residents who choose to access, for example, budgets and meeting minutes can sound an alarm if something seems amiss, holding the government accountable for their actions or lack thereof. Additionally, websites as a tool for access to such documents allows citizens to become more informed participants of the democratic process. The assumption here is that municipalities that are more "proactively" transparent will post more documents, records, and information on their website for users to access than those that are less proactively transparent. This measure of proactive dissemination as a way to evaluate transparency practices is one that provides value added to both e-government and transparency literatures.

A content analysis of municipal websites of New Jersey's 566 municipalities was conducted in early 2008. New Jersey is a particularly good case to study because of its wide variation: the state borders two major metropolitan areas, is home to urban, suburban, and rural communities, and is diverse in its socioeconomic makeup. Information was collected on numerous components of the website, such as contact information for various offices, meetings information, and financial documents.<sup>2</sup> The documents of focus in this analysis are council meetings documents. While meetings are typically thought of as a mechanism to enhance participatory avenues of concerned citizens (Adams, 2004; Baker, Addams, and Davis, 2005; King and Stivers, 1998), they are also avenues for information (Adams, 2004; Piotrowski and Borry, 2010). Thus, meetings documents are one way to formally evaluate a municipality's commitment to providing information to its residents. In New Jersey, the Open Public Meetings Act (Public Law 1975, C. 231) requires that governmental bodies produce notices and minutes for all public meet-

Category 1: No website	Category 2: Least Transparent	Category 3: Agenda-Centric Transparency	Category 4: Minutes-Centric Transparency	Category 5: Balanced Transparency
	85.9	0.0	56.2	0.0
	14.1	0.0	41.3	0.0
	0.0	100.0	2.5	100.0
N/A				
	95.1	90.2	0.0	0.0
	4.9	8.8	0.0	0.0
	0.0	0.0	100.0	100.0
63	184	61	121	137
	No website	No website         Least Transparent           85.9           14.1           0.0           N/A           95.1           4.9           0.0	No website         Least Transparent         Agenda-Centric Transparency           85.9         0.0           14.1         0.0           14.1         0.0           0.0         100.0           95.1         90.2           4.9         8.8           0.0         0.0	No website         Least Transparent         Agenda-Centric Transparency         Minutes-Centric Transparency           85.9         0.0         56.2           14.1         0.0         41.3           0.0         100.0         2.5           95.1         90.2         0.0           4.9         8.8         0.0           0.0         0.0         100.0

Table 1. Agenda and minutes posting by municipalities within dependent variable categories, in percent

ings. Notices are generally released in the form of a schedule due to be published by January 10<sup>th</sup> of each year. While not required to be created, it is common for local governments in New Jersey to produce agendas, which outline what is expected to be discussed at a public meeting (Piotrowski and Borry, 2010, p. 152). If agendas are created, they must be open for public inspection. Meeting minutes in New Jersey are required to be "promptly available" to the public once they are approved by the public body (Piotrowski and Borry, 2010, p. 153). What municipalities are not required to do, however, is post these documents in a place where they are accessible, such as on a website or other similar medium.

The meetings documents—agendas and minutes for council meetings—were coded for their timeliness, age, and consistency. To evaluate timeliness, the most recent agenda or minutes document was coded for its relevance; in other words, how "new" it was at the time of website review. For age, the oldest agenda and set of minutes were coded for how old they were.<sup>3</sup> Consistency was accounted for by looking at how often documents were posted between the most recent and oldest ones. Given that council meetings are generally held once a month, it was expected that consistent postings would equate to at least one agenda and at least one set of minutes per month. Agendas and minutes were coded exclusive of one other. One limitation of this study is the lack of inter-coder reliability, as the information was collected solely by the author. However, any errors are likely to be the result of underreporting information.

Looking singularly at how recent or old a set of minutes or agenda is does not provide the most telling picture of posting behavior, but the overall pattern of posting behavior does. As such, cluster analysis was used to group municipalities together that have similar posting practices. Agglomerative clustering is a technique that ascertains patterns within dummy-coded data (Han and Kamber, 2006).<sup>4</sup> Using these patterns, groups are formed of observations that exhibit similar behavior. As a result of the clustering, five categories were generated: the category to which a municipality belongs is the dependent variable in this analysis, to be discussed later. Substantively, these five groups are the different behaviors observed across New Jersey municipalities with respect to proactive dissemination of information. See table 1 for a summary of the numerical characteristics of these categories.<sup>5</sup>

Category one consists of those municipalities without a website. Though this study looks at the proactive dissemination behavior on a municipality's website, excluding this group could cost us valuable information, particularly if there are possible reasons explaining their lack of presence online. There are 63 municipalities within this group, accounting for just over 11 percent of the municipalities. The remaining four categories include all municipalities with a website. Category two is the "least transparent" category. Within this category, no municipality posted more than a single agenda or set of minutes. Only about 14 percent posted one agenda and about five percent posted one set of minutes.

The third category of proactive dissemination includes municipalities that posted in an "agendacentric" manner. All of the 61 municipalities included in this category posted at least two agendas: fully 80 percent of those websites posted very recent agendas, almost 70 percent included agendas more than a year old, and almost all (95 percent) posted at least one agenda per month. Simply stated, these municipalities generally kept their agendas timely, retained an archive, and posted consistently. However, these municipalities did not behave the same with regard to minutes: none of them included more than one set of minutes, and only about ten percent included a single set.

The fourth category behaves in the opposite manner as the last category. Of the 121 municipalities included in the "minutes-centric" category, all of them included at least one set of minutes: about three-quarters of them included recent minutes that were less than three months old. Nearly 90 percent of them included minutes older than one year and almost 95 percent of these municipalities posted at least one set of minutes per month. This same story is not apparent for agendas. While the posting of agendas in this category was stronger than the posting of minutes in the "agenda-centric" category, the posting behavior is not quite balanced here. Less than half of the municipalities in this fourth category included an agenda; almost 98 percent included just one, if at all.

The fifth and final category is what is qualified as "balanced transparency." Here, there is less disparity between the posting of agendas and minutes. All of the 137 municipalities within this category posted at least two each of agendas and minutes. Eighty-seven percent posted a very recent agenda, over three-fourths of them posted agendas more than a year old, and close to 95 percent of them posted at least one agenda per month. Similarly, just under 80 percent of these municipalities posted a recent set of minutes less than three months old, just over 80 percent had a set of minutes older than one year, and nearly all of them posted at least one set of minutes per month.

The clustering of observations to produce different proactive dissemination behaviors lends itself to understanding the actions of local governments regarding posting information on their websites. Since there is a lack of formally developed theory that gives us insight into the proactive dissemination practices, this clustering represents an initial step toward that understanding. Particularly interesting is the fact that the clustering reveals emphasis on the types of posted information, rather than the amounts of posted information. For example, the clustering shows us that instead of municipalities posting more or less than other municipalities, they are focusing on posting specific information. We see that some take the time to post and maintain agendas, while others do so for minutes. Further, others post few of either and the remaining municipalities post a large amount of both. These results give us a glimpse of the value municipalities place on meeting documents and information, in addition to the value placed on posting information online. Even though the resulting clusters are partly due to the nature in which the data were collected, we can see that within this one state, there are similar practice patterns with regard to posting behavior. These findings, in and of themselves,

are something worth noting for future research, particularly as applied to other contexts.

## THE CONTROL MODEL

This study tests a control model in order to determine possible sources of demand for and influence of organizational factors on proactive dissemination. This control model can help us draw some conclusions about what affects the posting behavior of municipalities. To inform this model, we can turn to demand for other avenues of transparency to discern whether those determinants translate to proactive dissemination behavior of government. Piotrowski and Van Ryzin (2007) set out to discover potential correlates of citizen demand for transparency. Through a survey, they were able to assess what types of people desired more transparent practices from their government. They included four scales of transparency which correspond to different types of information: fiscal transparency, safety transparency, principled transparency, and good government transparency. They found from the survey results that certain types of people may desire transparency of a particular kind. For example, females desire transparency about health and safety, while older residents desire more fiscal transparency. However, it is unknown whether these same types of people who desire transparent government actually advocate for, demand, or even influence the actual transparency practices of that government. Finding out whether these same citizens impact the proactive dissemination practices of a government can help bridge this gap.

Several studies have found that income is a factor that influences transparency. It is positively associated with desire for transparency (Piotrowksi and Van Ryzin, 2007) as well as online financial reporting by governments (Styles and Tennyson, 2007; Serrano-Cinca, Rueda-Tomas, and Portillo-Tarragona, 2008). Higher income levels could indicate a larger taxing base for a government as well as a more educated and affluent community of citizens. Larger populations could also provide a larger taxing base for a government, providing them with resources to maintain an online presence. Financial disclosure was also found to be positively associated with larger cities (Sanders, Berman, and West, 1994; Styles and Tennyson, 2007; Serrano-Cinca, Rueda-Tomas, and Portillo-Tarragona, 2008). Therefore, I expect that *per capita income* and *population will be positively associated with proactive dissemination*.

Piotrowski and Van Ryzin (2007) found that older residents desire more transparency. Age was found to be significant for three of the four transparency scales they included in their survey. However, their results also show that that older residents were less likely to actually obtain government documents. They hypothesize that this may be due to their lacking use of the internet, which is an outlet for government information that is gaining popularity. This is supported by Reddick's (2005) finding that older residents are less likely to participate online. Divergent findings are also apparent when it comes to females. Piotrowski and Van Ryzin (2007) find that females demand more transparency, but Schlozman, Burns, Verba, and Donahue (1995) conclude that females are no different than males when it comes to citizen participation in the public meeting setting. Due to the opposing theories on both counts, I refrain from positing direction and simply expect that older residents and females will be associated with proactive dissemination. Lastly, Piotrowski and Van Ryzin (2007) discovered that conservatives desire more safety transparency, while liberals desire more good government and principled transparency. Because the desire for different types of transparency varies among ideology, I cannot posit a direction and simply expect that political ideology will be associated with proactive dissemination.

Because municipalities without a website are included as a dependent variable category, a set of controls is introduced to provide us with some information on the relationship between these municipalities without a website and those with one. Moon (2002) provided evidence that municipal manager governance format was positively associated with an online presence. If managers are thought to be a driving force behind adopting a municipal website, it can be safe to assume that they also are influential regarding the content of a website. Election type was also included as a control variable: if managers are assumed to be associated with website usage, then nonpartisan elections might indicate smaller focus on politics and more focus on professionalism within the municipality. Lastly, municipal budget is also included. The budget of a municipality gives us an idea as to what possible resources are available to allocate to the production and maintenance of a website. I expect that council-manager format of government, non-partisan elections, and municipal budget will have a positive association with a municipality's online presence and proactive dissemination. Thomas and Streib (2003) showed that there is a negative association between non-white populations and website adoption. Following the same logic, rural population may have a similar effect. Therefore, I expect that non-white and rural populations will be negatively associated with a municipality's online presence and proactive dissemination.

All control information was collected from one of three sources. Demographic data were gathered from the United States Census information compiled by the New Jersey Department of Labor and Workforce Development. These data were more thorough than data provided directly by the United States Census bureau because they reported specific information for all municipalities in New Jersey. Political ideology data was compiled using voting results for the House of Representatives race in November 2008 from the Division of Elections within the State of New Jersey Department of State.<sup>6</sup> Municipal budget and information about government and election type were from the State of New Jersey Division of Local Government Services.<sup>7</sup>

#### MODEL FINDINGS

The dependent variable in this study-the proactive dissemination category to which a municipality belongs-is nominal and does not meet the distributional assumptions of ordinary least squares (OLS) regression, so data analysis was undertaken using a multinomial logistic ("logit") regression model (Long and Freese, 2003). While the categories of the dependent variable tend to imply stages of progression, two of the categories-agenda-centric and minutes-centric-each focus on a separate aspect of meetings information, thus a multinomial logit regression model was used instead of ordered logit. The multinomial logit model requires that one category of the dependent variable is the "base" category to serve as a comparison point for all other categories; in this case, the base category is category two: those municipalities with a website but are least transparent in proactive dissemination practices.8

Descriptive characteristics of the independent variables are included in Table 2, while a correlation matrix is included in Table 3. The natural logs of three variables-municipal budget, population, and per capita income-were used in order to reduce the large range of their values without losing their underlying distributional characteristics. The correlation matrix indicates that there is some colinearity among independent variables. However, these relationships are generally expected and dropping these variables would be inconsistent with the hypotheses derived from theory. For example, there is a high correlation between population and municipal budget: such a correlation is expected because the more people included the tax base, the larger budget a municipality could have. Additionally, these two variables are included with the idea that they are measuring two different things: population is

Independent Variables	Description	Mean	SD	min	max
Manager	0=no; 1=yes	0.085	0.279	0	1
Election Type	0=nonpartisan; 1=partisan	0.852	0.356	0	1
Municipal budget (in dollars)	natural log	11,355,342.51	16,635,491.00	18,645.4	180,814,349.07
Per Capita Income (in dollars)	natural log	29,987.37	14,269.57	9,815	114,017
Population	natural log	14,866.34	22,789.26	18	273,546
Median age (in years)		38.757	4.878	23.6	67.7
Non-white	percentage of total population	.156	.163	0	.983
Rural	percentage of total population	.205	.368	0	1.00
Female	percentage of females over 18	.521	.031	.151	.605
Political ideology (Democrat)	0=republican; 1=democrat	.454	.498	0	1
Note: The natural log of municipal budget, I	Note: The natural log of municipal budget, per capita income, and population were used in the analysis. The mean, standard deviation, and range are reported as raw statistics.	n the analysis. The mean,	standard deviation, and r	ange are reported as raw a	statistics.

used as an indicator of the size of a municipality's citizenry while budget is used as an indicator for potential institutional resources, generally, and perhaps technology budget, specifically. Other levels of colinearity are expected by the nature of the data: we would expect that percentage of rural population be correlated in some way to total population; we would expect median age and per capita income to be related, since age indicates longer time in the workforce, possibly influencing rate of pay. In sum, these variables were kept in the model due to their importance within the control model.<sup>9</sup>

Data from the multinomial logit model are presented in Table 4. The prediction rate for this model is 43.5 percent, as indicated by the Count R-squared. Further, this model predicts 16.2 percent better than a random model given the same variables, as shown by the adjusted Count Rsquared. While model coefficients are difficult to directly interpret, we can still see which variables are significant and in which direction. Table 4 shows that per capita income, population, median age, non-white and rural populations are all statistically significant variables, though for varying categories. Table 5 shows the predicted probability of a municipality belonging to a particular category where all independent variables are at their mean, or if dichotomous, at their mode.

To better interpret these results, I have included a graph that indicates the percent changes in predicted probabilities of belonging to a particular category when there is a one standard deviation change. See Figure 1. The highlighted and bolded values indicate that the relationship is significant. These percent changes can be added to the respective group's predicted probability (in table 5) resulting in the predicted probability of being a municipality in that group after a standard deviation change of a particular variable. In discussing these findings, I will discuss each variable and its effects across the categories.

Table 2. Descriptive statistics for independent variables

Independent Variable	1	2	3	4	5	6	7	8	9	10
1. Manager	1.000									
2. Election Type	2475	1.000								
3. Municipal budget	.1887	2026	1.000							
4. Per Capita Income	.0364	.0770	.1041	1.000						
5. Population	.1922	0821	.7834	0873	1.000					
6. Median age	0815	0874	0853	.4301	3429	1.000				
7. Nonwhite	.0591	1741	.3516	4096	.4178	4580	1.000			
8. Rural	0943	.1865	5089	1615	3226	0384	1825	1.000		
9. Female	.0380	0402	.1984	.1434	.0898	.2322	0614	2880	1.000	
10. Political ideology (Democrat)	.1045	1583	.2978	1940	.2886	2898	.4708	3631	.1091	1.000

Table 3. Correlation matrix of independent variables

Note: The natural log of municipal budget, per capita income, and population were used in the analysis. The mean, standard deviation, and range are reported as raw statistics. The correlation coefficients are based on their logged values.

Table 4. Multinomial	logit model	coefficients with	base category two

Independent Variable	Category 1: No website	Category 3: Agenda- Centric Transparency	Category 4: Minutes- Centric Transparency	Category 5: Balanced Transparency
Manager	-1.389	694	779	.276
Election Type	1.175	030	311	.258
Municipal budget	.112	.418	115	.253
Per Capita Income	-1.216*	.713	1.23***	2.170***
Population	-1.204***	.464	.310	.298
Median age	051	.009	047	135***
Non-white	1.463	-1.211	-2.613**	-2.942**
Rural	1.303***	631	.552	.679
Female	2.530	-4.628	5.727	1.556
Political ideology	.504	.566	098	036
Constant	18.262**	-17.288***	-14.512***	-24.772***
Log Likelihood = $-731.99222$ N = 566 LR chi-square = 259.99*** d. f. = 40 * Significant at p < .10 (two-tailed) *** Significant at p < .05 (two-tailed) *** Significant at p < .01 (two-tailed)		Pseudo R-squa Count R-squar Adjusted Cour		<u>.</u>

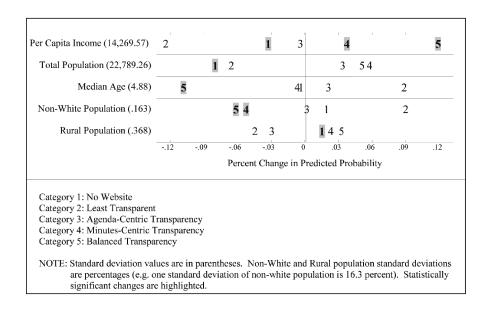
#### Per Capita Income

When per capita income increases one standard deviation, its value increases \$14,269.57 to \$44,256.94. When compared to the base outcome (category two, or the least transparent), this change is significant for three categories: no website, minutes-centric, and balanced transparency. The chances of being a municipality without a website when per capita income increases by one standard deviation decreases by about three percent. The true impact of this finding is best articulated in predicted probability: that three percent change decreases the overall predicted probability of being a municipality without a website-based on this per capita income value-to just over one percent. Put simply, it is highly unlikely that a municipality with a per capita income of about \$45,000 will be one without a website. The opposite effect is apparent with categories four and five. Here, an increase in per capita income by one standard deviation increases the probability of being minutes-centric transparent municipality by about four percent and the chances of being Table 5. Predicted probabilities based on logitmodel

Categories	Predicted Probability	
1: No Website	4.15	
2: Least Transparent	39.40	
3: Agenda-Centric Transparency	8.10	
4: Minutes-Centric Transparency	24.64	
5: Balanced Transparency	23.71	
Note: All probabilities are based on independent variables at their mean. Dichotomous variables are held at their mode.		

a balanced transparent municipality by close to 12 percent. These increases in probability bring predicted probabilities of being in those categories when per capita income is roughly \$45,000 to about 29 percent and 35 percent, respectively. Per capita income has an effect on three of the four categories in comparison to the base category of two, which indicates that it is one of the more impactful variables on proactive dissemination practices. These findings are consistent with the posited hypothesis.

Figure 1. Changes in predicted probabilities as a result of a one standard deviation change



### Total Population and Rural Population

Since the total population and rural population only have effects on the category of municipalities without websites, they will be discussed together. When population increases one standard deviation—by about 23,000 people to a total of 37,656 people—the chances of being a municipality without a website decrease by roughly eight percent. This decrease of eight percent places the predicted probability of being a category one municipality at less than zero. As a result, population has a large impact on whether a municipality will have a presence online.

When the percent rural population increases one standard deviation from 20.5 percent to 57.3 percent, the chances of being a municipality without a website increases by about three percent. While this increase may not seem like much, it increases the probability of being in that category from about four percent to seven percent. Therefore, rural municipalities are less likely to have a presence online than less rural municipalities. Both of these findings, total population and percent rural population, are consistent with their respective hypotheses.

# **Median Age**

Median age has a significant impact on the chances of being a balanced transparent municipality as opposed to a least transparent municipality. Piotrowski and Van Ryzin (2007) found that older residents desired more transparency, but that they were less likely to obtain government documents. Further, Reddick (2005) found that older residents are less likely to participate online. These conflicting findings led to a nondirectional hypothesis for median age in this study. Figure 1 indicates that when median age of a municipality increases one standard deviation, about five years to a total 44 years, the likelihood of being a category-five municipality as opposed to a category-two municipality decreases by roughly ten percent. This change greatly impacts the predicted probability of being a category five website: from about 24 percent to about 14 percent. Therefore, this finding seems to support the idea that older residents are less likely to participate online, regardless of their desire for transparency, as previously indicated by Piotrowski and Van Ryzin (2007).

# **Non-White Population**

Lastly, non-white population was significant for two groups: municipalities that are minutescentric and municipalities that have balanced transparency. Interesting about this finding is that the variable was included as a control for the fact that there is evidence that non-white populations would be less likely to have a website. The percent of non-white population did not have an effect on the group of municipalities without websites as compared to the base group, least transparent. However, an increase in non-white population, from about 15.5 percent to about 31 percent, decreases the chances of being a category four website by about five percent. This same relationship is found when it comes to balanced transparent municipalities: when a one standard deviation increase in non-white population occurs, the chances of being a category-five municipality as opposed to a category-two municipality decrease about six percent. Substantively, this means that larger populations of non-white residents decreases the chances of a municipality being considered as a minutes-centric or balanced transparent municipality.

# DISCUSSION

These findings have some interesting implications. Non-white population, which was included primarily as a control to explain differences between the base category and municipalities without a website, was found to be statistically significant for changes in both the minutes-centric and balanced transparency categories. These findings indicate that as non-white population and transparency are inversely related: as percentage of non-white population increases, the degree of transparency decreases. This could due to the possibility that non-white populations are related to lower income levels, as indicated by the correlation between the two variables, which is -.4096. Since per capita income is significant in those categories as well, we may have a spurious relationship here. In the state of New Jersey, many communities have large non-white populations, which render this finding worthy of future examination.

One of the more striking findings in this research is the effect of age on a municipality's placement in the balanced transparency category. As discussed above, when median age increases about five years, the chances of being in category five as opposed to category one decrease more than 10 percent. This relationship was hypothesized without a direction: Piotrowski and Van Ryzin (2007) found that older residents desired more transparency, but were less likely to obtain documents from their government. The nature and magnitude of this relationship in this current study is possibly due to the use of websites as the medium for proactive dissemination. E-government literature generally supports the notion that older persons use the internet to obtain government information less than younger persons (Reddick, 2005). This is likely indicative of a generation gap evident with the advent of the internet. Future research that studies the impact of age on proactive dissemination through different means may lead to fruitful discussion.

The measurement of recent minutes did not provide such a clear-cut contrast of proactive dissemination behavior when compared with the results of measuring recent agendas. In other words, in both categories four and five, the age of the most recent minutes are pretty evenly divided across the four measurement categories. To be sure, these minutes were measured in one month increments: less than one month old; one month or older, but less than two months; two months or older, but less than three months; and three months or older. New Jersey's Open Public Meetings Act does not provide an explicit release date for minutes, just that they be "promptly available" (New Jersey Open Public Meetings Act, 1976).<sup>10</sup> Because there is no deadline for availability, these categories created for new minutes are somewhat arbitrary. Minutes need to be drafted, approved, and finalized before they can be considered "minutes." As such, it may take longer than a month or two to get them ready for public release; whether this is acceptable or not remains a normative question that is beyond the scope of this chapter. In conclusion, however, future research should take this into consideration, particularly in the crossstate context. Some states provide hard and fast deadlines as to when minutes should be available, while others do not (See Piotrowski and Borry, 2010, for more discussion).

Lastly, the model has relatively few findings compared to the number of relationships in the model. Managerial government, election type, municipal budget, female population, and political ideology were all found to have no statistically significant effects on proactive dissemination. Three of these are considered government controls and the other two are taken from current literature as potential groups that demand transparent practices from their government. These non-findings could indicate that desire for transparency does not actually translate into demand or they could also indicate measurement issues. Since the unit of analysis is the municipality, this research may not be getting at a critical player: the individuals who attend meetings to participate and to request information.

#### CONCLUSION

This study sought to explore sources of citizen demand and organizational factors that influence proactive dissemination at the municipal level. As an exploratory study, there are two major points that can be drawn in conclusion. The first relates to the categories of proactive dissemination as devised by the agglomerative clustering of the dependent variable. For example, do all municipalities fall squarely into one of these categories? Or, are there other behavior patterns that are not captured by the municipalities within the state of New Jersey? Future research should also address other proactive dissemination behaviors. Municipal websites alone do not provide a full picture of a municipality's proactive dissemination practices. A municipality without a website may be proactively transparent in other ways.

The second major point to take from this research relates to the control model. Here, the goal was to establish potential determinants of proactive dissemination, as indicated by previous transparency and e-government research. Support for these determinants is mixed. First, several variables were not found to be significant, while others were. Additionally, these significant variables were not consistent across all categories of proactive dissemination behavior. While these variables were found to influence desire or demand for governmental transparency in general, the lack of support for these variables in this study could mean that this desire is not translated into action. In other words, people may want transparent and open government, but they may not be willing to demand or ask for it. Or, it could be that individuals who serve as a big push for governmental transparency are low in numbers.

This study focused mainly on the demand side of the equation with regard to proactive dissemination. Again, support here is mixed. None of the organization-specific variables, such as format of government, election type, or budget, were found significant. As a result, future research should continue to consider demand determinants while also exploring these and additional governmental and organizational factors. In addition, the availability or presence of government documents was explored. In some way, this study considers only quantity and availability. However, the quality of such documents is perhaps more important. A meeting agenda that is 20 pages long may provide irrelevant or useless information, while a two page agenda could be more telling. The presence of information is only one aspect of transparency while the quality of that information is essential to how informed the public can be and holding government accountable.

Another thing to point out is that the findings tend to be consistent with prior findings in the transparency and e-government literatures. While some might argue that this study may tell us what we already know, others might say this research has an added benefit. We already have some knowledge about website usage or why a government is transparent and what benefits transparency provides. However, this student provides more by providing insight into the *nature* and *magnitude* of a municipality's transparency practices—as indicated by the various categories of municipalities—as well as what might affect those practices—as found with the results of the control model.

Lastly, it must be acknowledged that some might argue that transparency is not always a good thing. Wickham (1975) posits that democracy requires a citizenry that is informed. Contrarily, he argues, democracy also rests on quality decision-making, upon which transparency could be an impediment. Therefore, it can be argued that some degree of secrecy could be beneficial for the development of public policy. Cooper (2006, p. 69) argues that citizens should included in the decision making process: "Citizens should not be deprived of the right to participate in public decision making because it requires a greater expenditure of time, effort, and money than they can afford or than the anticipated benefits seem to warrant." While the conceptual link between transparency and participation and engagement is pretty clear, the empirical link is not. This research can serve as a basis for future study into that link, begging an answer to the following question: does more transparency actually result in a more informed electorate who participate more or at a higher quality? While speculation of the costs and benefits of transparency and the impacts it has on participation and engagement are beyond the scope of this study, it is suggested that researchers consider this in the future.

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### **KEY TERMS AND DEFINITIONS**

**Freedom of Information Laws:** Legislation which allow persons to request public documents from governments.

**Governmental Transparency:** The degree to which access to government information is available; or the extent to which the general public is able to know what their government is doing.

**Meeting Agendas:** Public records that outline the potential topics and schedule of a public meeting.

**Meeting Minutes:** Public records that detail the proceedings of a public meeting.

**Municipal Website:** A tool through which local governments establish an online presence.

**Open Meetings:** Governmental proceedings at which the public has the right to attend.

**Proactive Dissemination of Information:** The voluntary release of government documents and other material to individuals or other organizations.

**Public Records:** Government documents in any form, including paper, electronic and audio or visual files.

# ENDNOTES

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- <sup>2</sup> For a discussion on the descriptive statistics found in this study, see Piotrowski and Borry (2009).
- <sup>3</sup> A single agenda or set of minutes was only counted once, as a municipality's newest. Age and consistency were coded only if there was at least one other separate agenda or minutes document.
- <sup>4</sup> Agglomerative clustering is a technique that places observations into groups based on patterns within the data. SAS uses an algorithm to measure the distance of one observation to its nearest "neighbor." Jacardian distance and agglomerative clustering was used, as opposed to "divisive cluster analysis", which places observations into groups with the greatest distances. Both methods produce close to the same results, but agglomerative clustering is a simpler method to run.
- <sup>5</sup> More detailed measurement and time characteristics of the municipalities' posting behaviors can be found in the Appendix.
- <sup>6</sup> Using the percentage of the votes for the outcome, a municipality was coded "1" if the Democratic candidate(s) received the most votes and "0" if the Republican candidate(s) received the most votes. Third parties were often included in the races, which may render a majority impossible. As such, whichever of the two major parties received the most votes was the one coded for.

<sup>7</sup> Government type is included as a dichotomous variable reflecting whether or not a government has a manager: 1 indicates a manager. Election type is included as a dichotomous variable reflecting whether local elections are partisan (1) or non-partisan (0).

<sup>8</sup> Another option was to possibly make category one—municipalities without a website—the base category. However, using municipalities without websites as a base would mean that we are comparing them to all other categories, which include municipalities with websites and some degree of transparency. Logically, it does not make sense to compare municipalities that do not have a website and have no chance of being proactively transparent to all other municipalities that have a website. It does make sense, however, to compare municipalities without a website to municipalities that have a website with low-levels of posting behavior, as well as to compare all municipal websites with varying degrees of posting behavior.

- <sup>9</sup> To further address the concern of multicollinearity, I calculated the variance inflation factor of the variables in the model. None of these were higher than 4 and the mean was 1.88, all well within the standard cut-off of 10 (Belsley, Kuh, and Welsch, 1980).
- <sup>10</sup> Agendas are required to be included with the notice "if available." Notice is required in the form of a yearly schedule, which implies that agendas are hardly known that far in advance. However, it is common practice in the state of New Jersey for public bodies to produce and release an agenda prior to a meeting (See Piotrowski and Borry, 2010).

		Information	Category 1 Municipalities without websites	Category 2 Least Transparent	Category 3 Agenda-Centric Transparency	Category 4 Minutes-Centric Transparency	Category 5 Balanced Transparency
	Recent Agenda	No agenda		85.9	0.0	56.2	0.0
		3 months or older		0.5	9.8	3.3	5.8
		2 months or older, less than 3		0.0	4.9	0.8	2.2
		1 month or older, less than 2		1.1	4.9	3.3	4.4
		Less than 1 month old or upcoming		12.5	80.3	36.4	87.6
SVO	Oldest Agenda	None or only one agenda		100.0	0.0	97.5	0.0
END		Less than 6 months old		0.0	27.9	0.0	13.9
ÐV		6 months or older, less than 1 year		0.0	4.9	0.0	8.8
		1 year or older		0.0	67.2	2.5	77.4
	<b>Consistency of</b>	None or only one agenda		100.0	0.0	97.5	0.0
	Agendas	Less than one every 2 months		0.0	3.3	0.8	3.6
		One every 2 months		0.0	1.6	1.7	1.5
		One or more per month	VIN	0.0	95.1	0.0	94.9
	<b>Recent Minutes</b>	No minutes	Y/N	95.1	90.2	0.0	0.0
		3 months or older		2.7	1.6	26.4	22.6
		2 months or older, less than 3		0.5	0.0	19.8	19.7
		1 month or older, less than 2		1.1	6.6	32.2	32.8
		Less than 1 month old		0.5	1.6	21.5	24.8
SE	<b>Oldest Minutes</b>	None or only one set of minutes		100.0	100.0	0.0	0.0
LNN		Less than 6 months old		0.0	0.0	8.3	10.9
IW		6 months or older, less than 1 year		0.0	0.0	4.1	5.1
		1 year or older		0.0	0.0	87.6	83.9
	<b>Consistency of</b>	None or only one set of minutes		100.0	100.0	0.0	0.0
	Minutes	Less than one every 2 months		0.0	0.0	3.3	0.7
		One every 2 months		0.0	0.0	2.5	0.7
		One or more per month		0.0	0.0	94.2	98.5
		Total Number of Observations	63	184	61	121	137

# APPENDIX: DESCRIPTIVE CHARACTERISTICS OF MUNICIPALITIES WITHIN DEPENDENT VARIABLE CATEGORIES (TABLE 6)

Table 6.

# Chapter 3 E-Government for Transparency in Mexico: Advances and Limits in Promoting Open Government and Citizen Engagement

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### ABSTRACT

In the last decade, Mexico's developments regarding the recognition and protection of the right to access the government's information has been considerable. The use of internet has been a key factor to make information available and to make citizen-government interactions easier. However, institutional, structural and behavioral factors continue to be obstacles to the effective realization of the right to information. The chapter provides a brief background to the development of e-government at the federal level and of the transparency legislation. The use of IT in the implementation of the LFTAIPG is explained and main strengths and weaknesses are identified. The main structural, institutional, and cultural limits to the use of ICTs for making the right to information effective are presented. Finally, some concluding remarks are offered in relation to the interaction between internet technologies and institutional behaviors that can thwart the efficacy of e-government as means to foster citizen engagement.

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#### INTRODUCTION

Whenever the people are well informed, they can be trusted with their own government; that whenever things get so far wrong as to attract their notice, they may be relied on to set them to rights.

#### Thomas Jefferson

Information is a critical element to be able to get involved in the political debate and have an impact on the decision-making process and their implementation (Aguilar, 2001). A representative democracy requires information so that institutional checks and balances can operate properly and voters can impose a sanction on those public servants who do not perform adequately; accountability requires that public officials explain and justify their actions, and that citizens enjoy the right to debate and make judgments on the information and arguments presented to them (Stewart, 1984). While this is not enough to ensure effective accountability, the right to information is an essential ingredient of a well functioning democracy.

In this respect, information and communication technologies (ICTs) have been seen not only as tools to improve the efficiency and quality of public services, but also as way to increase the confidence of the people in public institutions (West, 2009). Technological tools such as the Internet have great potential as a means for extending the public sphere and, therefore, generating greater citizen involvement in public affairs. Such potential can be appreciated in the form of easier access to public information. However, such positive effects are not achieved without problems: while it is true that ambitious projects to make government more transparent are now possible, there are circumstances or factors that technology cannot by itself surmount. This is particularly the case when we consider the problems of democratic governance and the deep social gaps that poor and developing nations are facing. Paradoxically, in

such countries, the use of e-government is at the same time a pressing matter but also a strategy with limited impacts within the wider context in which it is applied.

This chapter presents the Mexican experience of access to public information, identifying the progress made and the most important challenges that have been detected in the use of ICT. The aim is to show the potential of egovernment as a tool to increase government transparency and access of the public to information, but also the lessons learned regarding the social, institutional and cultural factors that limit or constrain the effectiveness of ICTs in increasing citizen engagement. In this sense, e-government represents an opportunity to foster a more informed and active citizenry but cannot be seen as a "silver-bullet". The multiple factors affecting the exercise of the people's rights beyond the use of technologies must be considered and addressed if the right of access to public information is to be strengthened.

The rise of Vicente Fox to the presidency of Mexico in the year 2000 marked the culmination of a gradual democratization process of the political regime, dominated by a single party for 70 years. At that point, Mexico experienced an unprecedented climate of political openness in which the new administration promoted major reforms inspired by the idea of good governance. In 2001, the government published a presidential agenda with six main lines of action, including promoting honest and transparent government, and digital government. As regards honest and transparent government, the most important gain was unanimous congressional passage of the Federal Law on Transparency and Access to Public Governmental Information (LFTAIPG) in April 2002. The Law guarantees the right every person to access to public information in position or produced by the federal government aiming to strengthen democratic culture and practices in Mexico. The right of access to

information was understood as a mechanism for citizen engagement, by establishing a new balance of power in which citizens would be able to render direct judgments regarding the activities and performance of the government. The push towards e-government was aimed at making it possible, "from the comfort of their home or office, for citizens to obtain information from the government and to have access to the services it offers" (Presidency, 2001, p. 12).

The Law makes an explicit link between the exercise of the right of access to public information and the adoption of new technologies, particularly using the Internet. This reflects the interest of making the citizen the central focus of government activity, the concern to have more honest and transparent government, and the push towards e-government. It was not just a question of using the Internet and ICTs as the most appropriate platform for making public documents and information accessible, but they were seen as the touchstone of a deep transformation of the culture and practices of transparency in the Mexican government and of the relationship between the state and citizens (Organization for Economic Cooperation and Development [OECD], 2005). Despite the important gains, important challenges remain when it comes to ensuring widespread use of the right to information.

The first part of this chapter describes the main characteristics of the Law on Access to Public Information and the main achievements in adopting e-government in Mexico. The next part reviews the electronic systems that have been created to provide technological support for the dissemination and exercise of the right of access to information. The third part discusses the structural, institutional, and cultural limits faced by electronic systems for access to information. Final observations are presented by way of conclusion.

# ACCESS TO INFORMATION AND E-GOVERNMENT IN MEXICO

# Transparency and Access to Information Reforms in Mexico

It is possible to trace back the precedents on the legislation on access to information in Mexico back to 1977, when Article 6 of the Constitution incorporated the clause "the right to information shall be guaranteed by the State." Nonetheless, this provision was generally understood as the freedom of expression in the media, and not as access to government information (López-Ayllón, 2004). For this reason, the enactment of the Law on Access to Public Information in 2002 meant a significant change as it opened the possibility for citizens to obtain data and documents from public institutions.

In March 2001, the president put forward a legislative initiative that assigned the State the leading role in ensuring the conditions necessary for citizens to fully exercise the right of access to public information. At the same time, in May 2002, a group of academics, members of the media, and civil society, known as "Grupo Oaxaca" [Oaxaca Group], made an alternative proposal for a bill on access to information. Even though the relationship between this group and government actors was not always simple, the dialogue that took place between the two parts made it possible to improve the initiative that was finally passed by Congress.<sup>2</sup>Bookman and Guerrero (2009) concluded that the intervention of Oaxaca Group triggered changes in the government's initial draft law, in particular regarding the autonomy of the newly created Federal Institute of Access to Public Information (IFAI) and the Senate's involvement in appointing its Commissioners.

The Law on Access to Public Information (LFTAIPG) was approved unanimously by Congress on April 30, 2002, and was published in the Official Gazette [*Diario Oficial de la Federación*] on June 11, 2002. The objectives of the law are as follows: 1) to provide whatever is necessary so that anyone may have access to information by means of simple and fast procedures, 2) to make public management more transparent by spreading the information relating to the government agencies, 3) to promote accountability vis-à-vis citizens by providing data required to assess the government's performance, and 4) to contribute to the democratization of Mexican society (Article 4).

The LFTAIPG establishes that information in the possession of the State is public (Article 2). Before, all information in the possession of government bodies was, in practice, confidential (López-Ayllón, 2004, pp. 26-27). Moreover, a test is defined for classifying information as under seal or confidential (Articles 3, 13, 14 and 18). In case of doubt as to how to classify the documents of the administrative or judicial authorities, the principle of maximum publicity of the information should prevail (Article 6). In addition, the personal information of citizens is protected (Article 20 to 27); it may only be made public at the request of the person to whom the information pertains.

A distinctive feature of the law is that it mandates that the release of public information shall not be conditioned in any way on the requester identity, motivations, or the use he or she intends to make of it (see also Table 1). There are also no requirements to present any identification when asking for information (Article 40). This is very important, given that in Mexico many citizens do not trust or even are fearful of the authorities; accordingly, not requiring the person to identify him or herself as a condition for requesting information and filing motions for review protects the citizens of the government abuses of authority (Interview 1). This same principle helped make it possible to establish on-line mechanisms for requesting information, eliminating the need for "digital signatures" or any other means of verifying one's identity.

The Law on Access to Public Information also incorporated an "active transparency" approach by requiring to make available to the public, "in a permanent, updated, and to the greatest extent possible on the Internet, information that will enable citizens to have direct knowledge of the functions, actions, results, structure, and resources of the entities of the State" (López-Ayllón, 2004, p. 28), without any need for citizens to make any request or file any petition. This is especially important if considering that similar legislations in other countries establish a procedure in which the individual has to make an explicit request for a given document or data. In other words, in the Mexican case, the costs and the burden of accessing the information must be borne by the State, not by the citizens.

The procedure by which a citizen requests information from the government takes place in two stages, each before different authorities (Figure 1). First, the request must be presented to the institution that has the information, which will have up to 20 working days to respond. The request may be made in person, in writing, or electronically. If the institution refuses to provide the information, or fails to do so within the established time frame, one may seek review by the IFAI, which is an autonomous agency governed by independent commissioners.<sup>3</sup> The IFAI rules on whether the institution must release the information requested; its rulings are binding and may not be appealed.

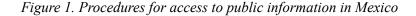
In addition, the Law establishes the obligation of the federal public administration to inform the citizens at least 20 working days prior to date on which they intend to publish or submit preliminary bills or regulations (except in emergency situations or if the publication may compromise the effects sought to be achieved) (Article 10) (López-Ayllón, S., 2004, pp. 28-29). This provision, along with the mandate to make this kind of information public using electronic means, suggests the importance of such innovations for allowing a more direct political participation of citizens with their representatives and public officials.

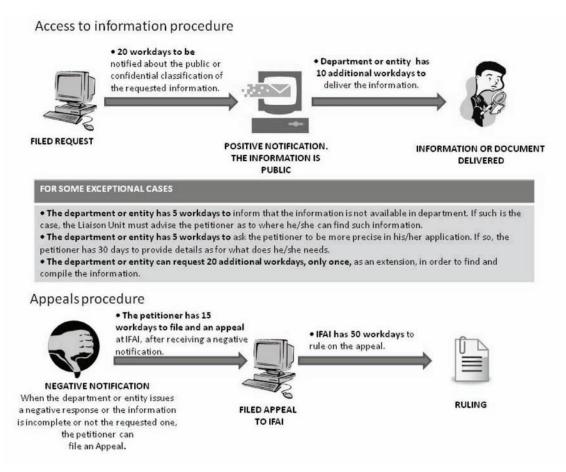
It is important to bear in mind that the use of electronic media for accessing government information and documents is not intended to

Information to be available permanently in the department or entities' transparency web page	Examples of information requested, 2003-2006.
<ul> <li>I. Its organizational structure;</li> <li>II. The powers of each one of the administrative units;</li> <li>III. The directory of public servants, from the level of department head or its equivalent;</li> <li>IV. The monthly wage per position, including the compensation system, according to the corresponding provisions;</li> <li>V. The address of the Liaison Unit, and the electronic address where requests for information can be sent;</li> <li>VI. The goals and objectives of the administrative units based upon their operative schedules;</li> <li>VII. Services rendered;</li> <li>VIII. Procedures, requirements and formats. In case they are registered before the Federal Registry of Procedures and Services or before the registry established for taxation purposes by the Tax Ministry, they shall be published as recorded.</li> <li>IX. Information on the allocated budget, as well as reports concerning its use, based upon the terms of the Federal Budget of Expenditure. For the case of the Federal Executive, said information shall be available for each department and entity at the Tax Ministry, which at the same time shall publish the economic situation, public finances and public debt, based upon the terms of said budget;</li> <li>X. The results of audits performed during the fiscal year of each compelled body and accordingly by the Comptroller and Administrative Development Ministry, internal comptrollers' offices or the Federal Bugerior Auditing Office, and, if it is the case, they should also include any necessary clarification.</li> <li>XI. The design, execution, allocated amounts, and criteria used for all subget of Expenditure;</li> <li>XIII. Licenses, permits and authorizations granted, specifying the name of the principals;</li> <li>XIII. Licenses, permits and authorizations granted, services rendered; in the case of studies or research the specific topic shall be state; b) The amount;</li> <li>Name of the supplier, contractor, or the company or individual with whom the agreements.</li> <li>XIV. The regul</li></ul>	<ul> <li>Number of mobile telephone lines in the state of Nuevo León, requested to the Federal Telecommunications Commission.</li> <li>Number of controversies liftgated at Labor Court by Mexican Petrol (Pemex), requested to Pemex</li> <li>Number of posts and remunerations at the Secretary of Public Security (SSP), requested to SSP.</li> <li>Number of buildings rented by the Secretary of Foreign Relations (SRE), requested to SRE.</li> <li>Copies of contracts signed by Pemex, requested to Pemex.</li> <li>Copy of the official gazette regarding the taxes on automotive ownership, requested to Secretary of Hacienda.</li> <li>Total production of ginger in Mexico, requested to the Secretary of Agriculture, Stockbreeding, Rural Development, Nourishment and Fisheries (SAGARPA)</li> <li>Information regarding the setting of pension levels, requested to the Mexican Institute of Social Security (IMSS).</li> <li>Information regarding federal benefits to senior citizens in the state of Chihuahua, requested to the National Institute of the Senior Adult (INAPAM).</li> <li>Information regarding a blackout, requested to the Light and Power Company (LyFC).</li> </ul>
<b>3</b> / <b>1 1 1 1 1 1 1 1 1 1</b>	

*Table 1. Information that has to be permanently updated in the Transparency Portal and examples of information requested in 2008* 

#### E-Government for Transparency in Mexico





eliminate the archiving and preservation of physical back-ups, but rather is aimed at making the procedure more accessible and more widely known. Accordingly, the authorities' obligation with respect to preserving and facilitating access to documents, i.e. the physical copies, in which the information is to be found, remains. The Law ensures that the information to which citizens have access is exactly the same as that which is used by the government authorities themselves in making decisions.

Given all these characteristics, with the adoption of the Law, Mexico became an international point of reference for the design and implementation of legislation on access to information. In this sense, countries that share with Mexico similar political, socioeconomic, institutional and cultural conditions, could take advantage of the process this country went through when facing a reform of this nature. The passage of the Law on Access to Public Information also led to the drafting and adoption of similar provisions in the various states of Mexico, including the establishment of organs to guarantee the right of access to information, although the procedures, powers, and capacities vary widely.

#### **Context of e-Government in Mexico**

Experiences of implementing electronic government in Mexico date back to the 1980s, although these did not extend to the entire federal government. More significant advances came in the wake of the adoption of the Federal Telecommunications Law in 1995, which laid the bases for regulating satellite communications; the creation in 1996 of Compranet (www.compranet.gob.mx), an electronic system for government procurement that became an internationally recognized practice; and the incorporation of provisions to make it possible to file taxes electronically in 1998. Nonetheless, it was not until 2001 that e-government was officially introduced as an initiative to modernize and digitalize government in Mexico (OECD, 2005, p. 25).

In the year 2000, President Vicente Fox announced the e-México initiative. The objective was to promote the incorporation of Mexico into the information and communication technologies revolution (www.e-mexico.gob.mx) by increasing connectivity and electronic access, with a view to reducing the digital gap in the area of e-government, but also in health and commerce. To achieve this objective, Digital Community Centers have been established to link up rural communities and families that do not have access to telecommunications infrastructure (OECD, 2005). In 2002, e-government became one strategic line of the Good Governance Agenda of the Fox administration. From that moment, e-government was consider as an instrument for promoting and developing sweeping transformations in the quality, transparency, and effectiveness of the government and public services. One crucial characteristic of this vision was that ICTs were not designed merely as the technological support structure for government activities, but as facilitators of a transformation in public management in general (OECD, 2005).

The commitment of the Mexican government to e-government has resulted in major gains in a relatively short time. For example, while in 2001 only 170 administrative transactions were available on-line, by 2005 the number increased to 1,225 (West, 2009, p. 244). Another accomplishment along these lines has been the implementation of the federal government's Portal Ciudadano (http://www.gobierno-digital.gob.mx), which constitutes a point of access to all government information, products, services, and transactions, and represents a communication link between the government and the citizens. That portal won the prestigious Stockholm Challenge Award in 2004. The Global e-Government Readiness Report 2005 of the United Nations ranked the efforts made in Mexico as 31st of a total of 191 countries. That same year, the Mexican government received the United Nations Public Service Award for its e-government strategy. Nonetheless, by 2010, Mexico descended 19 positions in the Global e-Government Readiness Report (United Nations, 2010).

# Description of Electronic Systems for Exercising the Right of Access to Information

The Mexican experience has shown that, as Becerra (2008) states: "the future of the right is conceived of as a legal and procedural framework that provides the greatest facilities and the greatest guarantees for the requester, and therefore the requester is the key subject of the laws. Accordingly, electronic systems are mandatory, because they are instruments that radically facilitate the right" and its exercise" (p. 76). Three electronic systems have been made available for exercising the right of access to public information: the Transparency Obligations Portal (POT: Portal de Obligaciones de Transparencia), the search engine of prior requests for access to information and prior responses (Zoom), and the system for filing of and follow-up to requests and motions for review (INFOMEX). These electronic information systems constitute the "great Mexican contribution to the right of access to information" (IFAI, 2007, p. 32).

The Transparency Obligations Portal (http:// portaltransparencia.gob.mx/pot/) is a server designed to facilitate citizen access to the informa-

tion which by law the institutions of the federal government must make available to the public on an ongoing basis, also known as the "transparency obligations."4 These obligations include: the organizational structure, the directory of public servants, remunerations, transactions, the budgets allocated and executed, the indicators of institutional performance, and the programs and services entrusted to the various offices. Among the benefits of the portal are that it makes it possible to find, in a single place, all the information on the more than 240 offices of the federal government, and that it can be consulted either individually or in the aggregate, for example, by public policy sectors. For example, the Transparency Obligations Portal makes it possible for users to find out how many contracts have been carried out by Mexican Petroleum (PEMEX) with IBM, but it also allows finding out how many contracts IBM has signed with any institution of the federal public administration (Guerrero, 2007, p. 4). Nonetheless, the transparency obligations of state and local governments, as well as other public institutions, are not integrated into the Transparency Obligations Portal since each one independently establishes its own transparency portal that contains the information determined by the local legislature (IFAI, 2009, p. 54). This makes it difficult for users to find the information they need in the case of state and local governments and entails greater diversity in respect of e-government.

As of May 27, 2010, the Transparency Obligations Portal had 31,995,520 hits. With respect to the information from the federal government, the aspects most sought-after by the users from February 2007 to date are: the directory of public servants (25.6%), procurement of goods and services, as well as public works (24.9%), and the monthly remuneration per position (15.7%). In the same period, the offices that received the largest number of queries through the portal were the Servicio de Administración Tributaria (Mexico's IRS), the Mexican Social Security Institute (Instituto Mexicano del Seguro Social), the Office of the Attorney General (Procuraduría General de la República), the Ministry of Public Education, the Ministry of Economy, and the IFAI itself (IFAI, 2010).

Zoom (http://buscador.ifai.org.mx/buscador/ bienvenido.do) is a search engine of the information requests that have previously been filed with the federal government, the responses that have been given, and the resolutions that the IFAI has issued, including the legal studies that support those decisions (IFAI, 2009). The usefulness of Zoom is, first, that it makes it possible to gain access to information that was already requested without the need to initiate a new procedure and thereby to avoid waiting time. Zoom also supports the work of government offices by making easy to identify precedents both of the requests for information and the resolutions of the IFAI, which helps public servants improve their future responses and comply with the law (Guerrero, 2007). Second, this tool also makes it possible to analyze the way in which previous requests have been presented, as well as the responses received, which may help to make the future requests more precise. The Zoom search engine operates in a manner similar to the most popular search engines on the Internet, which make use of keywords to create lists of links to relevant information (in this case, questions, responses, and motions for review). Once a request or a motion for review of interest to the user is located, it is possible to access a brief description, and, if he or she so wishes, all the documentation referring to it (IFAI, 2009).

The INFOMEX platform (www.infomex.org. mx/gobiernofederal/home.action) allows to make requests for information and to verify their status in order to find out which requests are pending a response, and which have already been answered. In addition, by this means motions for review or of inconformity may be filed with the respective guarantor organ (the IFAI at the federal level, and the equivalent bodies at the state level), and

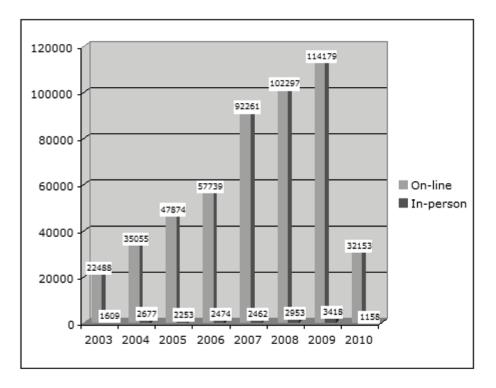


Figure 2. Number of requests made by electronic and manual media to May 2010

followed up on until a ruling is issued. Requests for information may be filed from any part of the world, 24 hours a day, and seven days a week.

The main accomplishment of INFOMEX was to establish and disseminate a standardized platform for interaction with users adapted to the requirements of the federal, state and local governments. The purpose of this strategy was to facilitate citizens' experiences at the moment of requesting information through the various means available (Interview 4). Given the importance of the INFOMEX platform, the next section briefly describes its origins and development.

As a result of the systems described, most requests are filed electronically: by 2009, of the 117,597 requests filed, less than 3% were filed manually. Even though the number of requests has increased considerably, the number of those filed manually has held steady, as illustrated in Figure 2. In 2007, these systems were "chosen as one of the 'Top 20' programs of the IBM Innovations Award in Transforming Government" (www.innovations. harvard.edu). In addition to considerably reducing the burden to citizens, these systems have also facilitated the work of the IFAI as the agency in charge of supervising implementation of the Law at the federal level. Moreover, since monitoring costs have been slashed and given the statistics the systems produce, it is possible for the IFAI to follow up on the offices' responses, and to monitor trends and possible obstacles (Guerrero, 2007). Similarly, the different offices reduce the costs related to carrying out the legal provisions with regard to the right of access to information. Bookman and Guerrero (2009) consider that "The use of electronic tools is a principal reason Mexico's law has been internationally recognized. If Mexico can continue apace its rapid growth and dissemination of the right to know, the innovations discussed... could form a global model for [freedom of information] implementation" (p. 23). The transformations that Mexico has introduced

in recent years is a clear example of how the ICTs can a very powerful tool to secure the right to access government information, for a growing number of citizens.

# The Development of the INFOMEX Platform<sup>5</sup>

The INFOMEX platform has its antecedent in the development of the Computerized System of Information Requests (SISI: Sistema Informatizado de Solicitudes de Información), which predates the Law on Access to Public Information. IFAI commissioner José Octavio López Presa, was a central figure in the conceptualization of this system. The SISI began operations on June 12, 2003, though by then at least two states (Sinaloa and Guanajuato) had already developed their own systems for administering requests for public information. Nonetheless, the IFAI and the state of Sinaloa jointly developed the project of adapting SISI to the definitions of local legislation and operational needs.

At the same time, the approval of the Federal Law on Access to Public Information contributed to the rapid expansion of state laws and regulations on access to public governmental information. This bolstered interest on the part of state governments and also on the part of other mandated agencies to adapt the SISI to their own needs. With this purpose in mind, IFAI began negotiations with the Ministry of Public Administration to secure the transfer of the system's operation to bring it under its own oversight, and thereby be able to initiate its adaptation. Nonetheless, the negotiation between the two institutions - both with jurisdiction over the issue of transparency in the public sector - turned out to be more complicated than anticipated, among other reasons because the Ministry of Public Administration had already registered the intellectual property rights of the system, giving the IFAI only limited possibilities for adapting it. The final transfer of the SISI to the IFAI occurred in May 2005.

During the same period, the World Bank recognized that the SISI constituted a practice of strategic importance for consolidating the transparency agenda in Mexico and offered a grant for 477,000 dollars to continue its development. With this impetus, in the context of the International Conference of Information Commissioners held in February 2005, agreements were reached between the IFAI and the state organs to transfer the SISI technology to the states. Nonetheless, the guarantor organs did not themselves have the authority or resources to ensure implementation of these agreements, which postponed the implementation of the SISI in other states of Mexico. Securing the commitment of the guarantor organs in the states did not suffice; rather, the commitment of the states' executive, legislative, and judicial branches was necessary.

Given the difficulties associated with adaptation of the SISI, it was important to develop a new system for administering requests. The central concept of the development of what came to be known as INFOMEX was the configuration not of an operational system itself, but of a platform for administering governmental information for all mandated agencies. This platform was intended to standardize and facilitate users' access to information in all levels of government. In this way, despite the diversity in terms of state laws and regulations, a"common digital experience" would be achieved for all users who access INFOMEX. At the same time, a strategy was developed for establishing direct ties to state and local governments, by the General Bureau for Attention to Society and Institutional Relations of the IFAI, to consolidate negotiations for transferring the platform to other states of Mexico. The leading promoters of this strategy were IFAI itself, but also other states such as Chihuahua, Jalisco and the Federal District. In this way, two main lines defined the establishment of the INFOMEX platform:

a) **Identity.** Harmonization of the existing systems with the INFOMEX platform, with



Figure 3. State governments incorporated to Infomex to May 2010

a view to taking advantage of the states' previous investments and developments, but achieving a recognizable and single identity for users (the INFOMEX "brand").

b) **Standardization.** A project for integrating the digital experience to make it user friendly for access to governmental information of the federal public administration, states and local governments, and other mandated agencies.

In the context of the 2006 presidential campaign, the World Bank promoted a national event for disseminating transparency and access to government information, with the assistance of all the guarantor organs in the country and of representatives of the three leading candidates (PRI, PAN, PRD). The meeting was the basis for consolidating a commitment for sharing the INFOMEX platform with all state governments and the largest local governments nationwide. The promotion strategy emphasized that INFOMEX is not a one-size-fits-all computer program, but rather a platform or interface that seeks to standardize practices for access to government information in the country.

To date, INFOMEX has been implemented in the states of Aguascalientes, Chihuahua, Coahuila, Colima, Durango, Guanajuato, Hidalgo, Jalisco, Morelos, Nuevo León, Nayarit, Querétaro, Quintana Roo, San Luis Potosí, Sinaloa, Tabasco, Veracruz, Zacatecas, and Chiapas, and in the Federal District. With the exception of Yucatán, all the other states, i.e. Baja California, Baja California Sur, Campeche, the state of México, Guerrero, Michoacán, Oaxaca, Puebla, Sonora, Tamaulipas, and Tlaxcala have already signed agreements to join INFOMEX; even more, some local governments have also decided to join it. Accordingly, today the platform covers nearly half of the national population, including more than 430 local government governments (IFAI, 2010a). This electronic gateway is available to all public agencies and institutions that so require, at no cost whatsoever, and with the technical support needed to implement it. Currently, even autonomous bodies such as the Federal Judicial Branch, the Federal Electoral Institute, the Mexican National Commission for Human Rights, and the National Institute of Statistics and Geography use INFOMEX process citizen's requests.

Among the main attributes of the system are that it contributes to developing common practices and services among the federal government and the various state governments; and promotes better quality and operating standards for all its members plus the possibility of obtaining free technical and organizational assistance. At the same time, INFOMEX provides a platform that benefits the original agencies on keeping track of the requests they receive. As a result, the information in the hands of the Mexican government and the various state governments is available to users all around the world.

The use in the federal level of the ICTs as means to foster the right of access to information was an important reference for the various states and the Federal District governments to identify the advantages of simplifying their own processes and, in some cases, of changing their own legislation to make it easier for individuals to request information via internet. In addition, the operation of the IT systems offered evidence that it was possible to guarantee the information transparency efficiently and at low cost. These benefits make it viable to expand the right to information by including the use of ICTs in the Constitution itself.

#### Internet in the Constitution

On July 20, 2007, the Congress unanimously approved the reform that added a second paragraph with seven sections and three transitory articles to Article 6 of the Constitution. The most important changes refer to the incorporation of the principle of maximum publicity of public information and the protection of personal data and confidential information pertaining to citizens. Especially important is Article 6(V), which establishes: "The mandated agencies shall keep their administrative documents updated, and shall publish, through available electronic media, the complete and updated information on their performance indicators and the spending of public resources." (Emphasis added.)

The effect of this addition was to explicitly establish the link between the right of access to government information in Mexico and the use of electronic media for the full exercise of this right. Additionally, the third transitory provision of Article 6 of the Constitution establishes the obligation of the federal government and the state governments to have electronic systems to allow any person to make remote use of the mechanisms for access to information and the review procedures. A two-year term is set for implementing this provision. Along the same lines, it is established that the state legislations must do what is in order so that those municipalities and delegaciones [local bodies] with a population greater than 70,000, have such systems within the same period of implementation.

# LIMITS AND CHALLENGES OF E-GOVERNMENT FOR ACCESS TO PUBLIC INFORMATION

The Mexican experience with the use of ICTs for promoting the exercise of the right to information makes it possible to identify both considerable achievements, which have been noted above, and limitations or restrictions that have had to be addressed. First are the limits related to the structure of Mexican society, which include issues such as the digital gap, i.e. the stratified and differentiated access to electronic media by the various groups of society. Second are institutional limits, associated with the instruments available for ensuring that the units of the government carry out their transparency obligations, and the very limitations of the IFAI in terms of its capacity to enforce its resolutions. Finally are the cultural limits, which refer to the values and attitudes of public servants with respect to the purpose and legitimacy of transparency and access to information.

# The Structural Limits

That citizens have access to a system that enables them to make requests from a distance is a considerable gain. The possibility of exercising their right and accede to the information without having to go to Mexico City (where the activity of the federal government is concentrated) or trust in the inefficient Mexican postal service, has important consequences (Guerrero, 2007). Nonetheless, these advantages also face the challenge of bridging the enormous gap that still exists between those who have Internet access and those who do not. Of course it is not just a question of providing the infrastructure, but also of endowing citizens with the capacity and skills needed for making effective use of information technologies. According to the 2009 Survey on Availability and Use of Information and Communication Technology in Households, of the National Institute of Statistics and Geography (INEGI), the percentage of the total population living in households with a computer has grown from 11.5% to 26.8% from 2001 to 2009 (INEGI. 2009), at the same time as those with access to the Internet has tripled, from 6.2% in 2001 to 18.4% in 2009. While this is significant growth, Mexico is in the next-to-last place among member countries

of the OECD, with only Turkey lagging behind (INEGI, 2009).<sup>6</sup>

Most Internet users in Mexico (65%) are in the 12-to-34-year age group. In addition, greater use of Internet and information technologies is associated with greater levels of schooling. The proportion of the population with no more than primary education who use Internet is just over 10%, whereas for those with secondary education, the figure doubles. Finally, among those with graduate studies, the proportion increases to eight of every 10 (INEGI 2009). In addition, according to a study by the Mexican Internet Association (AMIPCI), most Internet users in Mexico belong to groups with the lowest socioeconomic levels (C and D+), accounting for 48% of all users (AMIPCI, 2010). Further, according to the same study, 25.6 million are from urban areas and five million from rural areas.

In sum, while there have been major advances in the penetration of information technologies in Mexico, much still remains to be done to generalize their use across the different strata of society, especially as regards certain divisions such as between urban and rural areas, and among different socioeconomic and educational levels.<sup>7</sup>

Given the confidentiality guaranteed to users, it is not possible to have the precise profile of public information requesters; nonetheless, some of the users have voluntarily provided data on their age, occupation, and city of residence. This makes it possible to say that most users are from 20 to 39 years of age (61%). In addition, 45% reported being academics, 25% businesspersons, and 6.7% work in the government. One item of considerable importance is that 44% of the requests are presented by persons who say they reside in Mexico City. These data show that the use of the systems has not been generalized. Furthermore, most users make only one request, i.e. they are not recurrent users; accordingly, only 0.93% of the users account for 40% of the requests filed electronically. There are several possible explanations; one is that citizens exercise their right but then become disillusioned

with the process either because of the wait time or because the authority provides them information that is not necessarily what they were expecting, thus it is easy for citizens to become disenchanted on exercising their right (Interview 2).

Despite this not-very-encouraging panorama, journalists and civil society organizations, which disseminate the information through the media, tend to present the largest number of requests; it is now common for such information to be used to denounce mismanagement of resources, corruption cases, and ineffective public programs. In addition, a major effort has been made by the social organizations and IFAI itself to serve as intermediaries and trainers of those interested in exercising their right of access to information (Interview 1 and Interview 2). An example of this was the IFAI-Comunidades Project in 2005, whose objective was to identify mechanisms for disseminating the use of the right of access to public information among social groups without power or influence in the allocation of resources and definition of government policies.8 In this context, work was done with some 20 organizations in seven states that developed capacities for making effective use of access to information in their activities, which included a variety of issues such as sustainable development, environmental protection, and the protection of human rights (Guerrero and Sepúlveda, 2007). At the heart of the project was the recognition of the factors that limited the right of access to information such as the level of schooling, mastery of computer and Internet skills, along with specific situations such as being a member of an indigenous community. Accordingly, an effort was made not only to make known the mechanisms for access to public information, but to show their effectiveness and value to the users of the marginalized communities by focusing on using the information for addressing and, if possible, solving community problems in partnership with civil society organizations (Zermeño, et al., 2010).

When IFAI shut down the project in 2008, the number of direct beneficiaries came to 3,374 persons, who improved their knowledge both of the information to which they have a right and of the mechanisms for making the right of access to information effective (Zermeño, et al., 2010). IFAI-Comunidades offered evidence of the capacity of the Institute and the organizations to become involved with marginalized communities and effectively endow them with the knowledge and capacities to make effective use of the right of access to information, thereby pushing back the inequitable effects stemming from the digital gap in Mexico. In addition, experience also showed that it is possible for citizens with low educational levels and without prior knowledge of electronic media to learn to use them in a relatively short period.

#### Institutional Limits

Despite the initial enthusiasm and good reception among public servants, the reality is that over time, transparency has ceased to be a priority issue, and there are signs of setbacks and even violations of constitutional provisions. Following is a recounting of the most important ones.

First, there is a growing tendency to deny information: "paradoxically, the Calderón government, which openly supported the 2007 Constitutional Reform, has proved itself less transparent than its predecessor administration. The claim of 'inexistence' as an agency response to [freedom of information] petitions has mushroomed." (Bookman and Guerrero, 2009, p.27.) Along these same lines, Soben et al. (2006) consider that this situation represents a significant challenge to the IFAI, above all if one bears in mind the inefficient and incomplete organization and regulation of public records. As of May 2010, the number of requests for which the response that came back was "non-existent information" numbered 4,177, of a total 472,761 responses (IFAI, 2010, p. 22).

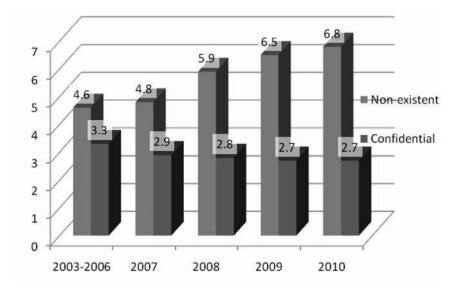


Figure 4. Percentage of non-existence of documents

Second, institutions such as the Tax System Administration [Sistema de Administración Tributaria] (SAT) and the Office of the Attorney General (PRG: Procuraduría General de la República), which have the highest number of negative responses, are the same ones that have made clear efforts to limit the scope and effectiveness of the Law on Access to Public Information in recent years (IFAI, 2010). For example, in 2010 the PGR brought proceedings before the Federal Court of Tax and Administrative Justice (TFJFA: Tribunal Federal de Justicia Fiscal y Administrativa) so as to get around having to comply with the IFAI resolutions. In addition, that institution indirectly supported the reform of the legislation of the state of Campeche to allow citizens to file motions for review of the IFAI rulings (Avilés, 2010 and Medina, 2010). That same year, the SAT filed an action for a judgment of annulment before the TFJFA, against the IFAI ruling that ordered the agency to publish the information on natural and juridical persons who benefited from the cancellation of tax liabilities totaling approximately 73.9 billion pesos. The IFAI argued its decision was based on Article 12 of the Law on

Access to Public Information, which stipulates that the name of every person who receives economic benefits from the State must be made public (Morales, 2010).

To date, 250 amparo proceedings have been brought against the resolutions of the IFAI, in addition to 30 proceedings for annulment (juicios de nulidad) before the TFJFA (Doyle, Saúl, and Mora, 2010). Although most of these motions are filed privately, most of the individuals who file them are employees of the federal public administration, assigned to offices such as the Ministry of Social Development, the Ministry of Foreign Affairs, the Institute for the Protection of Bank Savings, and, in particular, the PGR.

Situations such as these generate suspicions among the members of civil society, who consider that the Calderón administration seeks to weaken the guarantees of citizens' right of access to information (Interview 5). In addition, a rumor has spread to the effect that the Ministry of Interior intends to introduce amendments to the Law on Access to Public Information so as to submit reviews of the IFAI to an administrative tribunal, which would provoke delays in obtaining information, and attack the final nature of the Institute's rulings.

While IFAI may request sanctions for those public servants who fail to abide by its rulings, the Institute does not directly have the legal means to make government offices carry out its recommendations. The Law on Access to Public Information stipulates that the rulings of the IFAI are final (Article 59) and that the failure to enforce them is grounds for aggravated administrative liability (Article 63). Nonetheless, the power to apply sanctions is in the hands of another office, the Ministry of Public Administration, and the internal oversight organs of government offices, as provided by the Federal Law on Liabilities of Public Servants.9 This situation means that those who have committed violations of the provisions of the Law on Access to Public Information are not always punished. The IFAI itself has expressed concern, considering that this is contrary to the right of access to information, without mentioning the potential conflicts of interest in the event that the public servants sanctioned are members of the Ministry of Public Administration (Sobel, et al., 2006).

Since 2004, IFAI has filed a total of 65 complaints, 47 of which were submitted directly to the Ministry of Public Administration and 18 to the internal oversight bodies. In addition, most (32) have to do with the Office of the Attorney General of the Republic (Roldán, 2010). Of these, only 37 have been resolved, i.e. approximately 57%. It is notable that the vast majority of the complaints resolved (29) have been disregarded due to insufficient evidence while only eight have culminated in sanctions on public servants.

The limitations noted in the institutional framework and the situations where there have been clear setbacks undermine the effective use of ICTs as a means of ensuring access to information, and foment distrust on the part of civil society, which can work against achieving greater citizen participation.

# **Cultural Limits**

It was already noted that one of the most important resources for integrating information technologies in public services, and in transparency and access-to-information practices, is the level of commitment of political leaders to the project (West, 2009). Also relevant in this regard are the attitudes and values that public servants maintain with respect to transparency, the right of access to information, and the use of information technologies in government tasks (Luna Plá, 2008). According to Juan Pablo Guerrero, "Concurrent with the distrust and power imbalance perceived by citizens in relation to public authorities, bureaucrats in Mexico have historically expressed resistance to releasing information, due to a similar distrust and skepticism as to who is requesting information, and for what purpose it will eventually be used." (Guerrero, 2007, pp. 6-7.)

The most notable characteristic of the attitudes of Mexican public servants on the issues of transparency and access to information is ambivalence: on the one hand is the idea that the laws on access to information support improved government and better administrative practices in general; on the other hand, there's greater skepticism with respect to their capacity to contribute to significantly transforming relations between the government and citizens, in terms of transparency and accountability, and to increasing the levels of trust and credibility (Luna, 2008). According to the survey "The Culture of Public Servants in respect of Issues of Transparency and Access to Information," given to 1,221 public servants in the federal administration, most (55%) argue that the Law on Access to Public Information benefits levels of transparency, access to information, and modernization of the administrative apparatus. A large sector of the interviewees (29%) consider that one negative effect of the Law is the misuse ("mal uso") made of public information, that is, when it is used to point out government errors or to acquire data that is advantageous for deriving some economic gain (Luna, 2008). All the foregoing appears to suggest that a positive attitude towards transparency has yet to become embraced by public servants generally, and some still adopt "defensive" positions, that is, going to all lengths to protect the administration and important political figures. One example of this are the cases in which the authorities respond to requests for information with false information (Interview 3).

Another problem is that the information that the government offices have to make public, according to the Law, does not have quality standards so as to make it possible to ensure the requesters' satisfaction. In many cases the citizens are not provided with truly useful information. In this regard, "the dissemination of information that is out-of-date, incomplete, chaotic, or unintelligible to the ordinary citizen becomes a factor contributing to opacity, not transparency. Accordingly, it is advisable for the secondary legislation to establish provisions to ensure quality information, such as the obligations to update periodically, to use thematic search engines and plain language, to state the date of the last update and determine who is responsible for the publication of information by thematic category" (López-Ayllón, 2008, p. 13).

When citizens don't see any practical application when filing requests, and are skeptical of the information provided by the government, legal recognition of the right of access to information is not enough to foster citizen engagement; it is also necessary to promote the use of this right by as many citizens as possible. (Interview 4). The lack of attention to this aspect limits the potential of ICTs for fostering greater trust and credibility between the state and citizens (Interview 1).

#### **FINAL COMMENTS**

Throughout this chapter, the Mexican case has throw light regarding information transparency and information technologies that could be apply in similar cases. Moreover, by reviewing the Mexican experience, evidence has been presented that makes clear that information technologies can truly promote and facilitate access to government information for a growing number of people. Since the enactment of the Law, thousands of citizens have exercised their right thanks to ICTs, and several players from the media and civil society organizations have used electronic systems of access to information to document cases of government corruption and opacity on issues such as the agricultural subsidies programs, budgets, and access to health care, among others. Although there isn't any recipe as how to achieve information transparency and the best way to use ICTs to assure the exercise of this right by the vast majority of citizens, other countries that are going through a similar process can learn from the mistakes and successes of the Mexican case. While there is evidence of major achievements, the most complex challenge continues to be bridging the technological, institutional, and cultural gaps that persist in México that limit the capacity of citizens to exercise the right of access to information. Among this limitations, special mention should be made of the gaps in access to ICTs, the weakness in the institutional framework that still offers space for opacity, the risk of setbacks at both the federal level and in the states, and attitudes of public servants and society at large that reduce social trust and the perceived utility of making requests for information.

The set of electronic systems mentioned here will not, on their own, transform the practices and culture that resists transparency in Mexico. These changes will only be possible when transparency and access to information can be used as effective means for the government to be accountable to citizens and when citizens themselves are better able to judge the performance and the legitimacy of public official's actions and decisions. One very important factor in this regard is the effectiveness with which the government responds to citizen requests and the quality of the information rendered. Otherwise, information technologies may create just another space where citizens feel ignored or mistreated. Therefore, there is a need both to expand the technological infrastructure available to society and to foster the appropriation of the right among citizens; i.e., to help citizens understand how to the use the information systems, as well as the specific benefits that can be derived from their use (Interview 4).

This challenge suggests the importance of the efforts made, in the Mexican case, by IFAI, the guarantor organs of the states, and various civil society organizations to identify and endow specific populations with capacities to take advantage of the information systems developed to facilitate access to information (Interviews 2 and 3). This requires a major effort to identify the needs of the different users of such systems, so as to reduce the concentration in just a few types of requesters and geographic areas such as Mexico City. In this regard, successful cases can be identified such as the Comunidades-IFAI Project, which show that it is possible to take specific actions to integrate the most technologically and socially marginalized communities, and thereby make use of the right of access to information as a means for the genuine empowerment of citizens vis-à-vis the government.

The Mexican experience teaches us, as a principal lesson, that it is not enough to have legislation and systems based on ICTs to effectively promote access to information, as a basic building block of citizen engagement. Structural, institutional, and cultural determinants limit the effectiveness of these efforts, even though they have won international recognition. The success of e-government depends not only on installing technological infrastructure for the majority of citizens, but on developing a culture in which digital exchanges between government and citizens are not only accepted, but promote new and more effective forms of participation and accountability.

#### **INTERVIEWS**

- 1. Miguel Pulido, Executive Director, Fundar, Centro de Análisis e Investigación, A.C June 29, 2010.
- Sergio M. López Menéndez, Director of Outreach and Relationships with Organized Society (Promoción y Vinculación con la Sociedad Organizada), IFAI May 21, 2010.
- 3. Guillermo Noriega, Executive Director, Sonora Ciudadana, June 29, 2010.
- 4. Alfredo Méndez Calatayud, Director General for Informatics and Systems, IFAI, May 21, 2010.
- 5. Gabriela Morales, Officer with the Access to Information Program, ARTICLE 19, Office for Mexico and Central America, June 29, 2010.

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#### **KEY TERMS AND DEFINITIONS**

**Digital Divide:** Gap between individuals, households, businesses and geographic areas at different socio-economic levels with regard to both their opportunities to access information and communication technologies (ICTs) and to their use of the Internet for a wide variety of activities.

**Right of Access to Public Information:** The right of every person to request and receive complete, truthful, adequate and timely information from any agency, central administration unit, public utility or any other government body, within the limits imposed by the public interest and the protection of individual privacy. **Transparency:** Government according to fixed and published rules, on the basis of information and procedures that are accessible to the public.

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## **ENDNOTES**

- <sup>1</sup> We would like to thank Héctor Flores for his invaluable support for the writing of this chapter. All the opinions expressed by the interviewees are strictly personal and does not reflect the position of their institutions of affiliation.
- 2 Among other aspects, the governmentsupported initiative incorporated, from the proposal by the Oaxaca Group, elements such as the definition of national security; the obligation of the judicial branch to make public the judgments that have become res judicata, thereby making it possible for the parties to be able to oppose the publication of their personal data; establishing that one could not invoke the confidential nature of information in the case of investigations into grave violations of fundamental rights or crimes against humanity; and the establishment (and updating) of the index on confidential information (López-Ayllón, 2004). In addition, major differences persisted between the two initiatives, with respect to the designation of the commissioners of the Federal Institute for Access to Public Information (IFAI), its capacity to make recommendations, and, perhaps more important, with respect to the provision on *la positiva ficta*, supported by the Oaxaca Group, which mandated that in the event that the authority does not issue a response to a request for information, it would be considered, after a given time has lapsed, approved, and the authority would then be obligated to provide it.

The IFAI does not have any authority over offices that do not belong to the federal public administration. The federal legislative and judicial branches, as well as the autonomous agencies (organismos autónomos), independently manage information requests and establish the review processes. In cases such as the Federal Elections Institute (IFE: Instituto Federal Electoral) or the Federal Electricity Commission (CFE: Comisión Federal de Electricidad) (a public utilities company), the review process is similar to that of an administrative review by internal oversight entities, instead of being subject to the oversight of an independent supervisory agency (Ackerman, 2007).

- The transparency obligations provided for in the Law on Access to Public Information are applicable to both the federal public administration and the rest of the mandated agencies in the federal realm, which are: the Chamber of Deputies and the Chamber of Senators, the Supreme Court and the Federal Judicial Council, and autonomous agencies and entities such as the UNAM, the IFE, and the National Commission on Human Rights (CNDH). The Transparency Obligations Portal, however, only includes information on the federal public administration (IFAI, 2009).
- <sup>5</sup> This section is based on information provided in the interview with Alfredo Méndez Calatayud, Director General for IT and Systems, IFAI, May 21, 2010.
- <sup>6</sup> Even compared to countries from the same region and with a similar gross national product, such as Brazil, the lag is evident. In Brazil the number of households with computers in 2009 was 31%, compared to 26.8% in Mexico; moreover, in Brazil 26.8% of households have Internet access, whereas in Mexico the figure is barely 18.4%.

<sup>7</sup> It should be added that in the study done in 2010 by the International Telecommunication Union, Mexico placed 77th in the Information and Communication Technologies Index, which evaluates the impact of these technologies in 159 countries worldwide in terms of development of the level of infrastructure, intensity, and the capacities developed by each country (International Telecommunication Union, 2010). In the category of access to information technologies, one of the sub-indices of the measurement, Mexico ranks 76<sup>th</sup>; for capacity and intensity of use, it ranked 77<sup>th</sup> and 71<sup>st</sup>, respectively. This means that the country's greatest challenge continues to be access to broadband Internet technologies, which is a proxy for the sub-indicator of intensity of the use of information technologies.

<sup>8</sup> IFAI-Comunidades was financed jointly by the William and Flora Hewlett Foundation, the World Bank, and IFAI (Zermeño, Domínguez, Chávez, 2010).

<sup>9</sup> The penalties established by law range from reprimand to disqualification for up to 10 or 20 years, depending on the nature of the breach (López-Ayllón, 2004).

# Chapter 4 E-Procurement: Understanding Implementation

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#### ABSTRACT

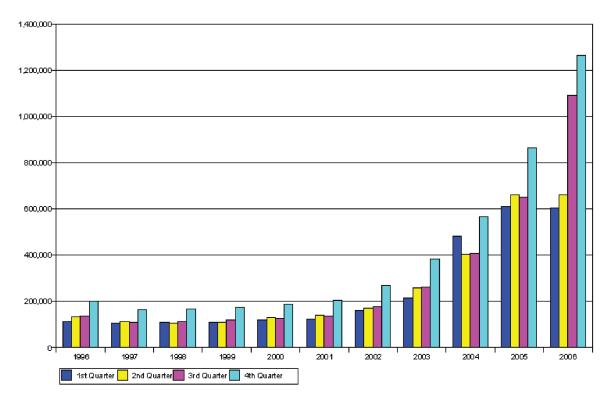
Over the past three decades, government has been making a steady push towards utilizing more entrepreneurial means of governance. This chapter explores one of those techniques and its proliferation in governments throughout the world – electronic procurement. Furthermore, it provides a deeper understanding of some of the most advanced governments that utilize electronic procurement. The findings suggest that there is broad implementation of electronic procurement throughout the world; however, it also shows that there is uneven implementation as far as details of adoption. It also discusses that cost is a primary reason for the adoption of e-procurement.

#### INTRODUCTION

Over the past three decades, government has been making a steady push towards utilizing more entrepreneurial means of governance. This implies utilizing a number of different governing tools to operate in a more flexible and efficient manner. In addition, it means partnering with the private sector whenever government needs services or products that might be accomplished in a more efficiently under the influences of market forces. The most common tool utilized when partnering with the private sector is a contract.

In the federal government, contracts are utilized when goods produced or services performed are not considered "inherently governmental," – a term utilized in a contract guidance document Circular A-76. If the federal government is any indication of the trend of contract use in the public sector, then the use of contracting has drastically increased over the past decade (Figure 1). Figure 1. Federal procurement history by quarter: FY1996–FY2006

#### Fiscal Year 1996 To Fiscal Year 2006



#### ACTIONS

Although it is difficult to gain a similar comprehensive view of state and local government contracting, it is assumed both levels of government trend in the same direction.

For example, New York City (NYC) had 3,852 contracts awarded worth 7.3 billion dollars in 2002. In 2009, NYC awarded 54,400 contracts worth 13.4 billion dollars. Yet the increase in contract transactions is not the entire story.

As the use of contracts increases, so does the need to make those contracts efficient and cost effective. In a study conducted about a decade ago by Moffett and Dilger, (1997) of managers from the 100 largest cities in the United States (U.S.), they found many of these entrepreneurial techniques (including contracting) were adopted

for the primary reason of reducing costs. Evidently, a decade later, managers continue to adopt new techniques to realize additional cost savings in contract procurement. Among the most promising are those associated with the rapid advancements in information technologies (IT).

Many have looked to automate processes through IT solutions proven to be effective in the private sector. Following the implementation of e-business and e-commerce, the public sector developed the idea of e-government (Moon 2002). E-government includes "the use of all information and communication technologies, from fax machines to palm pilots, to facilitate the daily administration of government" (Moon 2002). The use of IT in the public sector has "contributed to dramatic changes in politics, government institutions, performance management, red tape reduction, and re-engineering during the last decade" (Moon 2002).

In the field of contracting, electronic procurement (e-procurement) systems have been identified to achieve cost saving goals. That being said, there are a number of additional benefits -to be discussed below - that may be realized from such systems. Within the U.S., the federal government was the first to utilize e-procurement in a comprehensive manner. The Clinton administration announced a series of "new e-government initiatives" in 2000 with the purpose of providing a comprehensive, integrated online system (www. firstgov.gov) and to allow access for grant and procurement opportunities available through the federal government; this federal initiative led to the implementation of web-based processes by local governments as well (Moon 2002). Based upon evidence from the National Association of State Procurement Officials (NASPO), we are aware of some of the early implementers of e-procurement at the state level and we are increasingly becoming aware of how city and municipal governments are utilizing e-procurement. Moon (2002) reported on the use of e-procurement at the municipal level utilizing data from 2000. In his study, he found more than half of the survey respondents were utilizing e-procurement. Nevertheless, our knowledge about cities around the United States and internationally is still limited.

Significant advances have been made in the field of e-governance and e-procurement since 2002; yet we are lacking a clear sense of what cities are utilizing this technology. Additionally, we often assume cities that implement e-procurement in a comprehensive manner are doing so for cost savings - this chapter explores if other motivations might be present. Gaining a better sense of what cities are utilizing e-procurement will provide a necessary descriptive component to the field. In addition, this chapter presents findings from in

depth interviews of those that are implementing e-procurement in a comprehensive manner.

Utilizing two sets of data of from the E-Governance Institute at the School of Public Affairs and Administration, Rutgers-Newark, this chapter will provide a comparative analysis of the implementation of e-procurement within the U.S. and internationally. The first set of data comes from a 2007 survey of the websites of the world's most populous cities. The cities selected were within the world's most wired nations according to International Telecommunication Union. The second set of data comes from a 2008 survey conducted by the E-Governance Institute which surveyed the websites of the two most populous cities in each of the fifty United States. The descriptive statistics of this data will provide the field with an understanding of the current state of e-procurement implementation. Furthermore, it will discern whether or not the U.S. is similarly positioned with cities around the world. Additionally, this chapter will present data received in follow up interviews with the top performers in the U.S. The interview questions were designed to provide a deeper understanding of e-procurement implementation.

### BACKGROUND

This chapter utilizes a definition of e-procurement specific to the public sector defined by Bertini and Vidoni (2009) as a "set of technologies, procedures, operations and organisational approaches and methods that allow for the on-line selection and provisioning of goods and services through the opportunities offered by the development of the Internet and electronic commerce. Public e-Procurement is obviously influenced by the different structure that characterizes the contract categories related to the specific role played by the Public Administration (PA) within the legislative system as a whole," (p.5). E-procurement is offered as a solution to the traditional mode of procuring goods through a paper based system.

A paper based system, while it has a number of benefits, may also result in cumbersome processes and extended time frames to obtain goods and services. The various layers of bureaucracy a potential vendor must pass through are multiplied by the lack of automaticity in the system itself. Furthermore, according to Krysiak et al. (2003), paper based systems often "perpetuate the use of antiquated documentation... some of which utilize "specifications that are out of date and reference products and features no longer in existence" (p.152). The repercussions from such an oversight can be time consuming and costly.

Shifting to an e-procurement system may help alleviate some of the burdens of paperbased procurement. While most assume the key reasons for adoption are simply cost savings, it is apparent-cost savings are one motivation among many. Hardy and Williams (2005) suggest adopting e-procurement is dependent on many organizational and stakeholder characteristics. A study, in which the authors examined the adoption and implementation in three countries, found a number of different motivations, while some of the nomenclature was the same. For example, in Italy, e-procurement arose out of the Concessionaria Servizi Informatici Pubblici (CONSIP) originally established primarily for, "the purpose of increasing the adoption of ICTs [information and communication technology] in government agencies and encouraging its use in the redesign of internal activities as part of "modernizing" public administration," (Hardy and Williams, 2005, p.165). Hence it was not specific to modernizing paper based contracting or procurement practices in general. Rather, it was a part of a larger wave government reform focused on technological advances. The focus in Western Australia however, was more focused on increasing transparency while making advancements in electronic commerce (e-commerce) and developing an electronic marketplace (e-marketplace)

(Hardy and Williams, 2005). Nevertheless, both cases were grounded in many similar concepts of e-procurement.

As CONSIP has continued to develop their eprocurement system, it has become a model and a focus of scholarly examination. They utilize a four stage process which includes, "the decision of what to buy (internal to the PA), the qualification of the bidders, the online auction itself, and the adjudication," (Magrini, 2005). According to Magrini (2005), "the selection of the supplier is simplified due to the reduced time and costs of the bidding process" and, "the cost for suppliers to participate in the auction is abated through digitalisation of the procedure, which ensures and clarity and equity". The automation of processes has proven to increase efficiency and reduce costs.

Among the many reasons why cost has been reduced is an increase in participation by vendors, especially smaller local vendors, ultimately increasing levels of competition. Additionally, the technology allowed public managers to evaluate the vendors' offers in a much more accelerated manner (Magrini, 2005). Similar evidence was found in examining the experience in Taiwan. Eprocurement was able to increase competition by reducing the barriers of entry into the government marketplace. By simplifying "the procurement process" and reducing "transaction costs," more vendors were encouraged to participate (Liao, Wang, and Tserng, 2002, p.740). According to Liao et al. in the Taiwan experience, "The Electronic Tender Obtaining and Submitting System simplifies original administration procedures and, therefore, the government and suppliers can save US\$14 and US\$26 million, respectively, each year (p.731).

In the U.S., perceptions of cost savings are similarly perceived. In a recent survey of city managers in Texas and Florida, 60% of the managers perceive the adoption of e-procurement as a cost saving device (Reddick and Frank, 2007). The study revealed electronic government (egovernment) in general was primarily adopted as a mechanism to achieve results. Additionally, the authors found that "72.2% of city managers believe e-government has increased the level of productivity of employees," (Reddick and Frank, 2007, p. 583). Therefore, we see an overwhelming perception within U.S. cities that electronic solutions, such as e-procurement, are perceived to save governments money.

The cost savings, however, should be cautioned because, although a government might reduce costs and gain efficiencies in contrast to the traditional paper based system, it is clear a large investment must be made initially, making actual savings harder to realize. Magrini (2005) suggests a large national investment must be made making "effective savings stemming from e-procurement difficult to assess," and issues of international "fragmentation" may challenge the larger marketplace (p.10). This is similarly expressed by Hardy and Williams (2005); the larger the organization adopting such solutions, the larger the investment, which makes savings harder to appreciate. Moreover, smaller less disjointed agencies were able to see cost savings due to their smaller investment and ability to coordinate efforts. Cost, therefore, is not the only reason to shift to e-procurement.

In addition to cost, many identify accountability as a primary reason to move to an e-procurement solution. A key purpose of shifting to an electronic system is to achieve a "digital democracy for more transparent accountability of government" (Moon 2002). Key aspects of accountability stem from e-procurement offering a centralized solution. Rather than trying to monitor contracts through multiple sources, those with oversight responsibility can gain access through one entry point. Oversight is then possible through the entire process of procuring the goods (Magrini, 2005), enhancing an organization's ability to make corrections mid-process. Additionally, e-procurement systems heighten tracking capabilities and record keeping (Magrini, 2005), making auditing and reviewing cases more accountable.

Contract procurement is also an area that may be more vulnerable to corruption. Utilizing systems of e-procurement limits these possibilities. Liao et al. (2002) state, "it renders the procurement process more open and transparent, and thus reduces the possibility of bid collusion" (p.740). This sentiment is also expressed by Zhang (2002) as it relates to procurement in China. Zhang writes, "Because China still does not have a public procurement law, many G to G [government to government], B to G [business to government] and G to B [government to business] activities take place through a 'black box' (hidden) process, and in the mid-1990s the leadership realized that control over this process was being weakened, not only by the temptation posed for public servants to indulge in corrupt practices, but also by the lack of any kind of institutional system" (Zhang, 2002, p.166). Furthermore, by automating processes that previously necessitated human intervention, fewer opportunities are present for people to corrupt activities (Magrini, 2005).

Others promote e-procurement on the basis of transparency. Similar to arguments for increasing e-governance in general, the more government processes hosted on publicly accessible formats, the better. According to Magrini, "transparency is facilitated by a free flow of information between the PA and the constituency, in this case enterprises and interest groups" (p.22). Hence in this situation, by providing broader access to the bidding process, stakeholders are provided with a clear view of the process as it unfolds. What is more, efforts to make the process more efficient actually have a complimentary effect of causing transparency (Magrini, 2005). Simply placing information online is not equivalent to transparency; it is developing easy to follow processes that facilitate information sharing.

The sharing of information is yet another reason many see e-procurement as a successful solution to public procurement. Holzer and Yang (2006) postulated increasing citizen participation in government performance measurement might serve to

increase levels of trust between government and citizens. The premise was increasing communication and willingness to collaborate with citizens might enhance levels of trust in government. A similar argument regarding e-procurement might be made for the relationship between government and the business community. Inherently, many feel the e-commerce market may be susceptible to more fraud and manipulation, enhancing the levels of distrust between government and their private sector partners. For example, the China Electronic Commerce Association (CECA) alarmingly discovered through a survey, "Lack of trust stifles online trade," more than a third of Chinese companies with experience in online trading do not trust e-commerce, while an earlier report showed that 71.1% of Chinese Internet users, who would buy or sell something online, were wary of fraud" (Wang, 2008, p.272). Nevertheless, e-procurement may offer solutions to such concerns. If one can increase the level of communication between buyer and seller, then processes are shown to work better and quality is higher (Vaidyanathan and Devaraj, 2008, p.419). Furthermore, according to Reddick and Frank (2007), 47% of city managers state e-government has "fostered a greater level ofteam work" (p.583). Reddick and Frank (2007) go on to say:

There was agreement that e-government has increased citizen and business interaction with senior managers. E-government has been providing city managers with the ability to deal more effectively with customers and suppliers. Overall, the results for the stakeholder involvement category indicate that e-government in Texas and Florida cities is able to meet the demands of these diverse groups. According to city managers, there is a strong level of support for e government from a variety of constituencies in the operating environment. (p.585)

These findings suggest e-procurement might enhance government relationship with the business community while simultaneously achieving internal solutions of increasing efficiency and effectiveness.

While internal solutions and pleasing stakeholders may be one set of motivations, when examining government management, one must always consider political motivation. In examining a centralized payment system in the U.S. federal government, Fedorowicz et al. suggest a number of political reasons why members of this joint solution - the Internet Payment Platform - decided to collaborate. Their data suggests agencies decided to utilize this platform because it could enable compliance to political mandates. Furthermore, e-procurement systems may alleviate circumstances if government vendors attempt to apply pressure through their congressional representatives (Fedorowicz et al., 2009). Their findings also demonstrate political motivations stem from the executive branch. Members who joined through a self-selection process did so to support the President's agenda. In this particular case, it was the President's Management Agenda (Fedorowicz et al., 2009).

Political motivations are not isolated to complying with or supporting specific management criteria. Rather, there may be specific policy objectives that the selection of a certain solution such as a contract - might serve to promote. Often overlooked in contract procurement, government can use contracts to promote a specific policy goal. Historically, the government has promoted social goals through the use of specific contract criteria (McCrudden, 2004). For example, President Martin Van Buren issued an executive order to institute a 10-hour work day for individuals working under certain contracts, and the Davis-Bacon Act of 1931 required certain contractors to pay their employees the current local pay rates for construction services (McCrudden, 2004). Additionally, agencies are mandated to meet other socio-economic goals, such as contracting with small businesses. According to the U.S. Federal Small Business Administration, federal agencies

must have at least 23% of their contracts with small businesses. Therefore, the contract, as a policy tool, can achieve both an economic and a social goal (Cooper, 2003). A similar premise exists in selecting an e-procurement system.

As stated by Hardy and Williams (2008), "public e-procurement has policy implications not only with respect to setting rules and standards that promote fairness, equity, and transparency in public contracting but also in advancing other government initiatives and policy goals such as economic development and information and communication technology (ICT) innovations," (p.156). Such an effort is what launched the egovernment effort in China. According to Zhang (2008), "Deng Xiaoping repeatedly emphasized the promotion of telecommunications as the starting point of economic development" (164). It was this emphasis that spawned such an effort. To reach this end, the government set up an e-procurement system in Shenzhen, a designated economic zone, and began to establish the required infrastructure (Zhang, 2008). Zheng (2008) further points out the often unseen infrastructure that goes into developing such solutions and the business necessities needed to align the necessary partners. In addition e-procurement has "broadened the vendor pool," allowing many to enter the government market not able to do so in the past (Reddick and Frank, p. 587).

Based upon the literature above, we seek to further explore e-procurement. While it is clear many are implementing e-procurement systems, the literature is void of recent studies that assess the U.S. implementation juxtaposed to international cities. This research seeks to gain a better understanding of current implementation. Furthermore, this research seeks to add a more comprehensive understanding of the process of implementation. While exploratory in nature, this study seeks to gain a better understanding of the nuances of e-procurement implementation, which may lead researcher to develop appropriate frameworks of study on which to build.

#### METHODS

The methodology employed for this research was twofold: website evaluations and interviews. To gain greater insight into the varying factors that influence local governments to adopt and implement e-procurement, it became apparent a qualitative approach should be combined with the descriptive statistics obtained from website evaluations. Employing a mixed-methodological approach provides deeper understanding of the complexities associated with infusing information and communication technologies in the public sector. Conducting interviews provides such a framework to understand the organizational, political and the technological factors that impact the decision-making process of public administrators, thus strengthening the research. Due to the exploratory nature of this research, it is important to assess the variation that exists in municipal governments who utilize features of e-procurement on their websites. After compiling the results from the website evaluations, public managers from the U.S. cities who earned a score of three (3) were contacted asked if they would be willing to be a part of this study and interviewed.

#### Website Evaluations

The first part of the methodology employed for this research is a website content analysis that evaluates the official web home page of the two largest municipalities in each of the 50 U.S. states along with the most populated international cities. The main city homepage was defined as the official website where information about city administration and online services are provided by the city (Holzer and Kim, 2007). In addition to examining the most populated international cities, the research considers the total number of individuals using the Internet in that nation. These cities were identified using data from the International Telecommunication Union (ITU), an organization affiliated with the United Nations

Table 1. E-procurement index

0	No e-procurement available
1	The site allows potential bidders to access RFP's and status of procurement online in html format
2	The site allows potential bidders to download RFPs (.doc or .pdf)
3	The site allows potential bidders to place bids online

(UN). Data were obtained from the E-Governance Institute at Rutgers University, Newark that has developed a survey instrument to systematically evaluate 98 website measures across five broad categories: privacy and security; content; usability; service; and citizen participation. The data from the study is the result of a thorough and extensive content analysis of municipal government websites. Although many governments across the world offer various services online, studies that evaluate the performance of such online services primarily focus on federal, state, and local governments in the U.S. Only a few studies have produced comparative analyses of e-government in municipalities worldwide. Further, studies that assess features of e-procurement have not been fully explored.

Prior research in e-government suggests a positive correlation between a city's population and its capacity to adopt and implement e-governance initiatives at the local level of government (Moon, 2002; Moon and deLeon, 2001; Musso, et al., 2000; Weare, et al. 1999).

For this research, a three-point Guttman scale that assessed websites based upon features of eprocurement was developed. A Guttman Scale is an analytical tool whereby respondents indicate the level of acceptance of an indicator based upon a scoring continuum usually from lowest to highest. Specifically, the scale evaluated sites according to the following criteria to determine if e-procurement was available: if the site allowed potential bidders to access request for proposals (RPS's) in html format; if the site allowed potential bidders to download RFP's in either .doc or .pdf format and; if the site allowed potential bidders to place bids online. To achieve reliability, websites were evaluated by two researchers. First, the lead researcher assessed features of e-procurement using the index that was constructed (Table 1). A second website evaluation, of all websites, was conducted by a(*PhD student*) to ensure that the same scores were obtained therefore achieving inter-rater reliability within the study.

#### Interviews

The researchers utilized interviews via electronic mail (e-mail) to conduct the second stage of qualitative research for this study. Based upon the results of the website evaluations, the researchers selected 12 top performing U.S. cities to conduct in depth research. The purpose of these interviews was to learn from the highest performers identified in the website evaluations. The U.S. cities were selected due to constraints in time and available resources. The interview questions were determined based upon the literature discussed above and were divided into four categories: cost, adoption, accountability, and political (See Table 2).

The researchers made initial contact by phone with the Chief Procurement Officer (or the person responsible for city wide procurement if no Chief Procurement Officer was in place) of the 12 cities. The researcher explained the study being conducted and asked for permission to forward the electronic interview questions. The researchers made three attempts to contact the city representative by phone, each time leaving a voicemail message. After the third attempt, the researchers sent an email requesting participation. Of the 12 cities, six expressed interest in participation. Dur-

Table 2. Interview instrument

Question	Category
Adoption	<ol> <li>Please discuss the primary reason why you adopted an electronic procurement (e-procurement) system?</li> <li>Was there any resistance to adopt an e-procurement system?</li> </ol>
Cost	3. Has the e-procurement system helped reduce costs in compari- son to a traditional paper passed procurement system?
Accountability	<ul> <li>4. Please discuss the implications the e-procurement system has had on accountability. This may be specific to organizational accountability or it may concern accountability to vendors and or other stakeholders</li> <li>5. How has the e-procurement system changed the mode in which your organization communicates with private sector vendors?</li> </ul>
Political	<ul><li>6. Has the e-procurement system achieved any policy goals i.e. increasing economic development?</li><li>7. How have politicians reacted to the system?</li></ul>

ing the electronic interview phase of the study, one more city dropped out of the sample. The interviews were then conducted with five of the top twelve cities - Salt Lake City, Utah; Houston, Texas; Indianapolis, Norfolk, and Wichita. The procurement managers of these five cities agreed to participate in formal, structured interviews with open-ended questions prepared in advance relating to the primary reason in transitioning to an electronic system; the effect of the electronic system on accountability: costs associated with this change; communication with private vendors when operating within an electronic system; any staff or departmental resistance (if any); and the particular goals in mind when implementing an e-procurement system. Interviews were transcribed, and common themes that surfaced were taken directly from the transcribed records. A word count highlighted the responses the procurement managers shared in common, and these themes are presented below.

#### **Results From Website Evaluations**

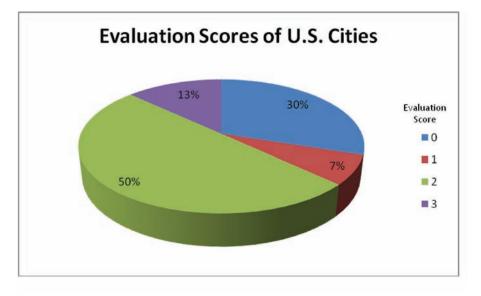
The results from the website evaluations demonstrate most cities in the U.S. are utilizing e-procurement to some extent. Seventy percent of websites evaluated utilized e-procurement. Within the 70%, there is variation to the extent e-procurement is being used. As stated above the e-procurement systems were being evaluated on a three-point scale:

- 0 = No e-procurement available.
- 1 = The site allows potential bidders to access RFPs (requests for proposals) and status of procurement online in html format.
- 2 = The site allows potential bidders to download RFPs (.doc or .pdf).
- 3 = The site allows potential bidders to place bids online.

Thirty percent of the websites evaluated did not utilize e-procurement. Of the 70% that utilized e-procurement, about 10% received a score of one indicating the city allows potential bidders to access RFPs and status of procurement online in html format. About 71% of the websites evaluated received a score of two indicating the site allows potential bidders to download RFPs .doc or .pdf format. The remaining 29% evaluated received a score of three indicating the site allows potential bidders to place bids online in addition to downloading RFPs (see also Figure 2). The 12 top ranking cities were: Atlanta, Georgia; Indianapolis, Indiana; Des Moines, Iowa; Wichita,

#### E-Procurement

Figure 2. U.S. score distribution



Kansas; Columbus, Ohio; Portland, Oregon; Memphis, Tennessee; Nashville-Davidson, Tennessee; Houston, Texas; Salt Lake City, Utah; West Valley City, Utah; and Norfolk, Virginia.

The results also demonstrate state characteristics may play a role in practicing e-procurement. Of the 100 city websites evaluated, 50 cities shared the same score with its counterpart city in the same state. This means the two largest cities in 25 states are at similar points in implementing e-procurement systems. Only two states, Tennessee and Utah, had their two largest cities- Nashville and Memphis of Tennessee and Salt Lake City and West Valley City of Utah - receive a score of three on the evaluation. Additionally in 14 other cities, if the largest or second largest city in the state had at least begun implementing eprocurement, then the counterpart city had the same or higher score in the evaluation. However, the results show 12 cities with the same evaluation score as their state counterpart had not begun using an e-procurement system. The six states in which neither of its two largest cities had started to practice e-procurement were: Louisiana, Maine, Michigan, Vermont, Wyoming and Idaho. See Figure 3 Below for the Geographic Display of the Data.

The results suggest population is not a factor in implementing e-procurement. Of the 12 top performing cities, only two cities – Houston and Philadelphia – are among the top ten largest cities in the U.S. Of the remaining 10 top performing cities, five of those cities - Norfolk, Wichita, Salt Lake City, West Valley City, and Des Moines - are not among the top 50 largest cities in the U.S.

In contrast to the data from the U.S. is the data retrieved through international web evaluation. These cities, as mentioned above, were the largest cities in each of their corresponding countries. The countries were identified as the 100 most wired countries by the International Telecommunication Union. In total, there is data for 86 cities of which 67% had not implemented e-procurement in any form. However, 16% achieved the highest score of three on the evaluation scale; four percent received one while 13% received a two (see also Figure 4).

Geographically, 24 (28%) of the cities were in Asia, 35 (41%) were in Europe, nine (10%) were in Africa, nine (10%) were in South America, seven (8%) were in North America and two

Figure 3. Geographic display of U.S. city data

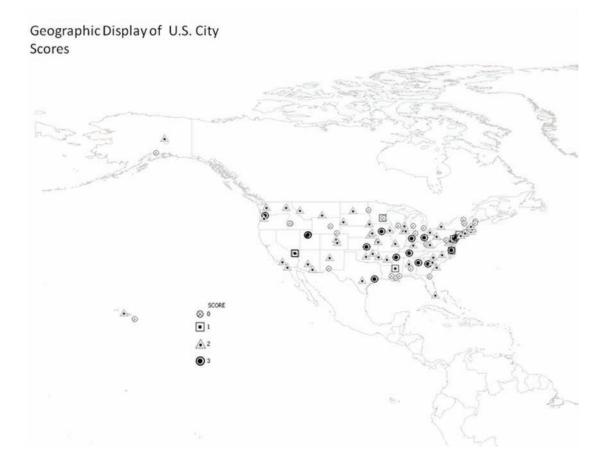
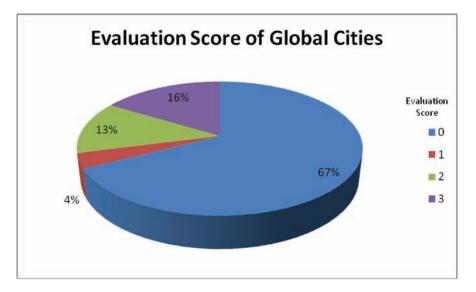


Figure 4. Global city score distribution



#### E-Procurement

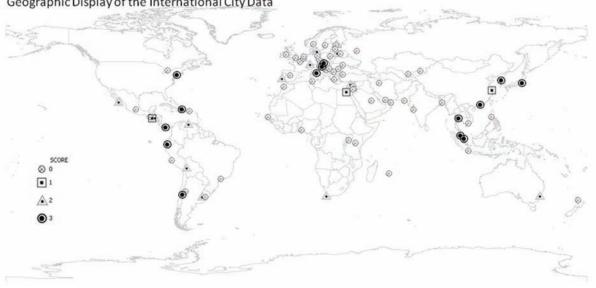


Figure 5. Geographic display of the international city data

Geographic Display of the International City Data

(2%) were in Australia. Due to the larger proportion of countries from Europe and Asia, both countries were represented significantly higher with cities that received a zero on the evaluation. Out of the 58 cities that scored zero, 42% were European and 29% were Asian. Also of note, seven of the nine African nations received a score of zero on the evaluation. While the European and Asian cities represented in the lower tier of scores corresponds with their representation in the sample examined, European cities do not find similar representation in the highest tier. Of the 14 cities receiving a score of three, six or about 43% are from Asia, while four or 29% are from Europe. Twenty one percent of countries that received a three were from South America. See Figure 5 for the Geographic Display of the International Cities.

Comparing the results from the U.S cities to the international data highlights additional findings. The data shows cities within the U.S. are more advanced in the process of implementing e-procurement. While the data shows a larger percentage of global or international cities have scored three on the evaluation, a larger percentage of U.S. cities have adopted some form of e-procurement. Sixty seven percent of international cities have yet to start e-procurement in any form whereas only 30% of U.S. cities have not begun. However, 70% of U.S. cities scored a minimum of one on the evaluation as opposed to 33% of international cities (see also Figure 6).

#### Results from Interviews

Upon examining 2008 data that surveyed the two most populous cities' websites in each of the fifty United States and the District of Colombia, twelve cities were given the highest score possible. A high score indicates the city allows e-procurement on its website; specifically, it allows potential bidders to access requests for proposals, access the status of procurement online in html format, and also allows potential bidders to download requests for proposals. To learn from these best practices it was decided to conduct additional research on the outstanding performers. These 12 top-ranking cities were identified and asked to participate in

U.S. Cities vs. International Cities 3 **Evaluation Score** 2 50 International Cities Percentages 1 U.S. Cities Percentage 67 0 30 0 20 40 60 80 **Percent of Cities** 

Figure 6. U.S. city/international city data comparison

an interview to gain a deeper understanding of motivation for transitioning to e-procurement; five cities agreed to participate: Salt Lake City, Houston, Indianapolis, Norfolk, and Wichita.

Common themes among the respondents state e-procurement systems as an internal solution to increased efficiency; e-procurement is associated with cost-savings, performance measurement, transparency, and is in line with a certain policy goal or displays some degree of political motivation.

The most abundant response when asked for the primary purpose in adopting an e-procurement system falls under the category of efficiency, both as an internal solution and externally on the vendor or supply side. All five top-scoring city government officials cited examples of efficiency gains, primarily in the form of more productivity in a substantially less amount of time. In implementing e-procurement systems, the processes internal to the purchasing departments became streamlined and automated. In allowing the full purchasing process to be available online, time savings alone were sufficient to justify the transition into an electronic system, according to respondents. Through instantaneous transmissions and exchanges of information, electronics systems notify vendors immediately when solicitation documents are posted on the city's website and receive electronic invitations to bid. The procurement process is simplified with all necessary information readily available online, making it possible to tabulate the proposals received by the purchasing department, and an objective selection from comparisons across bids is done in less time than traditional paper-based systems. The purchasing division "works smarter" with a streamlined, faster process.

Two of the five cities also reported efficiency gains in the form of reducing the clerical staff when using an electronic system as opposed to the traditional system. One purchasing agent calls this "right-sizing;" less full-time staff for clerical work is required with e-procurement since the amount of required paperwork is substantially reduced. Respondents also included examples of having the opportunity to schedule time more efficiently as a result of e-procurement. Since the automated process saves time, time is available for the division's priorities instead of making written requests. Less time is also spent on the phone with vendors with information on the status of processes, as this is also available to access online. An electronic system also results in a reduction of errors, so an increase in employee productivity was noted from all respondents; two respondents indicated increased productivity and efficiency from vendors, as well, as a result of a faster process. Basic notices for vendors are sent out via web and necessary processes are downloadable, for example collecting a vendor's W-9 form, which also saves time.

A second theme that arose from the five respondents was cost-savings. Two respondents pointed out increases in vendors and competition, and, ultimately, a reduction in price after transitioning to an electronic system. A broadened vendor pool implies greater competition, which lowers costs. Four of the five respondents indicated cost savings yielded from e-procurement in various forms. An electronic system allows a decrease in transaction costs; communication, for example, is now predominantly in electronic form, so less paper is required. Less mailing and copying of solicitation documents also yields cost savings, as well as eliminating full-time clerical positions no longer needed within the department. One respondent did address the initial cost of an e-procurement system, "The online system required an upfront investment in technical staff, programmers, hardware and software required for implementation," but the city reports over 30% in savings when taking into account the clerical staff reduction and the decreased need for paper supply in advancing towards a "paperless environment." This illustrates long term cost savings may not be realized immediately.

Transparency is another dominant theme from the responses collected from the five cities. An e-procurement system allows for an open solicitation and bidding process, and vendors can access this information and view solicitation documents electronically. Procurement specialists responded with consideration for vendors, assuring e-procurement allowed more access to information than traditional paper-based systems; all notifications and invitations to bid electronically are sent out by the system at the same time, indicating fairness in the competition among vendors. Respondents also pointed out a greater amount of proactively disseminated information readily available on the city's website for any interested parties, including the taxpayer; the e-procurement system also simplifies the process of searching and retrieving particular documents when necessary. All purchasing opportunities posted online are in the context of a fair, open solicitation process. One respondent indicated vendors have expressed their appreciation for the electronic system because of information readily available for them. Moreover as stated by one respondent, access is given to "most importantly- the tax payer."

When asked about the effect of e-procurement on communication with vendors, the respondents described a positive relationship between the city and its vendors. Participants explained e-procurement's implementation included training sessions for vendors, and vendors' feedback described systems as "easy to use." Three respondents indicated some initial resistance in preparation for the implementation from vendors who wanted to continue working as accustomed. Typically, this involved the use of "snail mail" to send and receive bids. Despite initial hesitation for learning something new, respondents went on to describe an increase in productivity on the vendor side in e-procurement. One of the cities provided onsite training sessions for vendors, marketed their online system enthusiastically as they prepared for implementation, and when the system began its implementation stage, vendors could see the developments and make suggestions based on the experience on their end. Two respondents stated an increase in the number of vendors for the city, as well as increased competition for bids.

Procurement managers also indicated eprocurement changed the nature of communication between the city's purchasing officials and vendors. Although there are still circumstances in which face to face communication is necessary, e-procurement has made this the exception and not the rule. Most of the communication, all respondents report, takes place electronically through e-mail, fax, online transactions, and/or web conferences. Vendors now automatically receive notifications when opportunities in purchasing become open and receive electronic invitations to bid on these. Notices and other basic information is available on the respectable websites, which respondents report are much more convenient than preparing written requests and sending these out through postal mail. Vendors can register for certain services and receive e-mails when these opportunities are available at no charge to them. Face to face interaction has been replaced with electronic forms of communication, and although "less vendors visit our physical location, more vendors visit our electronic location." The result is an increase in vendors that engage in full and open competition, all part of a "transparent process."

Performance measures also surfaced as part of the city's regime with the implementation of an e-procurement system. Two respondents in particular expressed setting goals for the purchasing division and outcome goals regarding the budget; one city participates in an annual evaluation of the purchasing departments' processes to find where it "measures against its peers" and to identify new ways to improve performance.

When asked if e-procurement had achieved any particular policy goals, three of the cities did provide examples of political motivation in implementing an electronic system. One city stated it implemented e-procurement in order to be in compliance with the city's web development standards and initiatives of IT advances. Two other cities indicated e-procurement systems were components of the city's financial goals. "We are continually asked to do more with less; e-procurement is one way that assists procurement officials of meeting this challenge. The system has helped us achieve financial goals... we've experienced significant identifiable savings as a result of increased competition." Another respondent expressed e-procurement has enhanced the functionality of Minority, Women, and Disadvantaged Business Enterprise (MWDBE) to allow vendors of this group be identified more easily by buyers for solicitation or contract purposes; this is another example of e-procurement aligning with a policy goal. Another respondent reported that the city was pushing "green" or environmental initiatives. The e-procurement system helped to fulfill this goal. There is variation among respondents with the level of involvement from elected officials or politicians. The city of Houston reported the purchasing division remaining in close contact with the city's legal department and elected officials because over half a billion dollars of annual procurement are processed by the division for the city of Houston. Two other cities clearly stated no involvement or reaction from politicians or city council members about procurement processes.

The data collected from the interviews share commonalities with the survey of literature included at the opening of this chapter. For example, we do find cities transitioned to e-procurement primarily for cost-saving and increased efficiency reasons. This is possible through reduced processing time, number of employees required, increased competition of an e-marketplace, and reduction in transaction costs. E-procurement allows buyers to evaluate bids objectively and move through selection process faster, not to mention the process is simplified through electronic paper trails. Information is easier to search and retrieve; tracking and record keeping are improved. Eprocurement also reaches efficiency by increasing employee productivity. The automated electronic system also allows less room for errors and is necessary to keep up with technological advances. E-procurement and other e-government initiatives are also based on the principles of transparency and accountability; opportunities for corruption are decreased as the process becomes more open. Access to information is equal for all vendors, making the bidding process open and transparent. Information is proactively disseminated by cities, such as contract information, allowing opportunities for citizens to learn about their local government. The procurement process is open, clear, and equal; communication is encouraged between suppliers, the business community, and citizens. Employees are able to do more with fewer resources and make fewer errors along the way. Political motivation is also a factor in government practices. In this case, we see the city's financial goals, information technological initiatives, and allowing minority or women owned business to be easily identified for contract purposes.

## SOLUTIONS AND RECOMMENDATIONS

The implications for this study on public administration are many. First, while initial cost is a major concern, the findings suggest the long term cost savings will surpass upfront costs. As with any investment, there is an upfront cost, which, if invested wisely, will pay off in the long run. It is clear that such savings will be seen in two major areas – lowering personnel costs and increasing speed in which transactions occur.

The findings suggest utilizing e-procurement provides a much faster response to government requests. E-procurement not only allows venders to respond in a quicker manner, but it simultaneously provides them with more time to evaluate and establish an appropriate bid. Due to the time savings gained from the processes of the posting of the bid and the response to the bid, eprocurement allows for an expanded time frame when important. More generally, the streamlined process allows government to keep pace with the available market technology. Rather than being tied to a product proposed a year in advance as accustomed in a paper based procurement system, the time savings gained from an e-procurement system ensure the product government is buying is current. There may be many cases in which the market will not change so rapidly; however when dealing with any IT, it can be reasoned such time savings are imperative.

An e-procurement system further allows public officials to focus directly on their major agency goals instead of technical processes. As Merton (1957) warned of bureaucracy, "Adherence to rules, originally conceived as a means, becomes transformed into an end-in-itself; there occurs the familiar process of displacement of goals whereby 'an instrumental value becomes a terminal value" (p.111). By replacing cumbersome processes with automated systems, goal displacement does not have to occur in purchasing divisions; rather than placing such a large emphasis on the process, focus can be shifted to finding the best vendor to meet the needs of the government.

The implications for government accountability address issues of vendor accountability to government along with government accountability to its primary revenue source – citizens. As noted by numerous respondents, transparency was a major outcome of the e-procurement system. Providing vendors more access to information about the bidding process helps create an atmosphere of trust between government and its private sector partner. While trust does not guarantee strict accountability, often in public-private partnerships, it is a major asset or determinant of the success of the relationship.

Furthermore, issues of trust extend to the citizen. Providing more access to government processes may serve to increase citizen trust in government. While it is true citizens may choose to not fully participate in this process, simply providing access is a way government can create a level of accountability absent from previous systems. An e-procurement system allows for such access.

The final major implication comes in the form of two policy goals. Suggested by a few respondents, e-procurement helps government achieve clear environmental goals. The clear reduction in the use of paper serves to help government reduce its environmental impact, along with reducing costs. A second policy goal is e-procurement allows for greater access to the bidding process. As IT has done across the world, access to information becomes much cheaper and more widely distributed. While this may not level the playing field between small and large businesses, it certainly helps to make it more balanced.

#### CONCLUSION

This chapter has defined e-procurement in the public sector as an extension of e-governance initially implemented in the private sector, but accommodated for government for several reasons. Key motivation for the shift to e-procurement, as highlighted by the review of literature presented here, are cost savings as a result of a broadened vendor pool and more competition; increased internal and external efficiency; advancing government through technological initiatives; proactive dissemination and free flow of information for increased transparency of government contracts and procurement processes; a method to push political or policy goals, such as readily identifying small or minority owned businesses or municipality economic development; encouraging citizen participation and trust in government through higher levels of accountability and basic knowledge of government practices; and an overall improved relationship between government, the taxpayer, and the business community.

Through this descriptive, two-fold study of national web content evaluation and U.S. cities juxtaposed with global cities, this chapter provides a sense of where the U.S. stands internationally; this research finds, despite global cities having a higher number of top ranking cities, the U.S. has more cities that have begun transitioning or have already implemented an e-procurement system. Nationally, we can see a trend at different government levels towards electronic systems as opposed to a traditional paper based system. At an international level, more cities in the U.S. have begun this transition than global cities. Surprisingly, we find no connection to link population with e-procurement in the U.S., as top scoring cities were not necessarily the largest. Also, this study finds cities within the same state had similar website purchasing evaluation scores, meaning we may want to further consider the influence of the state government on the city level, among other things.

Because the country is in fact moving to more streamlined automated practices, and city governments can currently find themselves at different points of this process, this research provides qualitative, in-depth research from top-scoring cities in the U.S. These have identified cost-savings, increased efficiency gains, greater access to the bidding process and an increased vendor pool as manifestations of the benefits of an e-procurement system; of course, initial investment is required and is a necessary consideration for local governments. Still, efficiency and cost-savings are not the only determinants of a successful e-procurement system-participating respondents also emphasized transparency and accountability as primary motivators for shifting to an electronic system. Commitment to the values of fairness, equity, and transparency are characteristics of government, and e-procurement allows public and private entities to work together in the context of these values to ideally increase citizen trust in government practices because of their open nature.

This chapter's contribution to the field of public administration is due to the lack of current comparative studies of the U.S. and other global cities on e-procurement; additionally, by incorporating more in-depth responses from top scoring cities in the U.S., this study also outlines major impacts on the field. First, the initial cost or investment has been found to be offset by long term savings; second, e-procurement means speedier purchasing processes to both government and its vendors to keep government current and relevant in a global market setting; third, e-procurement allows agencies to focus attention on pressing policy goals

as priorities instead of technical procedures and layers of bureaucracy; fourth, achieving accountability by providing access to information can be facilitated through an electronic system and its trail of information as contracting is an area susceptible to corruption; fifth, there is the issue of the taxpayer's trust in government practices, and an online system allows the citizen to learn what government is doing, what projects are underway, and learn of the vendors working with government contracts; finally, e-procurement allows for the advancement of certain policy goals, like creating greater access to the bidding process so vendors can participate in an open and fair process while government works most efficiently and can be objective in collecting and comparing bids, as well as in making the appropriate choice. Ultimately, we determine that cities around the world are in the midst of transitioning to e-procurement. If done properly such a transition can increase support and promote democratic values on an international scale.

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#### **KEY TERMS AND DEFINITIONS**

**Electronic Commerce (e-Commerce):** the transaction of goods and services through the use information and communication technologies.

**Electronic Government (e-Government):** the use of information and communication technologies to assist in the daily administration of government.

**Electronic Procurement (e-Procurement):** The utilization of information and communication technologies to allow for the online selection and purchase of goods and services.

**Procurement:** the purchasing of goods or services to meet the needs of the buyer.

# Chapter 5

## E-Disclosure of Campaign Finance Information: Agenda Setting and Policy Change

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#### ABSTRACT

In the United States, disclosure has long been a primary tool for fighting the corruptive influence of money in politics. Recent scandals have helped place disclosure back on the agenda of many the 50 states. Because of the move to electronic governance, many new laws regulating disclosure have taken the form of e-disclosure. Agenda setting theory suggests that interest groups, political context, policy entrepreneurs, focusing events, and state resources influence the ability of issues to reach the institutional agenda (Baumgartner & Jones, 1993; Kingdon 1995). This study uses panel corrected cross-sectional time series analysis to explore which of these factors are motivating increased interest in e-disclosure laws at the state level from 2005-2009. The number of electronic filing laws proposed in state legislatures is the dependent variable (National Council of State Legislatures).

#### INTRODUCTION

In 2006, scandals in Washington, D.C. surrounding former lobbyist Jack Abramoff helped to inspired may state legislatures to suddenly propose strengthening rules regarding lobbying—a

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condition that was known at the time as "Jack Abramoff-itis" (Associated Press, 2006). This condition, however, had already begun taking hold before the Abramoff's scandal broke. In 2005, the states had sufficient examples of "wrong doing" in their own capitals to motivate legislators to revisit existing laws governing campaign finance and ethics. Among the states with lawmakers who had at the time been force to stand trial or resign were Ohio, Kentucky, Wisconsin, Idaho, Rhode Island, Alabama, Tennessee and Illinois. Charges facing lawmakers in these states included kickbacks, extortion, mail fraud, conflict of interest and not reporting dinners and free golf outings paid for by lobbyists (Stateline.org, 2006).

When faced with scandals of this magnitude, lawmakers have several forms of legislation that they can turn to in an attempt to regain public trust. They include freedom of information laws that mandate that government records and information be made available as well as limits on the amount of gifts, trips and honoraria that politicians can accept. Additionally, conflict of interest disclosure laws require that lawmakers disclose theirs (and in some states spouses) financial interests. This makes it easier for the media, interest groups and the public to detect possible conflicts of interests regarding bills that legislators vote on. Finally, campaign finance reform can impose limits on contributions and mandate disclosure of contributions and expenditures. All of these policies have the goal of rebuilding trust with the public through making government more open (transparency).

Regardless of which law policymakers pursue, it is done so reluctantly. These policies can make it more difficult for them to interact with lobbyist and members of business. Policies that require disclosure also make it easier for opponents to gather information that can be used as a weapon during a campaign. Despite reluctance to consider such legislation, waning public trust such as that felt in 2006 can result in the strengthening of these policies or place them back on the list of issues under review. One policy area that was revisited during this period was campaign finance laws that mandated disclosure of contributions and campaign spending. The adoption of these policies was aided by advances in telecommunication. Public administrators in the U.S. had started employing procedures that used the Internet to deliver goods and services in an effort to reduce cost and increase efficiency. State, local and federal

campaign finance regulatory agencies had begun implementing campaign reporting procedures that required either the replacement or augmentation of paper filing systems with electronic systems. Although these new electronic systems were adopted in part to save money, they were also expected to increase transparency by making summaries and analyses of campaign contributions and expenditures more easily accessible to the public, interest groups and the media.

These electronic reforms, or e-disclosure laws, are part of a larger trend in information provision and management in the public sector. Starting with the Clinton Administration, all levels (federal, state and local) began adopting practices of electronic or e-government, which "refer to the delivery of information and services via the Internet or other digital means" (West, 2004, p. 2). There are a number of arguments for promoting electronic delivery and individualized access to government information. First, it has been argued that e-government will increase government transparency and efficiency because citizens can access information and government can deliver services 24 hours a day (West, 2003; Norris, 2001). Increased government transparency is an important consideration in attempting to rebuild citizen trust. It has also been suggested that e-government will increase government responsiveness to the public by facilitating communication options that are quicker and more convenient (Thomas & Streib, 2003). Finally, it has been argued that e-government may have the ability to increase political engagement and facilitate a more participatory democracy (Jaeger & Thompson, 2004; Pardo, 2000).

Current e-disclosure policies vary significantly among the states. They differ in their requirements for how campaign finance information is to be posted online, and the level of donor employment information that must be provided. Additionally, state websites provide databases which differ in the information they supply for public use (Campaign Disclosure Project, 2008a). The states also vary in their response to recent pressure to strengthen these policies. Some state legislatures considered different campaign finance and ethics laws or did not respond at all to waning public trust. What explains the variation in legislative responsiveness to demand for greater transparency in the electoral process? Is scandal the only factor to motivate change or are there other factors conductive to reform efforts? This paper explores these questions starting with a general discussion of the history of campaign finance reform in the United States followed by a brief summary of agenda setting theories.

#### BACKGROUND

Although government officials are reluctant to enact laws that regulate their activities, the American states have a long history of election reform. The approach that individual U.S. states have taken to regulate campaign finance varies considerably because of substantial differences among the states including variation in geographical area, party balance, inter-party competition, interest group organizational strength, legislative professionalism, term limits and use of the initiative process (Thompson & Moncrief, 1998, p. 20). Even though these differences in the political environment of the 50 states have lead to significant variation in policy, disclosure has become the most prevalent form of campaign finance regulation (Drage, 2000).

Adoption of campaign finance reform at the state level parallels that of the federal level. When the U.S. national government initiated reforms starting in the late 1800's, the states followed suit. New York in 1890, Massachusetts in 1892, and California in 1893 passed disclosure requirements for both money receipts and expenditures. A number of states during this time period also passed laws banning contributions from certain industries such as banking and insurance (Center for Responsive Politics, 2000). As with the federal government, this initial enthusiasm for reform at the state level faded and would not find new energy until the early 1970's. During this period, public outrage over Watergate resulted in both the federal and state governments strengthening their campaign finance laws.

In the last two decades, campaign finance reform has been an active area for legislation at the state level. Recent state efforts have focused on lowering contribution limits, increasing disclosure requirements and public financing of campaigns. A contributing factor has been the initiative process. Initiatives are measures placed on the ballots by citizens and interest groups. The initiative process allows citizens to have a direct say on a policy by serving as a mechanism that allows them to address issues that legislatures would rather avoid. It also has an indirect effect. Legislatures may take action on issues of great public interest out of fear regarding the type of laws that the citizens may adopt (Smith & Tolbert, 2004). Not all states have the initiative process but those that do have seen substantial activities in the area of campaign finance reform.

Public involvement in the area of campaign finance at this time can be contributed in part to entrepreneur efforts. One such policy entrepreneur is Randy Kehler, a founder of the nuclear-freeze movement. He took up the fight for campaign finance reform after becoming frustrated after every attempt to get the issue passed into law was blocked by Congress despite overwhelming public support. He concluded that money had become the deciding factor in policy adoption. In 1989 he formed the Working Group on Electoral Democracy (WGED) to push for campaign finance reform. His group began looking at the campaign financial records for every state and worked to match donors with politicians and voting records. In 1993, the group released a series of reports showing the influence of money in state elections. These reports helped to mobilize support for electoral reform (Orlando, 2000, p. 2).

It was no long after WGED released its reports that states began passing legislation that encouraged the use of e-disclosure. Nevertheless, the adoption of e-disclosure policy cannot be completely attributed to efforts of the WGED. In the mid-1990's, the Clinton administration had also began encouraging the use of e-government practices at all levels of government as part of its effort to "reinvent government." Regardless of which event contributed more to the passage of e-disclosure laws, we first began to see them in the states as early as 1996. In this year, four states enacted laws making e-disclosure mandatory for some candidates (Holman & Stern 2001, p. 16). In 1997, fifteen states passed laws facilitating electronic filing and seven states followed in 1998. Next, twelve states passed legislation mandating electronic filing of and access to campaign finance information for the 2000 elections (Drage, 2000). By 2003, only four states (MT, SC, TN and WY) did not have some form of computer aided filing system for campaign financial disclosure statements (Center for Government Studies, 2002).

Since 2003, the states have made considerable progress in strengthening their e-disclosure regulations. In 2003, the Campaign Disclosure Project began offering grades on state disclosure laws. Their overall score is based on four items: state campaign disclosure laws; electronic filing programs; accessibility of campaign finance information; and the usability of state disclosure web sites. In the first year that grades were issued, 17 states received an F and only 2 received an A or B. In 2008, the most recent year they issued report cards, 10 received an F and 24 received either an A or B. They attribute these improvements to increased reliance on the Internet for both collect and dissemination information regarding campaign contributions and expenditures (Campaign Disclosure Project, 2008a).

The most recent report highlights advances that the states have made toward making campaign finance information more accessible to the public. Of the 50 states, 49 now post campaign finance information on a disclosure website and the majority of the states (39) have a searchable database for contributions while about half (27) provide a searchable database for expenditures. In addition to making information more accessible, the states are also requiring more information be provided and 36 states now require that candidates report last minute contributions in a timely manner. A majority (44) states require the reporting of independent expenditures while 31 states now require candidates to report the occupation and employer of contributors. While the posting of campaign information to a disclosure website has become nearly universal for the states, the requiring of candidates to file reports online is less uniform. Only 30 states require statewide candidates to file disclosure reports online with fewer (24) require both their statewide and legislative candidates to do so. Finally, 8 states do not make electronic filing an option for candidates and in 12 states electronic filing is voluntary (Campaign Disclosure Project, 2008a).

Except from those individuals regulated by disclosure policies, one would expect little opposition to this form of campaign finance regulation. Disclosure has had broad public appeal even with those who oppose campaign finance regulation on principle (Samples, 2006). However these reforms are not without criticism. A recent ruling by the U.S. Supreme Court on January 21, 2010, in Citizens United v. FEC and subsequent response by the House of Representatives helps to illustrate specific concerns. The Supreme Court overturned a long standing federal ban on direct corporate and union spending on campaign advertising. In June, 2010 the U.S. House of Representatives attempted to neutralize this decision by voting 219-206 for disclosure rules that would regulate these campaign ads. It would require corporations and some nonprofits to report their five top donors if they spend on campaign ads, as well as divulge who paid for them. Furthermore, top company executives would have to appear in the ad and endorse its message. Proponents argue that it would help bring much needed transparency to the actions of powerful interests. Opponents argue that it represents an infringement on political speech and would have a chilling effect on spending for political ads (Tetreault, 2010). Before becoming law, this disclosure policy will have to fight an uphill battle for passage in the Senate. Although this fight is not specifically over e-disclosure regulations, it does point out the two sides of debate over disclosure policy in general. While proponents of campaign disclosure reforms argue that they increase transparency and diminish corruptions in elections, opponents argue that they infringe upon political speech as well as suppress it.

#### AGENDA SETTING

At each level of government there are an untold number of problems that policymakers could consider. How does an issue set itself apart and make it to the list of problems that government officials plan to address (institutional agenda)? The history of campaign finance reform suggests that actors both inside and outside of government as well as scandal have helped to place this topic on the institutional agenda. Do these variables always matter regardless of issue area and are there other factors that are just as important? This section attempts to answer these questions through a review of the literature on agenda setting.

One theory is the punctuated equilibrium model proposed by Baumgartner & Jones (1993, 2002) to explain agenda setting in the U.S. According to this model, policies remain stable for long periods of time with occasional periods punctuated by high levels of activity and dramatic changes in policy. This occurs because of a fragmented political power in the U.S. resulting from its federal system. Dispersed power allows certain interest groups to dominate an issue area and dictate how it is portrayed (framed) and the policy solutions that are acceptable. If competing interest groups are able to frame the issue differently and change public opinion, a period of significant changes to policy may occur.

Competing interest groups often attempt to reframe an issue when new information or events take place that draw attention to a problem. However, it is not enough that the public become aware of an issue. There must be widespread belief that the problem needs to be addressed and the government must be perceived as the appropriate actor to deal with the situation. When an issue reaches this point, it is said to have reached the systemic agenda (Cobb & Elder, 1971). The systemic agenda is the lists of problems that the public believes should be addressed. It does not include all actual problems but those that have garnered widespread attention. Those issues with certain characteristics are more likely to make it to the systemic agenda. Rochefort & Cobb (1994) provide a list of factors likely to determine if a problem makes it to the systemic agenda that includes causality, severity, incidence, proximity and crisis. Issues reaching the systemic agenda are likely to be believed to have resulted from actions or inactions of the government, are severe, have occurred recently and are is fresh in the public's mind, impact a large number of people, happen with great regularity or have the word "crisis" attached to them by the media, interest groups or institutional actors (p.16).

Not all issues will survive the transition from the systemic agenda to the institutional agenda. Kingdon's (1995) multiple streams model argues that issues move to the institutional agenda when three independent streams of policy, problems and politics intersect during an open "window" or period of opportunity. The problem stream consists of all the problems that different groups wish to be addressed. As argued by Baumgartner & Jones (1993, 2002) new information or an occurrence that attracts public attention (focusing event) can help an issue stand out from the others. The policy stream consists of all of the solutions that political actors would like attached to an issue. A solution is adopted based on a number of criteria including cost, political feasibility, public acceptance and technical feasibility. The political stream is made up of the political environment and includes the opinions of both citizens and public officials.

Some of the windows in Kingdon's model (1995) are quite predictable such as appropriation bills while others are not. An issue is more likely to make it to the institutional agenda if a policy entrepreneur helps guide it through the window. These are individuals who acting in a leadership capacity invest considerable time, money and effort into the passage of a particular policy issue. At the state level, it is often administrators who take on the role of policy entrepreneur and bring about policy change within the state bureaucracy (Kingdon, 1995; Elling, 1999).

The review of the literatures illustrates that no agenda setting theory is complete but considered together these theories suggest a set of variables that can be used to explore why certain states are more likely to consider e-disclosure policy as an alternative when reevaluating their campaign finance laws. In the next section, the influence of interest groups, ideology, political context and resources on the agenda setting process will be assessed through examining the level of legislative activity regarding e-disclosure in the states from 2005 through 2009 using pooled cross-sectional time series data which controls for variation both between states and over time.

#### EMPIRICAL MODEL: DATA AND MEASUREMENT

The dependent variable is the number of bills in state legislatures concerning e-disclosure in each year (2005-2009) as reported by the National Conference of State Legislatures (2010a). This time frame was chosen to capture the possible impact of national concern regarding political scandal that took place at both the state and national level in the U.S. beginning in 2005. Legislation is included in this analysis regardless of its purpose; it is beyond the scope of this preliminary study to examine factors that influence the direction in which policy may be heading. Instead, the focus of this paper is the on legislative activity in this policy area.

Political actors at the state and local level (interest groups, local officials and agencies) play an important role in agenda setting (Baumgartner & Jones, 1993; Kingdon, 1995). Depending on how policy impacts an interest group, it may act either to move policy onto the agenda or to keep it off. At the state level, both government unions and lobbying firms have been found to be invested in the politics of e-disclosure laws (McNeal, Schmeida & Hale, 2007; McNeal & Hale, 2010). To control for their possible influence, I include measures of interest group strength for each. For lobbying firms the amount of money that lobbyists and public relations firms contributed to state candidates and political committees in a state during the various election cycles is used (National Institute on Money in State Politics, 2010). Similarly, to control for the influence of state employee unions, included is the amount of money contributed by state level civil servants for the various election cycles. The impact that these two interests have on e-disclosure laws has been found to be mixed. States with stronger lobbying and public relation firms have been found to have more stringent and comprehensive e-disclosure laws while greater involvement by government unions or intergovernmental interest groups has been found to have a negative impact on the strength and inclusiveness of these policies (McNeal, Schmeida & Hale, 2007; McNeal & Hale, 2010). It is expected that they will have a similar impact on agenda setting in this issue area.

Government unions and lobbying firms are not the only groups likely to have an influence on agenda setting in this area. Leaders in the passage of campaign finance reform laws such as good government groups (e.g. Common Cause and the League of Women Voters) and civil rights groups are also anticipated to play a major role in updating policies in the area of campaign finance. The number of civil rights and civil liberties groups in a state was included as an additional control for interest group strength (Project Vote Smart, 2006). A measure of interest group strength for good government groups was not included because this variable was found to be highly correlated with the number of civil rights and civil liberties groups. Previous research (McNeal, Schmeida & Hale, 2007; Witko, 2007) found the involvement of civil rights groups to be positively related to the adoption of e-disclosure laws while a stronger presence of good government groups was associated with more stringent campaign finance laws. It is anticipated that civil rights and civil liberties groups will have a positive impact on agenda setting activities in this policy area.

The political environment includes both the attitudes of the citizens as well as public officials and plays an important part in the agenda setting process (Kingdon, 1995). There are a number of ways that the political process may be impacted by public opinions. One mechanism that citizens may use to influence public policy is direct democracy (initiative process). Previous research (Witko, 2007) has found that the initiative process is associated with more stringent campaign finance laws and it is expected that in states with the initiative process will have greater legislative activities regarding e-disclosure. Presence of the initiative process is measured using a variable coded 1 if the state has the initiative process and 0 otherwise is included.

Ideology of both citizens and elected officials is another important element of the political environment. Laws restricting the actions of government officials (campaign finance and ethic laws) have been associated with a liberal climate (Loftus, 1994; Witko, 2007). The ideology of government officials and the ideology of citizens are controlled for using Berry et al. (1998, 2001) indices of government ideology and citizen ideology. Both indices range from 0 to 100 and higher values indicate greater liberalism. One factor associated with a liberal climate in the legislature is a greater presence of women. Research suggests that female legislators are typically more liberal than their male counterparts, regardless of party affiliation (Pogionne, 2004). The presence of women legislators is measured using the percent women in a state legislature for each year (Center for American Women and Politics, 2010).

A number of factors can influence the opinion of policymakers. The first is partisanship. Party control of the government is measured by the percentage of Democrats in the state legislature for each year (National Council of State Legislatures 2010b). Research on partisanship and e-government is mixed. McNeal et al. (2003) and Tolbert, Mossberger & McNeal (2008) found a positive relationship between Republican controlled legislatures and implementation of e-government policies. Both studies concluded that states with Republican controlled legislatures were more likely to be innovators in e-government because of the belief that e-government would increase both efficiency and cost savings. While these studies found a connection between e-government and partisanship, McNeal, Schmeida & Hale (2007) found no relationship between the adoption of edisclosure laws and partisan control of the state legislature.

There are both arguments for why legislative term limits will and will not result in stronger campaign finance reforms. Supporters of legislative term limits argue that they can help to unseat incumbents and make lawmakers more responsive to the public. States where the legislature is more responsive to public demands would be expected to be more likely to pass government reforms (Opheim 1994; Moncrief et al., 1992). Detractors of term limits have argued just the opposite. They contend that the desire to get reelected makes policymakers more responsive to the public. States with term limits would therefore be less likely to have legislators who respond to public demand (Polsby, 1990). To control for the possible impact of term limits a variable coded 1 if the state has legislative term limits and 0 otherwise has been included (National Council of State Legislatures, 2005). Similarly, a measure has been added for the possible impact of gubernatorial term limits on the responsiveness of the governor to public demand coded 1 if the state has gubernatorial term limits and 0 otherwise.

Prior research (Gould 1978; Loftus 1994; Skowronek 1984) finds that while legislators are unlikely to support policy that regulates their activities, the greatest resistance comes from power holders. Junior legislators and minority party members are more likely to support these measures. The ability of legislative leaders to resist pressure from junior members and minority party members to adopt a particular policy is dependent on the strength of their power. A scale of the formal powers of the Speaker of each state House of Representatives is included as a measure of legislative leadership strength (Mooney, 2010). This measure is based on six equally weighted items from the 2003-2004 legislative sessions: powers to appoint committee chairs, to appoint party leaders, to make committee assignments, to refer bills to committee, to control staff and the amount of addition income the Speaker receives. Party competition has also been found to influence responsiveness to the public. Research (Garand, 1985) suggests that states with greater party competition are more likely to adopt legislation that reflects public interests. To control for interparty competition, the Ranney Index for state two-party competition has been included for various years (Morehouse & Jewell, 2003). This index is based on the proportion of gubernatorial votes won, the proportion of state house and senate seats won and the proportion of time that the governorship and two houses of the state legislature were controlled by the same party.

While campaign finance laws regulate the actions of those running for office, there are also laws that regulate citizen involvement in elections. Laws that regulate voting and voter registration can act as barriers to participation. It is expected that in states with greater barriers to participation would be less likely to adopt policy that reflects the public interest. As a measure of limits to participation, included is the percentage of U.S. Congressional districts in each state that are covered by Section 5 of the Voting Rights Act of 1965 pre-clearance provisions. Pre-clearance designation indicates that a state or other electoral jurisdictions within the state must get federal approval to changes their election laws. Determination of which states or electoral jurisdictions are designated as pre-clearance is based on a formula that is calculated using indicators of laws that limited the ability of citizens to vote or register to vote and low election turnouts (U.S. Department of Justice, 2008).

Although there are a number of factors in the political environment that can prevent policy from making it to the political agenda, legislative professionalism may serve to enhance placement of policy on the agenda. Research (McNeal et al., 2003; Tolbert, Mossberger & McNeal, 2008; McNeal & Hale, 2010) has found that states with greater legislative professionalism are more likely to be leaders in e-government and e-disclosure laws while Witko (2007) has found that greater legislative professionalism is associated with more stringent campaign finance laws. It is expected that agenda setting will be greatest in states with more professional legislatures because decision makers in these states should have greater familiarity with and expertise in the various policy areas. This variable is measured by an index created by Squire (2007) that uses the U.S. Congress as a baseline against which to measure the salary, staff, and time-in-session of the 50 state legislatures.

Legislative professionalism is one example of state resources that influences the ability of policymakers to innovate and consider new agenda items. Additional measures of state resources have been included for educational attainment and urbanization. Educational attainment is measured over time by the percent of the state population over the age of 25 with a bachelor's degree or

higher education (various years) and urbanization is measured by the percent of the population living in urban areas (2000), with data from the U. S. Census. Markell (1993) suggests that the measure of resources be expanded to include a strong record of policy implementation of an issue area. States that have a history of innovation in an issue area may be more likely to continue placing new ideas on the table. As a measure of innovation of e-disclosure policy, a campaign finance disclosure grade based on 13-point scale ranging from F to A+ and created by the Campaign Disclosure Project for various years is included. The grades are based on a 120-point scale of which 84 points were based on content of the disclosure law, 15 points were allocated for the enforcement of the law and 21 points were based on the filing schedule (Campaign Disclosure Project, 2008b).

Finally, Goggin et al. (1990, pp. 145-6) argue that public awareness is also an important factor in determining public policy. States are more likely to respond to an issue if the public believes that a problem exists. Included in this study as an indicator of need is the number of election administration jurisdictions in each state in 2002 (Election Assistance Commission, 2004). Mc-Neal & Hale (2010) found that states with more election administration jurisdictions had weaker, less evolved e-disclosure laws. They argued that a greater number of election jurisdictions places greater strain on the state's election resources and a need for more extensive coordinated communication about election-related matters.

#### FINDINGS AND DISCUSSION

In Table 1, the dependent variable is coded so that higher scores are associated with increased e-disclosure agenda setting activities. Because the dependent variable is measured over time pooling the fifty states and the dependent variable is continuous, cross-sectional time series analysis is used. Specifically, I use ordinary least squares

(OLS) regression with panel corrected standard errors (PCSE). Beck and Katz (1995) make a case for using PCSE over random effects models for pooled data when the number of time periods is relatively small compared to the number of panels (T<N). They argue the coverage probabilities based on the OLS point estimates with panelcorrected standard errors are closer to nominal levels than the coverage probabilities of the GLS estimators with associated model-based GLS standard errors. The use of PCSE corrects for serial correlation in calculating the standard errors of the regression coefficients. The model used in this chapter is appropriate for PCSE because it has 5 time periods (T) and 49 panels (N), with each state as a panel. There are only 49 panels because, unlike the other states, Nebraska has a unicameral state legislature and uses nonpartisan elections to select members for its legislature. Certain variables such as percent Democrats in the state legislature cannot be calculated for this state.

The findings in Table 1 suggest that some of the factors that are associated with the agenda setting literature are related to legislative activities surrounding e-disclosure at the state level. Specifically, findings support the literature regarding the impact of interest group strength, ideology, term limits, legislative professionalism, interparty competition, Speaker institutional power, pre-clearance designation and indication of need.

The results regarding interest group strength support the argument that interest group activity can influence the rise or fall of issues on the institutional agenda but not in the expected direction. Decreases in the number of civil rights and civil liberties groups were associated with greater legislative activities on e-disclosure. However, there was no associated between the amounts of money donated by lobbying and public relation groups or civil service unions and legislative activities. This contradicts McNeal & Hale (2010) who found that these groups were associated with the strength and breadth of e-disclosure laws adopted. It is possible that these groups do not involve themselves with

Predictor Variables	Number of bills in state legislatures		
Interest group strength	В	B (s.e.)	
Lobby firms <i>it</i>	5.30e-08	(7.88e-08)	
State government employees <i>it</i>	1.27e-08	(4.99e-08)	
Civil rights groups <sup>i,t</sup>	089	(.017)	***
Political constraints			
Initiative process <i>i</i> .	.238	(.161)	
Interparty competition <i>i</i> . <i>t</i>	.017	(.007)	**
Speaker's institutional power <i>i</i> , <i>t</i>	.189	(.070)	**
Democrats in the state legislature (%) <i>i</i> , <i>t</i>	.041	(.385)	
Women in the state legislature (%) <i>i.t</i>	012	(.010)	
Ideology of elected officials (liberal) <i>it</i>	003	(.002)	
Ideology of citizens (liberal) <i>it</i>	003	(.001)	+
Voting Rights Act Sec 5 <sup><i>i</i>,<i>t</i></sup>	002	(8.32e-04)	*
Legislative term limits <i>i</i> . <i>t</i>	326	(.191)	+
Gubernatorial term limits <i>i</i> , <i>t</i>	435	(.182)	*
State resources			
Urban population (%) <sup>it</sup>	002	(.003)	
Education attainment (% BA degree) <i>it</i>	.004	(.015)	
Institutions			
Legislative professionalism <i>i</i> . <i>t</i>	1.646	(.814)	*
Demands/needs			
Election administration jurisdictions <i>i</i> , <i>t</i>	-4.00e-04	(1.67e04)	*
Policy implementation record			
Electronic disclosure grade <i>i</i> , <i>t</i>	007	(.020)	
Year Control			
Year 2005	.083	(.072)	
Year 2006	443	(.064)	***
Year 2007	143	(.025)	***
Year 2008	229	(.006)	***
Constant	517	(.752)	
Wald Chi <sup>2</sup> (13)	291301.9		***
Number of panels	49		
R-Squared	.1989		
N	245		

Table 1. Legislative activity on electronic disclosure policy, 2005-2009

Note: Panel corrected cross-sectional time series data for the 50 states. Unstandardized regression coefficients with standard errors in parenthesis. Subscript i contains the unit to which the observations belong, in this case the state, and controls for variation in state legislative activity between the states. Subscript t represents the time or year the variable was measured.

\*\*\* p=<.001; \*\* p=<.01; \* p=<.05; + p=<.10, two-tailed tests.

agenda setting on this topic but become mobilized when it appear that the legislature will takes action on this issue.

States with more conservative citizens were found more likely to engage in legislative activities regarding e-disclosure. This is in contradiction to research (Loftus, 1994; Witko, 2007) that found that more liberal climates are associated with more stringent campaign finance and ethic policies. Furthermore variables that indicate a more liberal climate (percent women in the state legislature, percent Democrats in the state legislature and liberal legislative ideology) were found to be unrelated to legislative activities on e-disclosure. These findings may result from the fact that this study focuses on a different stage of the policy process then earlier research on e-disclosure. Previous research explored the relationship between campaign finance regulations and adoption while the study is concerned with agenda setting. Estimates vary, but approximately only 20 percent of bills proposed in state legislatures become law (Council of State Government, 2008, p.130). Factors that are not relevant to agenda setting may act as filtering criteria to determine which bills are adopted.

There is disagreement in the literature on whether term limits will have a negative or positive impact on the responsiveness of lawmakers to citizen demands. The findings from this study suggest a possible negative impact. Both legislative and gubernatorial term limits were associated with less legislative activities on this topic. Both Sec 5 pre-clearance designation and interparty competition were significant and in the predicted direction. States with greater interparty competition had greater legislative activities on e-disclosure while those with more election jurisdictions with a pre-clearance designation were less likely. Speaker's institutional power was found to be a significant predictor of legislative activities but not in the expected direction. Legislative activity was found to be positively related to legislatively leadership power. It is possible that because no legislator is likely to support policy that regulates his/her activities, it would take strong legislative leadership to force and keep this type of policy on the agenda. The remaining measures of the political environment were found unrelated to the number of bills in state legislatures on this topic.

Legislative professionalism was found to be associated with more legislative activities on edisclosure. This supports the literature (McNeal et al., 2003; Tolbert, Mossberger & McNeal, 2008; McNeal & Hale, 2010) that found that states with greater legislative professionalism are more likely to be leaders in e-government and e-disclosure laws. States with greater legislative professionalism appear to not only have more stringent edisclosure laws but also are more likely to have them revisit the institutional agenda. It cannot be inferred from these findings that states with more stringent e-disclosure policies are the same ones that are more likely to place them back to the institutional agenda during this period. The grade that states received for their disclosure laws from the Campaign Disclosure Project was found unrelated to agenda setting. Other measures of state government resources were also found unrelated to legislative activity.

The number of election administration jurisdictions in a state was found to be negatively related to agenda setting. This contradicts Goggin et al. (1990) who argue that public awareness of a problem is a significant predictor of political activities. Those states with the greatest need for e-disclosure policy were least likely to have this policy on the list of topics under consideration. Finally, control variables were added for years under consideration in this study. Each control variable was coded 1 for a particular year and 0 otherwise. The findings from these controls suggest greater activity in 2005 and 2009. This supports Kingdon (1995) who argues that periods of opportunity "windows" take place that facilitate agenda setting. One typical window is elections. Elections can bring in new administrations and willingness to address issues that were previously

ignored. The years 2005 and 2009 both represent periods of administrative change following the 2004 and 2008 presidential elections.

#### FUTURE RESEARCH DIRECTIONS

Taken as a whole, the findings from this study confirm many of the expectations based on the agenda setting literature. Nevertheless increased legislative activity does not necessarily translate into increased support for e-disclosure policies. This was a preliminary study that did not consider whether the variety of bills proposed in the states were for or against this campaign finance reform. Further research is needed to determine whether policymakers are in favor of strengthening and broadening e-disclosure policy, or whether proposed legislation was meant to weaken or replace current e-disclosure laws with a different type of reform. Disclosure policies have been the most prevalent type of campaign finance regulation in the American states for some time. As suggested by the punctuated equilibrium model, competing interests may be using recent events to reframe the issue and push for different solutions to combating the corruptive influence of money in politics.

Additionally, we are currently going through a period of increased media attention to campaign finance regulations. A number of focusing events have been taking place that could place e-disclosure back onto the systemic and institutional agendas in the states. One such event was the trial of former Illinois Governor Rod. Blagojevich (D). During the recent period where scandal was occurring in a number of states, citizens of Illinois were faced with the embarrassment of having both the then current and previous governors facing charges of corruption. Former Gov. George Ryan (R) was standing trial on 22 counts of corruption while members of the then Gov. Rod Blagojevich administration were found guilty on charges related to kickbacks and extortion schemes involving the investment of the teachers' pension fund (Stateline.org, 2006, 54). Former Gov. George Ryan was sentenced in April 2006 for fraud and racketeering to six and a half years in a federal prison (Schaper, 2007). Former Gov. Rod Blagojevich was impeached and removed from office. He stood trial on 24 counts related to racketeering and attempting to trade or sell President Obama's former Senate seat (Tarm & Robinson, 2010). In August 2010, the jury found him guilty on one charge-lying to federal agents. The jury was deadlocked 11-1 on the other 23 charges in favor of conviction. The judge declared a mistrial on these 23 charges and prosecutors have vowed to retry the case (Davey & Saulny, 2010). His trial garnered considerable media attention and any future trial would also likely act as a focusing event.

Illinois is not the only state currently dealing with the issue of corruption in state government. In October 2010, federal officials announced charges against 11 individuals in the state of Alabama. The 39-count indictment concerns alleged bribes made to influence the voting of state legislators on a bill regarding proposed electronic bingo gambling machines in gaming facilities (Barnett, 2010). Futures trials regarding this circumstance may also draw attention to the corruptive influence of money in government.

Another focusing event is the U.S. Supreme Court ruling in Citizens United v. FEC. This Supreme Court decision may have both a direct and indirect impact on campaign finance reform in the states. The Court's decision to overturn the federal ban on direct corporate and union spending on campaign advertising has a direct impact on the 24 states that have similar bans. These states will need to take up the issue of campaign finance to either rewrite current laws or repeal them (National Council of State Legislatures, 2010c). There is also a possible indirect effect resulting from the reaction to the decision on Capitol Hill. Not only has the House passed a bill that attempts to counteract this decision but members of the Senate Judiciary Committee used the confirmation hearings for Supreme Court nominee Elena Kagan to condemn the decision. During the hearings, the Court was accused of "legislating from the bench" and Kagan was repeatedly asked her thoughts on the decision (Davis, 2010). This attention to the decision could place campaign finance back on the systemic agenda.

#### CONCLUSION

This analysis was undertaken to identify factors that have influenced the placing of e-disclosure on the institutional agenda in the American states following an outbreak of scandals in various states in recent years. Although it represents only a preliminary investigation into agenda setting and e-disclosure policy, it has helped to highlight some of the differences between agenda setting and adoption in this policy area. While previous research (McNeal, Schmeida, & Hale, 2007; McNeal & Hale 2010) found that state resources, a history of innovation in the policy area and several interest groups were related to policy adoption, this was not true for agenda setting. Only one interest (civil rights and civil liberties) was found related to agenda setting and a previous record of policy innovation and state resources were found unrelated. Although these variables do not appear related to determining if e-disclosure policies make it to the institutional agenda, they may acts as criteria for evaluating if disclosure or other types of campaign finance reforms are most appropriate for regulating the use of money in elections.

Nevertheless, this research does indicate that there are other variables that are both significant predictors of policy adoption and agenda setting. Just as with the research on policy adoption and e-disclosure policies (McNeal, Schmeida & Hale, 2007; McNeal & Hale, 2010), legislative professionalism was found to be a strong and significant predictor of agenda setting. One telling finding is that both this study on agenda setting and the McNeal & Hale (2010) research on adoption found a significant number of factors in the political environment including variables such as the initiative process and interparty competition to be highly significant. Earlier research on e-disclosure (McNeal, Schmeida, & Hale, 2007) found no relationship between political factors and adoption in this policy area.

The earlier study attributed its findings to the type of policies that e-disclosure represents. McNeal, Schmeida & Hale (2007) categorized e-disclosure policy as a hybrid forms with characteristics of both administrative (procedural) reform policy and regulatory policy. Regulatory policy involves government enforcing rules of conduct directed at specific groups or individuals while administrative rules dictate how policy is carried out. The adoption of these two forms of policy is driven by different factors. The adoption of administrative reform (such as e-government) is often driven by the goals of cost reduction and increasing efficiency (McNeal et al., 2003). Unlike regulatory policy, it does not involve the direct and coercive use of government power over citizens and is not very salient among the public. On the other hand, implementation of regulatory policy is highly volatile and controversial (Ripley & Franklin, 1980). McNeal, Schmeida & Hale (2007) argued that the importance of interest groups in the adoption of e-disclosure policies could be attributed to its regulatory nature while the lack of influence by any other political factors could be credited to its administrative reform nature.

The change in importance of political variables may be signaling several different scenarios. The first may be that we are going through a period of punctuated equilibrium under the Baumgartner and Jones model. There have been a number of events that have brought campaign finance reform back to public attention. These events include scandals at both the state and federal level, the U.S. Supreme Court ruling in *Citizens United v. FEC* and the reaction to this decision on Capitol Hill. Baumgartner and Jones (1993, 2002) argue that interest groups with a different perspective on an issue will use periods such as this to attempt to reframe an issue. For a long period of time disclosure policy has been considered to be the most acceptable form of campaign finance regulation. There may be interest who believe otherwise but has been kept out of the discussion by dominate interest. Competing interests may be using this time to change the rhetoric regarding disclosure policy from transparency and fighting the corruptive influence of money in politics to infringement of political speech and suppression of political speech. The U.S. Supreme Court may have helped paved the way for this second interpretation of disclosure policy in an earlier case. In June 2008, in Davis v. FEC, the Supreme Court overturned part of the Bipartisan Campaign Reform Act of 2002 that required self-funded candidates to file campaign finance reports more often and provide greater information. This provision was overturned in part because the Court found that it would have a "chilling effect" on the political speech of selffinanced candidates.

There is a second interpretation to these findings. There may be unintended consequences related to e-disclosure policies. States began to adopt very basic e-disclosure policies in 1996. Since that time we have seen significant advances in technology and well as updated laws that have taken advantage of these advances. State as well as federal websites now provide searchable databases that provide a wealth of information for voters. At the same time, they are allowing employers, neighbors, friends or basically anyone look up how much an individual has contributed, to which candidates, their address, current place of employment and other personal information. The public may be feeling "buyer's remorse" or worried that there is such a thing as too much transparency. This might suppress political participation because individuals may become less willing to make political contribution. This is a preliminary study and future research is needed to explore what is happening during this period of change in campaign finance regulations.

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#### **KEY TERMS AND DEFINITIONS**

**Campaign Finance Regulations:** Laws that regulate the use of money in elections. In the American states these have taken the form of contribution limits, disclosure requirements and public financing of campaigns.

**Electronic Campaign Finance Disclosure Laws:** Campaign-reporting procedures require either the replacement or augmentation of paper filing systems with electronic systems. **Electronic Government:** The deliver by government of information and other services by electronic means such as the Internet.

**Initiatives:** Measures placed on the ballots by citizens and interest groups. There are currently 24 states in the United States that have some form of the initiative process.

**Institutional Agenda:** The list of problems currently under consideration by the government.

**Policy Entrepreneur:** An individual who acting in a leadership capacity invests considerable time, money and effort into the passage of a particular policy issue.

**Policy Windows:** Opportunities that present themselves for groups and individuals to place an issue on the agenda. Some opportunities such as elections are regular and predictable while others such as natural disasters can occur without warning.

**Systemic Agenda:** The problems that the public believe need to be addressed and that the government is the appropriate actor to solve them.

### Chapter 6 Courts On Screen: E-Government and the Increase of Judicial Transparency

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#### ABSTRACT

Opacity may be the key word to describe how judicial work is done. Yet there has been a plea for change, as transparency has been demanded as a rule for governmental issues, judicial work included. The challenge lies in getting there, and e-government may be today a popular trend that will get us there. Indeed, media convergence, the use of social media, and live broadcasting on the web repaginate an old debate on the presence of cameras in the courtrooms and places it on the e-government level. Rephrased as courts on screen, the debate challenges the secrecy of judicial deliberations and makes a call for sunshine in the courtroom. The Brazilian experience of TV Justiça and its recent arrival on YouTube and on Twitter has pushed further the debate over the impact of courts' sessions live broadcasting and is here examined as a case study for the increase of judicial transparency.

#### INTRODUCTION

Opacity may be the key word to explain how judicial work is done. A change is pleaded by one and everyone: we all want transparency as a rule for governmental issues, judicial work included. The challenge lays on how to get there and egovernment may be a good trend for the matter. Indeed, media convergence, the use of social media and live broadcasting on the web repaginate an old debate on the presence of cameras in the courtrooms and replaces it on the e-government field. Rephrased as courts on screen, the debate challenges the secrecy of judicial deliberations –

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which has been up to now the rule in the majority of countries - and brings up a call for sunshine in the courtroom. It comes thus as no surprise that in March 2010 a New York Times editorial on media coverage of Federal Court proceedings arguing that televising Supreme Court proceedings would be good for democracy, expressed that "[c] ameras in the court would allow Americans to see for themselves how an extremely powerful part of their government works. They would also allow voters to hold presidents accountable for the quality of justices they nominate. Right now, we see the justices during their confirmation hearings and rarely after that". In this reverberation of a North American congressional debate at least a decade old, transparency is here undoubtedly seen as the anteroom for accountability.

Yet, this is not a North American debate. As a matter of fact, this is a cosmopolitan discussion enhanced by a judicial protagonism that came along with the judicialization of politics (Vallinder and Tate, 1995). As a consequence, other experiences may be of further interest as they shed light on the debate from different perspectives. From a theoretical point of view, one may thus look at the Great Britain debate organized by the Department for Constitutional Affairs to strength its comprehension on the matter. Or, one may choose to examine the uniqueness of the Brazilian experience and try to establish what it means for transparency and for the development of e-government. The latter is the proposed approach here. In fact, after reviewing the correspondent literature, it is here proposed a close look at TV Justica - the official Brazilian court TV - assuming that an examination of its trajectory may be of great help to understand the renewal of the debate over e-governance and its impact on judicial transparency. An increasing demand for accountability has contributed to the transformation of judicial work and definitely, in the Brazilian case, as TV Justica provides for greater transparency, it has deeply contributed to the perceived change. Consequently, this is the exact intent of the analysis here proposed: to articulate e-government and judicial transparency in order to establish a sense for the increasing use of TV and web broadcasting of judicial life. After reviewing the literature on cameras in the courtrooms, the text takes a close look at the Brazilian experience of *TV Justiça* as it may be noted as an important case study to understand what lies ahead as one tinkers with judicial transparency and e-government.

#### BACKGROUND

The debate over the presence of cameras in the courtrooms is an old one and much has been said about it. On the one hand, some argue that cameras are disruptive of the judiciary scenery while on the other hand, others argue that it may increase judicial transparency and contribute to a greater accountability of judicial work. As described by Erskine (2006) in his analysis of the legality of live coverage on juror deliberations, cameras in a courtroom set out a conflict "between two fundamental constitutional rights: the right of an impartial jury and that of freedom of the press" (p. 712). In other words, "[t]he conflict between the media and the courts over cameras in the court centers on the First Amendment right of a free press versus the Sixth Amendment right to a fair trial. However, the specific arguments by media and the judiciary are usually framed differently. The judiciary argues that media coverage is disruptive to trial proceedings, the camera's presence may be intimidating to witnesses and attorneys may play to the camera. The media argue that camera access is vital to their role in a democracy; it provides transparency to the judicial process, enhances the credibility of the courts by taking the mystery out of the judicial process and provides a societal good by being a surrogate for the public" (Martínez, 2009, p. 4). In another paper, Martínez (2010) draws a similar case as he points out that: "[t]he televising of court proceedings, which a powerful minority of judges ironically opposes, confers

legitimacy on the judicial process as nothing else can. The First Amendment doesn't require public access to include television or computer access. But when judges exercise their discretion to open their courtrooms to cameras, that choice should be sustained. It strengthens the system of democratic self-government. It strengthens the legitimacy of the courts". Actually, similar arguments in favor or against cameras in courts were found almost a decade earlier in Mason (2001). In his paper, he argues that two positive aspects for cameras in the courtroom were the existence of studies conducted by the courts showing that cameras have no negative impact on trials and the fact that TV can play simultaneously a scrutineer and educator role. As negative points, he mentions that its presence can enhance sensationalism, pervert the trial process and foster disrespect to the court as they swap away the decorum of judicial proceedings. Put differently and briefly, this debate is all about the strengthening of the court's accountability and its impact on democracy.

One may shift the perspective and query whether there is any change from the viewer's perspective? Called upon to be the witness of justice being served, *i.e.*, to play a passive role on the making of justice, viewers are now able to establish a different rapport with the courts. Garapon (1996, p. 89) distinguishes between the viewer's "unarmed regard" in the courtroom and the television's "framed regard" whose editing and camera framing guide the audience's understanding of the facts. In fact, an important distinction that should bring us caution is that media intermediation increases, on the one hand, the desire to watch but, on the other hand, it pushes away the scene from the viewer. In other words, it creates distance between the viewer and its object. Thus, what is the impact of the camera intermediation: is it just the strengthening of a passive participation or is it an empowerment procedure that makes possible a different kind of interaction between the courts and its audience? Surely, viewers do not directly interfere with the courts' deliberation as they are not physically present. But, from another standpoint, their availability allows for the establishment of a "direct" link between those who decide and the public. Who is here empowered: the viewers or the decision-makers or both? From the viewer perspective, empowerment may come from greater accountability while from the decision-makers' standpoint, it may come from a renewed legitimacy drawn from the direct link to the receiver of the decision. In any event, court has to be shown on screen in order to make all these possibilities feasible.

Courts on screen - and no longer just cameras in the courtroom – are thus apparently all about transparency. It is a different kind of transparency indeed as the related literature considers transparency as a result of access to judicial information. For instance, LoPucki (2008) explains that "a court system is 'transparent' for the purposes of this article when all relevant aspects of its operation are revealed to policymakers, litigants, and the public in forms that they can readily comprehend. For reasons that will be explained, court systems can become transparent only when court files are maintained in relational electronic formats and the public has free, technologically unfettered access to their contents. Relational formats are the familiar formats used in data management and spreadsheet programs. Each piece of data is tagged as the value of a characteristic of an object. Empiricists refer to relational data as 'coded'. Statistics programs can process such data into statistics, tables, and graphs" (p. 4). On the other hand, Voermans (2007), when discussing "the efforts of some judiciaries in Europe and the US to open up and work more transparently, [focused] on the comparison and analysis of the way in which judiciaries in different countries tackle the demand for information about cases, case-related or court-related issues" (p. 150). Similarly, the Justice Studies Center of the Americas has published since 2004 an annual index of online access to judicial information in the Americas, whose indicators are related to the existence of a court's web page, the publication of decisions, internal rules, statistics, budgets and salaries, among others. Evidently, from these angles, transparency relates to the means available for and the expenses of justice being done. It is not about justice being seen to be done!

Such transparency would simultaneously allow every citizen to better understand the functioning of the judiciary and to act as an 'inspector' of the courts' activity. As courts have increasingly been called to decide upon different matters previously reserved to different arenas (Tate & Vallinder, 1995), this could only be perceived as a good thing for democracy as ultimately it would be a means to empower citizenship. If media and judicial power dispute which one should be democracy's strongest place of visibility (Garapon, 1997, p. 268), one may easily perceive the potential in their coming together. Yet, the problem is that seeing justice to be done does not necessarily create mechanisms for popular control nor make judicial liturgy and language comprehensible to the ordinary person. On the contrary, the risk is their transformation into some kind of judicial 'voyeur' waiting for a disruptive moment that would transform the deliberation into a worthy spectacle. As Garapon (1997, p. 269) points out such transparency may end up pushing democracy into three contradictions: the impasse of a world devoid of symbolism, the illusion of a direct democracy and the impossibility of total transparency.

The same debate had been advanced a few years ago by the Department for Constitutional Affairs in Great Britain through its consultation "Broadcasting Courts". In its consultation paper, it unmistakably establishes that its core issue would be the broadcasting option that brings together moving picture and sound, "as the availability of such recordings via the television or the internet would have the greatest implications for both participants, and the wider public" (DCA, 2004, p. 41). The consultation paper reminds us that "[t]hose who favour relaxing the prohibition on broadcasting court proceedings argue that justice

must be seen to be done - that the public have a right to see what happens and that, anyway, allowing broadcasting is simply extending the access provided by the public gallery to those who are unable to attend. They also contend that broadcasting would have a range of benefits: it would be educational, giving the public a better understanding of the justice system; it would make courts more accessible, and less daunting for those who have to attend them, either because they become involved in criminal proceedings, or because they have recourse to a civil remedy; and it would increase confidence in the justice system" (p. 56). Drawn from 259 responses, the conclusion however pointed in another direction: "[i]t is clear from the response to consultation that support for widespread broadcasting is limited, and that there is grave concern about the potential impact on participants, especially witnesses and jurors, and on the trial process" (DCA, 2005, p. 42). Unfortunately, the Brazilian experience which was at the time entering its third year was not incorporated in the British debate. This is precisely what is proposed in the next section: bring the TVJustica experience to the debate. Its examination as a case study may help to include different perspectives and approaches to the debate of courts on screen.

#### A CASE STUDY: *TV JUSTIÇA*, THE BRAZILIAN OFFICIAL COURT TELEVISION

In May 2002, after a very short two-month discussion on the Brazilian Congress, *TV Justiça* (Brazilian Court TV) was created by Federal Statute n° 10.461, which compelled cable operators to include it among its basic and free programming. By the time of its creation, the legislative and executive branches already had their own channels: *TV Câmara* and *TV Senado* respectively for the lower and upper houses of the Parliament and *Radiobrás* for the government. Even State legislatures had their own television channel. As it was justified by its legislative proposition, the creation of *TV Justiça* was then necessary, on the one hand, to even the offer and, on the another hand, to avoid a similar offer by the private sector portraying the courts as "justice without scripts". *TV Justiça* should not be about putting the aesthetics of entertainment into the courtroom, but should be about allowing the public to know the judicial system, to reflect upon it and to have a better understanding of the law. As it was then perceived, its great challenge was the translation of legal jargon into simple and accessible words for lay people.

Coordinated by the Supremo Tribunal Federal (Brazilian Supreme Court, herein, the Court), it is a non-profit public television channel, whose objective is to increase general knowledge about the operating mechanisms of Brazilian courts. From its first broadcast on August 11th, 2002, to today, much has changed mostly due to the Ultra High Frequency (UHF) transmissions which began in 2007 and to the impact of online communications. TV Justica is now available on cable, on UHF and online either through live broadcasting or downloading. Over the years, TV Justica has allowed the public to follow lively important decisions of the Court over constitutional reforms and many other issues of national relevance such as the limits imposed on embryonic stem-cell scientific research and the demarcation of the Indian reservation Raposa Serra do Sol. As a way to enhance transparency, its unique experience has been presented by Gilmar Mendes, the Court's former Chief Justice, in Russia and in China, respectively, in July and September 2009. At Moscow, he indicated that "trials' integrality - from public hearings, official report and oral arguments to deliberations-is televised. TVJustica contributes extensively to the dissemination of court decisions, reaching, according to some surveys, up to 12 million Brazilians". However, as explained by Giovana Cunha, its former general coordinator, most of these viewers come from

upper and middle classes whose professional lives are related to some kind of judicial work.

Nonetheless, while the live broadcasting of its 1000th court session in October 2009 was being celebrated, just about everyone was still commenting on the hostile argument held six months before, between two opposing members of the Court, one of them its former Chief Justice. Less than five minutes after it happened, it was available on YouTube and, a few hours later, it was rerun on the evening news. This has brought up a shy and incipient debate about the impact of live broadcasting on the daily life of the courts. While some argue that such a practice improves transparency and accessibility in the judiciary system, others argue that too much visibility exposes differences and confrontations-sometimes harsh ones - among its members, weakening the respectability of their decisions. A consensus is therefore far from being reached in the debate on the relevance of (live) broadcasting of courts' sessions. Recently, its official arrival on YouTube has further pushed such dispute. In fact, since October 2009, the electronic version of the official newsletter of the Court brings links to audio records (extracted from Rádio Justica [Brazilian Court Radio], which first aired on May 2004) as well as to video pieces (available on YouTube) of its published decisions. One may say this is transparency at its highest, fully profiting from media convergence and enhancing the Brazilian practices of e-government.

*TV Justiça* broadcasting has been since its first days split into three different branches: journalism, live court transmission and institutional programs. The journalistic section produces two daily half hour news journals which are presented live at 13h00 and 18h00 and short written bulletins that are transmitted as a screen footer updating the judicial events of the day by the hour. Unlike commercial television, it is supposed to take advantage of its direct access to primary sources – judges, district attorneys, lawyers – and to take its time to explain judicial facts and its relevance.

Court	Live Broadcasting	Delayed Broadcasting	Rerun	Total		
Supremo Tribunal Federal	08		24	32		
Tribunal Superior Eleitoral	08		11	19		
Conselho Nacional de Justiça		01	01	02		
Tribunal Superior do Trabalho		04		04		
Total	16	05	36	57		
Source: http://www.tvjustica.jus.br/programas.php, accessed on June 2, 2010.						

Table 1. Live court hours of transmission

Journalism is here clearly perceived not just as a way to report the main facts of the everyday judicial life but also as a pedagogical tool to explain how the judicial branch works. Institutional programs, which amount to almost two thirds of daily broadcasting, are produced by judges associations, regional and state courts, the Brazilian Bar Association and law schools, among others. Habitually, they explain the functioning of their professions, bring legal academia to the television screen and debate the most up-to-date judicial issues. One of its programs – *Saber Direito* (Right to know) – reproduces a classroom and provides that all course materials are available online.

Live court transmission is, by far, the most interesting aspect of TV Justica as it presents "justice in action". Since its beginnings, TVJustica has broadcast more than a thousand live court sessions, mostly from the Supremo Tribunal Federal. Actually, until October 2009, when it broadcasted the 1000<sup>th</sup> live court session, 619 sessions from the Supremo Tribunal Federal, 288 from the Tribunal Superior Eleitoral (Brazilian Electoral High Court) and 92 from the Conselho Nacional de Justiça (National Council of Justice, herein, the Council) had been aired. In April 20th, 2010, TVJustica expanded its live court transmission as the sessions of the Tribunal Superior do Trabalho (Brazilian Labor High Court) were included on its schedule. Although a little bit over one third of TV Justica weekly programming is consumed by the transmission of courts sessions, as Table 1

shows, live broadcasting (from these four courts) accounts for only sixteen weekly hours of its timetable. There is some delayed broadcasting for two courts and the best of the courts' sessions are rerun over the week and explain the timetable difference. The Court's predominance can be explained by its constitutional role and the almost residual presence of the Council may be due to the fact that its competence is mostly administrative and related to the organization of the Brazilian courts.

Canal Ponto Jus (Channel Dot Jus) is the most recent feature of TV Justica. Entirely dedicated to legal education, it broadcasts the educational programs previously aired on TVJustica. Its offer, still limited to Brasília and São Paulo, inaugurated TVJustica multi-programming system which allows simultaneously different digital transmissions. Once its offer gets expanded, TV Justica might have an exclusive channel just for live court broadcasting, as it was explained by its former general coordinator. Similarly to the Brazilian courts (Fragale Filho and Veronese, 2009; Fragale Filho, 2009), TV Justiça also makes wide use of Information and Communication Technology (ICT) and has expanded its offer to the internet, where online broadcasting and a download center are now available at its web site. As the Council edited its Resolução (Resolution) nº 70/2009, putting together a strategic plan for the Brazilian judiciary which demanded the enhancement of its visibility and the improvement of its communication process with society, a partnership was established with Google Inc. for the creation of a *YouTube* official channel for both the Court and the Council. As a consequence some of the *TV Justiça* programs as well as many of its live sessions were then made available at both *YouTube* channels. The integration of new communications channels continued as it did not take long to incorporate a *Twitter* offer.

Definitely, TV Justica changes the way judges (and especially, Justices) communicate with the public. It is no longer a communication restricted to the court proceedings and their published opinions. It came thus as no surprise that former Chief Justice Gilmar Mendes, by the end of his two-year term in April 2010, gave an interview at YouTube answering 11 questions chosen by direct scrutiny by the general public among the 408 proposed questions elaborated by 956 internet surfers. Many questions were directly related to the contents of some of his decisions and he did not hesitate in answering all of them. Ouestioned about judicial constraint and the obligation to only speak on the Court's proceedings, he answered that a Chief Justice has an institutional mission which is to zeal for the Constitution's implementation and if that requires speaking up on everyday matters (even if they are political ones), he had a duty to fulfill. Briefly, a judge (and especially a Chief Justice) is no longer limited to speaking up on courts' proceedings, but is called up to explain its decisions and behavior directly speaking to the public. As the interview is among the 70 videos most accessed on YouTube in Brazil with 40,700 views, one may easily claim that a new kind of accountability may here be on the verge of being constructed. Briefly, TV Justica and its use of media convergence bring a new light to an old debate about judicial transparency and the presence of cameras in courts. As it may be perceived as a new trend within judicial work, it may be worthwhile to push further the discussion on media convergence experience provided for TVJustica and its impact on judicial transparency.

## A Discussion: *TV Justiça* and Judicial Transparency

Although the official encounter of Brazilian courts and YouTube is a recent one, they have unofficially met before. As a matter of fact, many live sessions broadcasted by TV Justica, especially those displaying a direct confrontation among the members of the Court, were already available on YouTube long before the agreement between the Court and Google Inc. was signed. One of the most accessed videos broadcasted a live confrontation between former Chief Justice Gilmar Mendes and Justice Joaquim Barbosa. It seemed a rerun of another confrontation between the same characters which took place eighteen months earlier. The first altercation revealed a direct conflict over judicial legitimacy as to whom - between the two justices - was a true representative of an ascetic public morality, expressing worries about the consequences of the judicial ruling taken by the Court. Coincidentally, throughout the altercation, both justices begged respect from one another and both used phrases such as "I have no moral lesson to take from you". The argument was so rude that many feared an institutional crisis.

The following day the newspapers echoed the event launching a debate over the pertinence of live broadcasting of the court sessions. Former Justices, such as Carlos Velloso and Maurício Corrêa, advised that such "scenes" could be avoided by the interruption of live coverage. They advocated that Court session should be taped and edited to avoid the general public from witnessing such quarrels. Another former Justice, Célio Borja, reminded that the US Supreme Court deliberations are taken in sealed sessions and therefore the general public does not get to witness the intensity of any dissension. In short, the three retired Justices seemed to converge to a diagnosis according to which TV Justiça was the real villain in this exposé, since it amplifies and lends another dimension to the dissent found by chance during the Court deliberations. From their perspective, just blame the

cameras and shoot the messenger! Ultimately, it was as if live broadcasting was responsible for revealing the existence of dissent and heterogeneity, in a place where one expects to see consistency and convergence of views, and a collective body under heavy homogeneous ink.

Despite all else, TV Justica did not change anything on its daily routine and broadcasting. In fact, assuming such conduct would enhance democratic practices, it released the altercation images to other television channels, unedited and with its official digital on-screen graphic. By doing so, TV Justica seemingly ignored the debate regarding editing and maintained live court broadcasting, reinforcing its belief in the importance of transparency in judicial matters. Apparently, it seems that live broadcasting of the Court's sessions, despite the infamous episode, bears unanimity among the actual Justices. As the debate went on, a consensus could be found in the idea that live coverage has brought up a completely different perspective on judicial deliberations (or at least on the daily functioning of the Court).

TV Justica dodges the debate between media (or cameras) and the courts as it only broadcasts live sessions from the high courts. The camera's impact on parties and witnesses is thus avoided by their absence. One can hardly imagine how judicial liturgy can be disrupted or sensationalism can arise from the arid judicial debates over constitutional matters! Such would come probably only from an altercation among the members of the court themselves, as it was the case above described. Placed under judicial control, TV Justiça puts the Brazilian judiciary through its highest court under permanent public scrutiny as it increases its audience to an unaccountable margin. It does not matter if television rates may be close to zero, as there will always be someone to watch and echo it on the web. It is not so much about how many people watch it as it is about the wide availability of its contents. Indeed, it comes as no surprise that Barroso's commentary (2009) on the impact of TVJustica upon the Brazilian judicial system, after

recognizing the uniqueness of the Brazilian situation in which deliberations are taken under "the relentless gaze of television cameras", advocates that the "gain is greater than the loss." He goes on to state that, [i]n a country with our history, the possibility to listen to eleven people well prepared and well-intentioned deciding national issues is a good image. The public visibility contributes to transparency, social control and, ultimately, to democracy" (p. 2).

Consequently, TV Justiça brings a new light to the debate over the impact of media on judicial work. Actually, it highlights old problems as one may ask if collegiality is jeopardized by live broadcasting. This may be the case as what was formerly only perceived in the transcription of the court debates or in between the lines of a written decision, has now become available to everyone on television and computers' screens. Dissent is no longer just the basis for a future overturn in a ruling, but has become, as cameras broadcasted it, a possibility to establish a direct link to the general public and to put pressure on the court deliberative process. A recent Court deliberation on a constitutional matter related to the 2010 national elections made it even clearer. As the Justices discussed the constitutionality of a Federal Statute whose original legislative proposition was directly drawn from a citizen's petition, they read their votes for almost fourteen hours talking either to themselves in some kind of televised soliloguy or directly to the general public. One could hardly say that the reached decision was the result of a collective deliberation as much as it was the result of a simple addition of votes individually cast.

*TV Justiça* perfectly fits in this frame as it exposes judicial life to public scrutiny. It brings a new form of accountability to judicial life. Yet, it demands an enormous translation work as its language mainly reproduces the one used in court without any special concern for its comprehension. This is why judicial communication advisors in Brazil often think of their jobs as translators while their North Americans counterparts seem to think of themselves as facilitators of the press which is ultimately responsible for the translation work (Lemos, 2005). Ideally, the translation work at *TV Justiça* should be done by its journalistic branch. Nonetheless as most of its time is occupied by judicial members' comments on the most up-to-date judicial issues, the translation work is basically second-hand, *i.e.*, the starting point it is not based on the judicial facts but instead by what is perceived by a third party. In other words, what gets translated is not the judicial facts themselves, but what judicial commentators think of them.

Almost five years after the DCA consultation and eight years after the first airing of TVJustica, there is an undeniable accumulated experience that allows us to speculate on the consequences of live broadcasting of the Court sessions. Of course, the Brazilian experience and the British debate as well as the North American discussion conceive transparency differently. Their approach to the presence of cameras in the courtroom varies as they differently conceive the judiciary role in contemporary democracies. As a matter of fact, while in the United States cameras may be seen as disruptive of a judicial opacity necessary to the building of a public respect for judicial decisions, in Brazil, they are perceived as indispensable to overcoming a general mistrust of the judicial power. Where confidentiality may appear vital to the building of public confidence in the myth of a Supreme Court apolitical approach to judicial matters in the United States, by contrast, in Brazil, transparency appears necessary to gaining creditability within a judiciary often perceived as inefficient, slow and incapable to quickly respond to the most pressing questions raised at the judicial everyday life. From a Brazilian perspective, the challenge is greater if one includes the eventual accusations of corruption that are randomly thrown at some judges. Transparency becomes then the most adequate answer as it denudates the way courts operate, going as far as to make available

all data on budgetary expenses and, especially, judges' revenues.

What is then transparency all about: availability of data from the courts or the possibility of justice been seeing to be done? While the literature seems to think of it in terms of the former, the changes brought upon the courts through new information and communication technologies and the possibilities opened up by media convergence both seem to point to the pertinence of the latter objective. The original focus on the availability of courts data may be explained by the need to establish some variables for the assessment of judicial work. Transparency would therefore be directly related to data accessibility as these were indispensable to measure the quality of judicial work. Yet, this kind of evaluation procedure establishes a somewhat distant accountability that may be on the verge of a change due to live court transmission. In fact, such circumstance allows for the establishing of a direct link between sender and receiver of the judicial message. It may be a way to remind judges that they do not examine inanimate cases but they are deciding the everyday life of real people. And they should be accountable to it not only through the objective assessment of their data, but also through the visual scrutiny of their work.

#### Pushing Further the Discussion: Judicial Transparency and E-Government

Public access to information and services provided for government as well as public scrutiny of the governmental agenda are key issues within e-government. They are all related to an ever growing demand for transparency. Courts are also a part of government and are not exempt from this kind of demand. Their compliance with e-government matters should not be limited to the existence of websites and the availability of information. Pushing further judicial transparency and integrating other e-government practices in their daily routine may actually be a way for the courts

to take part in the development of e-governance. According to the UNESCO, e-governance may be defined as "the public sector's use of information and communication technologies with the aim of improving information and service delivery, encouraging citizen participation in the decision-making process and making government more accountable, transparent and effective". A good example of how courts may contribute to e-governance is the North American "law.gov" idea which postulates that "the primary legal materials of the United States should be readily available to all, and that governmental institutions should make these materials available in bulk as distributed, authenticated, well-formatted data". In other words, court opinions, hearings, and oral arguments are some of the judicial materials that courts should made available to the public in order to improve citizens' information and public accountability. Yet, such judicial transparency can be pushed further and enhanced by the use of live broadcasting and media coverage. It is not just about getting to know the outcome of a judicial debate, but it is also about getting to witness how courts operate, how consensus is reached, how dissent may forecast a future overturn in the court's decision.

However, all of this is not immune from resistance. Many still think of the courts as a place of seclusion that isolate the emotional aspects of any decision-making process. Thus, opening up the courts to the public debate would deeply interfere with their allegedly necessary rituals. Whatever one may say, there is probably no ending for such debate which undoubtedly touches the role of courts (and the law) in contemporary democracies. A good example of this reiterative discussion can be found at "Sunshine in the courtroom", a bill to provide for media coverage of Federal court proceedings in the United States. Introduced for the first time in the 105th Congress (1997-1998), it has been reintroduced in the 109th (2005-2006), 110th (2007-2008) and 111th Congress (2009-2010). The bill establishes that "the presiding judge of an ap-

pellate court of the United States (or the presiding judge of a district court of the United States) may, at the discretion of that judge, permit the photographing, electronic recording, broadcasting, or televising to the public of any court proceeding over which that judge presides". Exception is taken when such "action would constitute a violation of the due process rights of any party" as well as to protect witnesses and jurors and to secure the inviolability of conferences between clients and attorneys. Legislative propositions as well as a Senate Resolution have also been introduced to permit the televising of US Supreme Court proceedings. The latter states that "[i]t is the sense of the Senate that the Supreme Court should permit live television coverage of all open sessions of the Court unless the Court decides, by a vote of the majority of justices, that allowing such coverage in a particular case would constitute a violation of the due process rights of 1 or more of the parties before the Court".

Clearly, the proposed bills amplify what is already offered in Brazil by TVJustica as it brings the transparency of seeing justice being done in lower courts. It seems then that television coverage of courts proceedings is long overdue and getting to know the TV Justica experience may be an interesting way to "prod courts into the 21st century", as noted by the above mentioned New York Times editorial. It is also a way, of course, to improve democracy and citizenry, which also is the scope of e-government. Surely, its development is welcomed by one and everyone interested in the possibility of enhancing public participation on governmental matters. Oddly, courts are not perceived as a part of such a movement. Yet, courts on screen should be seen as an unusual facet of e-government that needs to be explored, examined and enhanced. Getting to know how courts operate is definitely a way to improve general knowledge about rights and to empower citizenship. Getting to know the work of the Court and its justices is a way to understand how public matters are examined once they are brought up to judicial attention. Publicizing the work of the courts exposes a different dimension of public matters and allows one and everyone to hold the judiciary accountable for its deliberations. After all, is this not what democracy is all about?

#### FUTURE RESEARCH DIRECTIONS

More empirical evidence is definitely needed to better understand the presence of cameras in the courtroom, the role of court live broadcasting or just the meaning of courts on screen in contemporary democracies. As the debate touches many diverse aspects such as the impact of cameras on judges, lawyers, parties, witnesses, jurors as well as the admittance of video footage as evidence, it is possible to distinguish two different approaches for the matter: a first one focused on behavioral and psychological aspects and a second one related to its impact on transparency and accountability within the courts. Undoubtedly, the latter was the privileged approach within this text. And, mainly based on the Brazilian TVJustica experience, there are three key consequences that can be advanced as valid hypotheses for further investigation. Live broadcasting has (a) amplified the criticism over court decisions, (b) jeopardized collegiality as a decision-making process, and (b) exposed the members of the court to a greater reputation.

Regarding the first hypothesis, as live broadcasting simultaneously amplifies the courts' auditorium and publicizes the integrity of the debates held in it, court deliberations are exposed to greater public scrutiny. Everyone gets a say on the righteousness of a judge's opinion, on the quality of a certain ruling. It is no longer just the outcome of a judicial quarrel that matters but the whole procedure may be examined by both political pundits and lay people. Behavioral analysis may be implemented not just for the judicial outcome, but may include the whole procedures of the court. As for the second hypothesis, as dissent eventually becomes more explicit, collegiality is jeopardized as a decision-making process. In other words, what is supposed to be a shared authority expressed on a collective decision becomes purely the prevalence of the majority over the minority. Once votes are cast, they are hardly altered no matter how harsh are the court debates. It is no longer about reaching a collective decision, but simply about adding up votes, instead. This second hypothesis explicitly contributes to the third one. Indeed, as for the latter, members of the court are no longer just a name on paper whose reputation is built only on a doctrinal or jurisprudential basis. Due to television and computer screens, a whole new set of characteristics are integrated into the general perception one has of each and every court member. In other words, screens contribute to the shaping of a new judicial habitus (Bourdieu, 1998). The consequences of all three hypotheses for democracy and for judicial work remain to be examined.

A possible fourth hypothesis may be added: TVJustica has stimulated a top-bottom movement that encourages live broadcasting within lower courts using video streaming on different court web pages. This is particularly true in the Brazilian judiciary as many lower courts which do not have access to television broadcast ended up by introducing such possibility on their web page. It introduces though another problem related to the digital divide. While television sets are present in almost every Brazilian household, internet access is still not available to everyone. Finally, all four roughly sketched hypotheses point to some possibilities of investigation in order to understand the impact of new technologies on the reshaping of judicial work.

#### CONCLUSION

US Chief Justice Earl Warren once said that "[w] e will have a man on the moon before there will be cameras in this courtroom" (Martínez, 2009). While one month after his retirement, Neil Arm-

strong and "Buzz" Aldrin walked on the moon, almost half a century later we are still discussing the pertinence of cameras in the courtroom. Whatever may be the outcome of such discussion, it is clear that e-government has raised it to another level as its concerns regarding accessibility and accountability have brought the quest for judicial transparency to another level. Actually, their encounter has placed courts on screen and as a consequence, reshaped the terms of the discussion as in the example made by the Brazilian experience of TV Justica. Launched almost a decade ago, its live broadcasting of courts' sessions has been fully integrated on its daily routine and has brought this debate to another level. Judicial deliberations in Brazilian high courts are now scrutinized through television and computer screens as a sign of transparency. Surely, it may increase accessibility, but it does not necessarily provide mechanisms for public control nor to overcome the language gap. In fact, neither legal speech nor media language reproduces the lay communication codes. On the contrary, the judicial liturgy, reproduced and perpetuated ad nauseam, establishes a communication code often unintelligible to the ordinary people, pushing them away from understanding legal phenomena and events (Gomes, 2007). This may explain the rough exchanges among justices without putting aside the formal treatment: notwithstanding the due honorable treatment, justices lively curse each other! No matter what must yet be overcome with regard to civic engagement, such transparency, at least, has reassured us that judges are human, just like everyone else.

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#### **KEY TERMS AND DEFINITIONS**

Accountability: The submission of administrative and/or judicial decisions to public scrutiny. *Conselho Nacional de Justiça* (the Council): Brazilian administrative court responsible for the Judiciary organization and its strategic planning.

**Electronic Government:** The deliver by government of information and other services by electronic means such as the internet.

**Judicial Transparency:** The availability of data related to the courts ranging from judicial decisions to the budgetary means available to the judicial work.

Live Broadcasting: The television broadcasting of a court's deliberations.

**Supremo Tribunal Federal (the Court):** Brazilian Constitutional Court.

TV Justiça: Brazilian official court TV.

## Section 2 Usability and Accessibility

# Chapter 7 Accessibility and Usability Issues

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## ABSTRACT

Democratic governments seek to serve all citizens equally and fairly. Achieving this ideal in e-governance will in large measure be determined by government's commitment to the development of websites and web applications that encourage and enable participation by all. Accessibility and usability are gateways to participation. This chapter examines the professional and legal standards for accessibility and usability as well as studies on actual implementation. A survey of New York State webmasters found that while IT professionals considered usability and accessibility important, none of them rated user satisfaction as excellent. Agency management was perceived as less aware of the importance of usability and accessibility than IT professionals. Assuring usability and accessibility is an on-going, iterative process that requires continual accountability and involvement of user/citizens, political leaders, and IT professionals.

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#### INTRODUCTION

This chapter examines issues surrounding accessibility and usability as gateways to e-governance. The standards for usability and accessibility are examined in-depth. Accessibility is addressed as a civil right for individuals with disabilities in the U.S. as codified in Section 508 of the Rehabilitation Act. Usability describes the ease with which all users of a particular website can find information and accomplish tasks. Central to achieving greater usability is the concept of user-centered design. Accessibility and usability jointly affect the degree to which citizens who use the web are empowered to access information and interact with their government via web-based applications. When websites, web technologies, or web tools are badly designed, difficulty in using them can become a barrier that excludes people.

The second focus of this chapter is the implementation of accessibility and usability in the design and development of government websites. Studies of accessibility and usability in government websites point to on-going difficulties in meeting legal and professional standards. Nevertheless, a number of state and federal sites have achieved success.

The authors conducted a survey of webmasters in New York State agencies to explore their perceptions on implementation of accessibility and usability. The study reveals tensions between IT professionals and agency leaders with respect to the perceived relative importance of accessibility and usability, and provision of resources to enhance usability. While IT developers make hundreds of decisions daily that affect usability and accessibility, the survey results suggest that there is less than sufficient interest on the part of agency leadership, and little accountability for leaders or IT.

A model for conceptualizing how usability and accessibility are implemented is introduced. Standards for accessibility and usability are not enough; on-going accountability and user-input are also critical. It appears that accessibility and usability are impacted at the intersection of IT developers, political leaders, and citizen/users. Citizen/users and disability advocates are critical to implementation in two ways. First, their participation is essential to usability testing. Secondly, they need to hold their government accountable to provide accessible and usable sources of information and tools for engagement. Citizenry provide feedback about what is and isn't working for them. IT is responsible for upholding professional standards and implementation. Finally, leadership and political will are critical to determine policy and enforce it. In a medium as dynamic and changing as the web, the process must be ongoing. Success requires on-going user input, accountability, and innovation.

### BACKGROUND

## Definitions and Standards: Accessibility and Usability

In terms of e-governance, two definitions of accessibility apply. The first, more commonly known as "universal access,' refers to available, affordable, reliable access to information technology (Hudson, 2002; Rice, 2002; Harrington, 2009). Barriers to universal access are often framed in terms of the digital divide, which includes not only IT infrastructure but also socio-economic, physical, social, and intellectual barriers to access (Hudson, 2002; Rice, 2002; Harrington, 2009; Jaeger & Bertot, 2010). The second, more specialized connotation for accessibility refers to individuals with disabilities having access to and use of information comparable to that provided to those members of the public who are not individuals with disabilities. (29 USC Sec. 794d. 36 CFR 1194.22. 2000) This chapter will focus on the second definition.

Usability refers to how well users can learn and use a product to achieve their goals and how

satisfied they are with that process. It is usually measured by users' ability to accomplish a task, or find information efficiently (HHS, 2010).

Accessibility and usability are achieved through adherence to standards and guidelines. Web content accessibility is governed by two protocols: one professional and one legal (Ellcessor, 2010). The web accessibility initiative (WAI) of the World Wide Web consortium (W3C) has developed web content accessibility guidelines (WCAG) establishing voluntary guidelines for accessible web development (Caldwell, Cooper, Reid, & Vanderheiden, 2008). The guidelines address making content accessible "to a wider range of people with disabilities, including blindness and low vision, deafness and hearing loss, learning disabilities, cognitive limitations, limited movement, speech disabilities, photosensitivity and combinations of these" (Caldwell et al., 2008). In the United States, Section 508 of the Rehabilitation Act (29 USC Sec. 794d. 36 CFR 1194.22. 2000) established a legal framework for accessibility for federal websites, federal contractors, and state governments that accept federal funding (Ellcessor, 2010). Section 508 sets out fourteen enforceable standards to ensure individuals with disabilities have access to and use of information comparable to that provided to members of the public who are not individuals with disabilities.

Usability has not been established as a civil right for citizens though it certainly affects their ability to interact with e-governance. The U.S. Department of Health & Human Services (HHS, 2010) has published *Research-Based Web Design and Usability Guidelines* which rate guidelines by both importance and strength of supporting evidence.

The concepts of accessibility and usability are closely related and arguably two sides of the same coin (Ellcessor, 2010). The HHS guidelines (2010) on usability include the Section 508 standards for accessibility. And the WCAG accessibility guidelines state: "Following these guidelines will also often make your Web content more usable to users in general" (Caldwell et al., 2008). In any case, good design demands both usability and accessibility for the widest possible range of users. Both are necessary in order for user citizens to be able to fully interact with e-governance.

The principle of universal design joins accessibility and usability. Universal design began in architecture as a front-end process that eliminates barriers to access rather than retro-fitting to provide access for the disabled (Center for Universal Design, 2008). Ideally, universal usability would provide accessibility by eliminating barriers for all. However, disability advocates warn against losing focus on access for the disabled. Also, once accessibility became a legal requirement, it required legally enforceable standards. Therefore, Section 508's fourteen standards establish measurable requirements, minimum standards that can be enforced rather than aspiring to universal design (Ellcessor, 2010).

## Significance of Accessibility and Usability

The emergence of e-governance has changed what United States citizens have come to expect and even demand from government at local, state, and national levels. The rapid advancement of the World Wide Web (WWW) into all phases of everyday life has given new meaning to how government should conduct its day-to-day business affairs. The notion of "open government" has spurred the call for transparency, participation, and collaboration, and increased access by the public at all levels of government. Accessibility and usability are central to government's ability to engage with its citizenry via the internet.

Upon assuming his leadership role in January 2009, President Barack Obama stated, "My administration is committed to creating an unprecedented level of openness in government. We will work together to ensure the public trust and establish a system of transparency, public participation, and collaboration. Openness will strengthen our democracy and promote efficiency and effectiveness in government" (Obama, 2009, p. 4685).

Many state and local governments have followed in this direction as well. In New York State, the chief information officer convened a one day summit in March 2010 that addressed a number of key issues regarding the open government dialogue. Topics addressed included: the meaning of "open government" in the digital age; operationalizing digital openness; meeting citizen expectations for access; what the future holds for openness; best practices; and the Sunshine Law and archival implications of digital records (CIO/ OFT, 2010).

This summit was an important step in advancing the Information Technology (IT) strategic plan for New York State. Throughout the country, we are witnessing other states moving in this same direction. In March 2010, the California senate established a committee to provide guidance on the rules of open government. In Washington State, government accountability, open records, and access are all top priorities. Many other states, including Minnesota, Kansas, and Illinois, have also implemented similar policies and programs regarding open government.

Both accessibility and usability affect transparency, participation, collaboration, measurement indicators (reporting and performance), and accountability—indeed, every conceivable topic related to e-governance and civic engagement. In his article "Transparency and technological change: Ensuring equal and sustained public access to government information," Jaeger and Bertot (2010) point out "... for the Obama administration's goals of increased transparency to make a genuine impact on the interaction of members of the public with government information, future policy will need to focus on the human dimensions of transparency, not just the technological dimension" (p. 375).

Accessibility and usability can define governments, empower citizens, and promote participatory democracy. In many aspects, adherence to accessibility and usability standards is integral to the future of e-governance. Without adherence, many citizens will be disenfranchised.

### Accessibility as a Civil Right

To understand accessibility for individuals with disabilities it is helpful to examine its history. The disability rights movement developed concurrently with the development of the Internet. Before disability rights, the prevailing medical model treated disability as a personal tragedy to be dealt with individually (Barnes, Oliver, & Barton, 2002; Goggin & Newell, 2003). From the disabled community a social interpretation of disability developed and with it the responsibility of society to include the disabled community. Access was framed as a civil right. People are disabled by society's failure to include them (Barnes et al, 2002; Ellcessor, 2010). Goggin and Newell's book Digital Disability: The Social Construction of Disability in New Media (2003) explains: "Societies build disability into those physical and social structures we take for granted, especially where those with power have excluded the knowledge and life-experience of those who live with disability" (p. 31). Tobin Siebers' seminal Disability Theory (2008) concludes the rights of the disabled are not "a fringe addition to civil rights law, but its very fulfillment" (p. 185).

A central tenet of disability rights is "nothing about us without us" (Charlton, 1998). To meet the needs of people with disabilities, design decisions must incorporate their expertise and input. A closely related concept in IT development is "user-centered design" discussed in detail below.

In terms of engaging citizens with disabilities, HHS (2010) reports that 8% of Americans have a disability that makes traditional use of a website very difficult or impossible. Estimates of the adult population with disabilities vary widely depending on the definition. The numbers of U.S. citizens reporting at least some difficulty with basic movement or sensory, cognitive, or emotional difficulties approached 30% of the non-institutionalized adult U.S. population or approximately 62 million people (Altman & Bernstein, 2006; Ellcessor, 2010). The aging of the U.S. population will continue to increase these numbers. It's important to remember that disabilities vary widely and solutions can become contradictory. Sound enables the blind and excludes the deaf. Text messaging is a boon to the deaf community and an anathema to others. There is enormous variability in needs for access that extend well beyond the category of disability including: the ever-changing range of mobile devices, access to broadband, computer literacy, and more. Ellcessor (2010) argues that addressing the need for variability becomes more meaningful than categories of able/disabled.

As disability rights emerged, the WWW evolved from one page of content on one website to billions of pages of content on millions of sites-all linked together by use of an open, common architecture. Agreed-upon open standards and common specifications have not only made the Web's creation possible but have enabled its continued evolution. Standards include technical protocols (e.g., Hypertext Transfer Protocol or HTTP), naming uniformity (e.g., the Domain Name System coordinated by the Internet Corporation for Assigned Names and Numbers or ICANN), accessibility recommendations (e.g., Web Content Accessibility Guidelines or WCAG coordinated by the Web Accessibility Initiative of the World Wide Web Consortium), and usability standards (e.g., International Organization for Standardization or ISO). Highlights of the standards for accessibility and usability are discussed below.

## Achieving High Measures of Accessibility: Themes of Accessible Design

To enable people with disabilities to participate equally on the web, standards and guidelines address two general themes related to presentation and content (Caldwell et al., 2008):

- Ensuring graceful transformation: Transformation is the ability to change across formats. Users of the WWW operate within innumerable, changing environments. Pages that "transform gracefully" remain accessible despite constraints, including physical, sensory, and cognitive disabilities, work constraints, and technological barriers. For government information to be accessible, content presentation should not rely on one type of hardware or software. If future hardware and software comply with standards, web content that is compliant today will also be accessible in the future.
- Making content understandable and navigable: Accessible content is created with clear and plain language presented in a way that is intuitive to users, with understandable navigation within and between pages. Not all users can make use of visual clues that guide sighted users of graphical desktop browsers. Users may lose contextual information when they can only view a portion of a page, either because they are accessing the page one word at a time (e.g., speech synthesis or Braille display) or one section at a time (e.g., magnified display). In this case, accessible also means usable.

## Factors and Determinants of Highly Accessible Websites

The mission of the World Wide Web Consortium (W3C) is to lead the World Wide Web to its full potential by developing protocols and guidelines that ensure the long-term growth of the Web (W3C, 2009). The Web Accessibility Initiative (WAI) has coordinated many of these guidelines, including Authoring Tool Accessibility Guidelines (ATAG), User Agent Accessibility Guidelines (UAAG), and Web Content Accessibility Guidelines (WCAG). WCAG 1.0 was published in May 1999, and WCAG 2.0 was published in December 2008.

WCAG 2.0 suggests twelve standards that are organized under four principles. These four principles are the issues that lay the foundation necessary for the widest possible audience to access and use web content (Caldwell et al., 2008).

## Principle 1: Perceivable Content (Caldwell et al., 2008)

For content to be accessed, users must be able to perceive the information being presented. Accessible websites must:

- Provide text alternatives for non-text content (e.g., graphics, audio, and video).
- Make content adaptable; and make it available to assistive technologies.
- Present content that is easy to see and hear in a number of environments.

## Principle 2: Operable Content (Caldwell et al., 2008)

For content to be accessed, users must be able to operate the interface on their own terms. Thus, web designers must:

- Make all functionality available from a keyboard. Some people find using a mouse difficult or impossible.
- Provide users enough time to read and use content. Timed activities may exclude users who need more time to complete tasks, who may take longer to read or respond, or who may be accessing content through an assistive technology that requires more time.
- Avoid using elements that flash or blink which may trigger a seizure disorder.
- Help users navigate and find content. Screen readers convert content to synthetic audio speech. Linear, ordered content with appropriate headings is easier to skim using assistive technologies. Finally, naviga-

tion should provide a means of skipping repetitive content, such as navigation links that appear on every page.

## Principle 3: Understandable Content (Caldwell et al., 2008)

For content to be accessed, users must be able to understand the information as well as the operation of the user interface. Designers must:

- Make text content readable and understandable.
- Make web pages appear and operate in predictable ways. What seems visually logical to the developer may be presented differently by assistive technology devices, which tend to have limited scanning features and operate more linearly.
- Help users avoid and correct mistakes. This is particularly important when using forms. When users input data into a form, validation errors should be described to the user in a manner they can perceive and understand.

## Principle 4: Robust Content (Caldwell et al., 2008)

Users must be able to access the content as technologies advance whether or not users acquire new technology. Therefore, sites must:

• Maximize compatibility with current and future user agents, including assistive technologies.

## **Accessibility Testing & Tools**

Accessibility is not a simple milestone to be checked off on the project schedule. While the use of CSS, valid markup language, and current HTML standards should become second nature to the development team, they should always also consider *how best* to assure accessibility. The following tools can provide important measures of accessibility.

- AccVerify<sup>®</sup> and Cynthia Says<sup>™</sup> from HiSoftware<sup>®</sup>
- WAVE Toolbar (1.1.4) for Firefox from WebAIM
- W3C Markup Validation Service at http:// validator.w3.org/

## Achieving High Measures of Usability

Achieving good usability is a desired result of "user-centered design," a process by which designers consider human thoughts and behavior in the construction of software or web-based applications. Designers must anticipate a user's expectations and "mental models" of how a function should work and try to create interfaces that line up with those ideas (Lazar, 2001). The U.S. Department of Health and Human Services (HHS, 2010) provides extensive guidelines for developing usable and useful websites at *usability.gov*.

User-centered design is an *iterative* process; designing, testing, and redesigning are repeated with the aim of continuously improving the product.

## **Themes of Usability**

Usability is commonly viewed as "user-friendliness," but usability is actually a combination of five general themes (Nielsen, 1993):

- Learnability. When faced with a new interface, how quickly can a user begin to work? Users expect to be able to visit a site and immediately discern how to accomplish their intended task.
- Efficiency. Once the user has learned the system, how productive can the user be? In e-government, efficiency of performance applies to both citizens and government

workers. Workers may use a website to complete a task repeatedly; measuring the efficiency of that process should lead to changes that increase the usability of the system, thereby reducing time on task.

- Memorability. Can the user return to the system and remember how it works? Designers build in cues for users to complete tasks so that both new and returning users can readily understand what to do next.
- Error frequency and severity. Can the user complete tasks without making mistakes? If users do make errors, how easily can they recover from them? Developers build in error messages and test scenarios to prevent errors, especially fatal ones.
- User Satisfaction. How satisfied are users with their experience? How pleasant is the system to use? User satisfaction is derived from the successful implementation of the factors listed above, but also includes the value users place on the aesthetic nature of the system. As human-centered design advocate and author Don Norman relates, "Attractive things work better" (Norman, 2002 p. 36-42).

How can a government websites achieve usability? The following section reviews key determinants of usability.

## Determinants of Highly Usable Websites

HHS (2010) has published comprehensive evidence-based guidelines for achieving usability. Each guideline is rated for both importance and for the strength of evidence supporting it.

## Factor 1: Usability Testing for User-centered Design

Usability testing is essential for assuring a useful and usable site. It provides direct evidence of how people interact with a system. Because usability testing strives to measure the success with which humans interact with web sites and web applications, usability testing must be conducted with human subjects in which "... Representative participants interact with representative scenarios. The tester collects data on the participant's success, speed of performance, and satisfaction. The findings, including both quantitative data and qualitative observations information, are provided to designers" (HHS, 2010, p. 188). The participant testers can comment either during or after they perform tasks. In the "think aloud" method they report problems as soon as they occur; in the retrospective method, they complete their tasks uninterrupted then watch a video of their session and report any critical incidents.

Iterative cycles of usability testing over the course of a website's development substantially improve usability (HHS, 2010). Iterative design consists of creating paper or computer proto-types, testing the prototypes, and then making changes based on the test results. The 'test and make changes' process is repeated until the web site meets performance benchmarks (usability goals). Paper-based or computer-based prototypes appear to be equally effective in identifying most usability issues.

Early in the design process, a relatively small number of test users are sufficient to identify problems with navigation and overall design issues. Nielsen (2000) reports that 85% of usability errors can be found in the first five user tests. However, if the website has very different types of users such as experts and novices, HHS recommends that usability testing should include six of each type user. (HHS, 2010) In subsequent iterations, the number of users depends on the confidence level required.

User testing can also be done using specialized usability laboratories with hardware and software to capture video of the user's face, motion on the screen, track eye movements and record pointer movements and clicks. These elaborate settings are a convenience but certainly not a requirement. HHS (2010) evidence-based guidelines found lab-based and remote testing to elicit similar results. There was also no significant difference between in-person and remote testing. In early 2010, online applications for remote user testing have become more available. Remote usability testing applications (e.g., ClickTale, Silverback, Feedback Army) can provide sophisticated tracking tools comparable to higher-end testing labs (Costa, 2010).

Automatic evaluation methods can be useful in initial evaluations of web sites though they are not a substitute for usability testing. The software identifies design difficulties such as slow page loads, missing links, jargon, and potential accessibility problems (HHS, 2010).

HHS (2010) advises that representative users are superior to expert evaluators for testing. Methods such as inspection evaluation, heuristic evaluation, and cognitive walkthroughs are to be used with caution. Experts tend to identify more potential problems than actual users encounter.

Usability testers are chosen that closely represent the target audience for the website. Therefore, research needs to be done to determine how best to conduct usability tests of e-government websites when the user audience is diverse with respect to culture, education, socio-economic status, technical platforms and Web experience.

#### Factor 2: Equal Opportunity

Usability, like accessibility, affects the user's ability to retrieve information or interact with others via a web interface. In e-government, the accessibility and usability of a system can directly affect citizens' ability to participate in government. In a prescient 1999 paper, Ben Shneiderman

asks, "How can information and communications services be made usable for every citizen?" Shneiderman identifies three goals for governments that strive for "universal usability."

- Support a variety of technologies. Governments should support a wide range of hardware, software, and network access.
- Consider diverse users. Governments must consider and accommodate users of different age, gender, literacy, culture, status, skill, knowledge, and motivation.
- Bridge gaps in knowledge. Governments must identify what users know and what they need to know in order to use tools. Guidance and support must be provided to bridge knowledge gaps.

Making a website usable includes designing that site to be viewed (and interacted with) on multiple platforms and devices, by a wide range of users. Instructions or guidance must be clearly accessible for novice users, while advanced shortcuts or features should be available for expert users.

## Factor 3: Budgeting and Return on Investment

What value can governments see from better usability results and how much does it cost? West and Lu's 2009 study of technology innovation in the private and public sectors found that leading companies spend 2.5% of their budget on technology compared to an estimated 1.88% for state government agencies. Jakob Nielsen (2007) claims that e-commerce sites can almost double the usability of their sites by allotting 10% of their budgets to usability. West and Lu (2009) caution that a big one-time investment is not enough to guarantee success. Successful websites require investment over time plus constant innovation. Designers and application builders must be held accountable to continually improve their product.

### **Cost Savings**

Government agencies can reduce the time and cost of Web development by applying user-centered design and considering usability throughout the development process. Correcting usability errors after deployment is much more difficult and ultimately more expensive. Most costs that occur after deployment (i.e., during the maintenance phase) are a direct result of a flawed or nonexistent usercentered design process. Unmet or unforeseen user requirements and usability issues are usually the culprit (Pressman, 1992).

#### **Increased Participation**

Whereas commercial sites translate user engagement to greater sales and revenues, e-government sites inform and serve users, their citizens. Arguably, designs that enable users to accomplish their objectives quickly and easily will be perceived as providing better customer service (i.e., civic engagement) and attract both repeat and new users.

As an example of how increased usability can increase citizen interaction, the website at the Federal Emergency ManagementAgency (FEMA) was redesigned in 2006 using an iterative, usercentered process (FEMA, 2009). By comparing the results of user testing on the original site and the redesigned site, FEMA was able to quantify the improvements. Task success jumped from 44% to 85%. Time on task was reduced by over a minute from 2 minutes 36 seconds to 1 minute 32 seconds. Satisfaction climbed from 49% to 71%.

## ACCESSIBLITY AND USABILITY: ARE THE GATEWAYS TO E-GOVERNANCE OPEN?

The World Wide Web represents a paradigm shift in the way we do business. The web is a communication revolution equal in consequence to any country's socio-economic-political change. Making the web usable, or user-friendly, ensures that those who want or need to interact with data, information, or accomplish business tasks can do so with minimal frustration. Resolving issues of website usability and accessibility issues are critical to governments in their transformation to e-governance.

## Implementation of Accessibility and Usability

The standards for accessibility are well established and the requirements for usability are relatively straightforward. Their importance as gateways to citizen engagement is undeniable. The next question is how well are government websites actually meeting these standards and requirements? The results to date are mixed in terms of both accessibility and usability.

Studies on accessibility continue to confirm that state and federal websites are not meeting accessibility standards long after the Section 508 requirements were implemented in 2001 (Ellison, 2004; Jaeger 2004, 2006; Ellcessor, 2010; West, 2008; Lazar & Greenidge, 2006). The Brookings Institution's annual report (West, 2008) on state websites does show a trend toward improvement since 2003. The upward trend is encouraging; however, in 2008, only 25 percent of federal websites and 19 percent of state websites were rated as accessible to the disabled.

Jaeger's comprehensive studies (2006; Jaeger & Matteson, 2009) of Section 508 compliance in federal websites identified key accessibility barriers recurring across all of the sites tested. These recurring problems included:

- Compatibility problems with screen enlargement
- Compatibility problems with screen readers
- Compatibility problems with alternate color schemes

- Use of flash and moving images to convey content
- Cluttered layout and organization
- Audio content without a text equivalent
- Graphics lacking Alt tags
- Difficult drop-down, mouse-over menus
- Problems with consistency and clarity of context, orientation, and navigation.

In comparing government websites to private businesses West and Lu (2009) found that government sites were more accessible than business sites, but business sites far excelled government sites in usability.

For assessing the usability of government sites, several studies offer insights if not fully comparable information. The 2008 U.S. States E-Governance report (Holzer, Manoharan, Shick & Stowers, 2008) ranked state websites for privacy/security, usability, content, services, and citizen participation. Maine ranked first with a composite score of 69; Wyoming was last with a score of 35. New York State's overall rank was 44<sup>th</sup> with a composite score of 46. New York's usability rank was 31 out of the 50 states and a dismal 41 for citizen participation. The Brookings Institution report on e-governance (West, 2008) analyzed 1,537 state and federal sites in terms of interactive features that improve service delivery and public outreach. Delaware ranked first; Maine was in the top ten; and Mississippi was last and Wyoming 47th. New York fared slightly better ranking 20th among the states. West (2008) concludes: "Although considerable progress has been made over the past decade, e-government has fallen short of its potential to transform public-sector operations" (p. 1).

On a more optimistic note, the annual American Customer Satisfaction Index (ASCI) (Fornell, 2010) reported user satisfaction with federal websites at an all-time high. Of over hundred sites, many provide user satisfaction comparable to private sector websites. Two Social Security sites scored as high as 90 on the 100 point scale, and over one-fourth had scores in the 80's. ASCI attributed the high scores to the large investment the federal government has made in information technology and to legislation supporting e-government.

Given the mixed quality of government websites, the question that emerges is how does government implement excellent, accessible and usable websites? How did those sites that ranked high accomplish excellence? What stands in the way of the more mediocre sites? Who makes the decisions and who holds whom accountable? Jaeger and Matteson (2009) concluded that government sites were inaccessible not because they failed at implementation but because they didn't try. They propose an adaptation of the Technology Acceptance Model to explain six layers that contribute to the level of compliance with 508 accessibility requirements. Presumably, this model could also apply to usability. The first level is the political climate; the second is pressure to adopt 508 guidelines. The third is acceptance of the value of accessibility that is tempered by agency mission, priorities, perceived and actual costs, staff time and skills. The fourth layer is level of implementation which is tempered by the fifth layer of monitoring and enforcement, user feedback, content and audience, leading to the sixth layer of actual compliance. Under Jaeger and Matteson's model, agency management plays an enormous role in the adoption of 508 requirements. Managerial leadership and political support are key factors in implementation.

Mahler and Regan (2007) approached the study of federal website development from a political perspective. This qualitative study conducted interviews with key players. In studying who controlled website development, they found wide variation in levels of control from upper management. Significantly, agency management focused exclusively on controlling content and approval was often handled by public relations. Accountability and control largely followed the same procedures used for government publications. Some agencies had approval processes that lasted over two months. There were varying levels of tension between IT and program personnel, depending on personalities, history, level of authority and more. In particular, people who wanted to take advantage of the interactive nature of the internet were frustrated. Although the issues of accessibility and usability did not surface in the study, it provides insights into the decision-making process for web development.

Stienstra and Troschuk's case study (2005) from Canada raises interesting insights and questions about actual implementation from another perspective. They studied implementation of an e-consultation program specifically designed to engage disabled individuals. In interviews with program and IT professionals, Stienstra identified several tensions and barriers to implementation. In one case, program people were frustrated with their reliance on IT's ability or willingness to implement their vision. In another case, it was IT that vigilantly assured that accessibility was addressed along with program content. And then the political climate changed, a key minister left, priorities shifted, and the process began again, - a scenario that all too often typifies government projects.

West and Lu's study (2009) compared government and business websites to determine what government could learn from business. They offered five recommendations from successful innovators.

- Successful innovators spend a significant amount of their overall budget on information technology.
- Successful innovators focus on the customer, value market research, and take visitor feedback seriously.
- Successful innovators provide incentives for management and design teams to work together.
- Successful innovators devote time to figuring out their competition and determining

how to position themselves vis-à-vis market competitors.

• Successful innovators tie resource allocation to customer satisfaction. (p. 2)

Shneiderman's preface to the HHS (2010) web design and usability standards cautions that setting guidelines is only part of the process; "... the greatest benefits from these research-based guidelines will accrue to those who create effective processes for their implementation" (p. v). Successful implementation requires the 4 E's: education, enforcement, exemption, and enhancement. First, leaders, managers, and IT personnel need to understand the standards and their importance. IT personnel need access to training on usability testing and more. Second, enforcement or accountability needs to be built into the implementation process. This is an on-going requirement in a dynamic environment. Third, exemption means that in such a dynamic and creative environment as web design there are always exceptions to the rule. Standards should not squelch creativity. And finally, enhancement allows for constant seeking of better ways to improve usability.

## Case Study on Implementation in New York State

As a first step to understanding the implementation of accessibility and usability in New York State, the Professional Development Program (PDP) at the University at Albany conducted a survey of webmasters and web developers for New York state agencies. The survey sought to discover their perceptions on implementing accessibility and improved usability among state agencies. The study hypothesized that accessibility would be considered more critical than usability because development of accessible websites and Web applications is mandated by state law as well as Section 508. State support for accessibility has included opportunities for training and sharing of best practices among developers. No official policy exists in New York regarding usability or usability testing. In effect, usability has been given less attention, despite the volume of traffic state agency websites receive and the amount of information they contain.

In May 2010, an online survey was distributed via a listserve. Of the 388 listserve members, 44 responded for a response rate of 11%. While this small response rate precludes making definitive conclusions, the responses do show some interesting trends for further exploration. The majority of agencies reported hundreds of thousands of file requests (*i.e.*, page hits) per month ranging from 20,000 to four million.

In the study, 91% of the webmasters responding believed that both accessibility and usability were very important or critical. However, they perceived a much lower level of support for usability in their agency. In the webmasters' perceptions, 66% of agencies held accessibility to be very important or critical and only 43% of agencies viewed usability as very important or critical. Presumably the greater support for accessibility is related to greater awareness and to its legal importance. The agency attitude on usability begs for further study. Is it the result of ignorance or indifference? What helps raise its prominence on the agenda of agency leadership?

Significantly, *none* of the developers surveyed believed that their agency did an "excellent" job at "user satisfaction" or usability-associated issues as defined by the ability to find information or efficiently accomplish tasks. Respondents gave the following ranks to user satisfaction, shown in table 1.

This survey adds to the mounting evidence of a sizeable gap between accessibility and usability standards and actual implementation especially when remembering that webmasters were found to overestimate the quality of their sites when their perceptions were measured against actual accessibility tests (Jaeger, 2006; Jaeger & Matteson, 2009).

	poor	mediocre	average	above average	superior	excellent
User satisfaction	0%	9%	43%	36%	11%	0%

Table 1. Percentage of webmasters responding to ratings of user satisfaction

To further understand usability implementation, additional survey questions focused on the key issue of usability testing. Ninety-five percent of the webmasters who responded to the survey concurred that usability testing would improve their website. However, only 70% reported that their agency had conducted usability tests. While 76% of those who did test did so in-house, only 36% felt themselves to be competent or expert in usability testing.

When asked to identify additional challenges they faced when improving usability, webmasters reported such predictable challenges as lack of resources, the necessity of serving many different audiences, and the sheer amount of information involved. In terms of management, two challenges were reported. One challenge reported by 43% of the respondents was the fact that different groups within the agency were responsible for different sections of the website. Finally and perhaps most significantly, 50% reported that leadership didn't understand the importance of usability testing.

Although these findings are not conclusive without further research, they do point to a number of potential issues, in particular, the disparity between management and IT staff with regard to their views concerning the relative importance of accessibility and usability, and the perceived lack of resources and training to do usability testing.

#### **Solutions and Recommendations**

Given the many barriers and challenges to accessibility and usability, how can government bureaucracies implement a process that is dynamic, iterative, responsive to vast audience variability, and most importantly accountable and user-centered? Some states and federal sites have been successful, but many are disappointing.

As a first step, we recommend Shneiderman's 4 E's (HHS, 2010). Education is critical not only for IT personnel, but also for leadership and management. IT personnel require technical training in implementing accessibility and usability guidelines and especially in usability testing. Leadership and management need to understand the basic concepts of usability and accessibility and the necessity of regarding them not as onetime tasks but as on-going iterative processes. Both management and staff need to understand how user input is central to the process.

The second E of Enforcement is critical and appears to be largely lacking. To achieve usability, Shneiderman advises that designers "will be more diligent if there is a clear process of interface review that verifies that the guidelines have been applied" (HHS, 2010, p. v). As a management practice, work plans should establish measurable standards and a schedule for measuring achievement of the standards. Excellence in the private sector requires accountability that includes customer satisfaction (West, 2009). While 508 compliance is still woefully inadequate, we can thank the existence of this law for the level of compliance we do have.

The final two E's, Exemption and Enhancement, call for on-going creativity. Enforcement shouldn't stand in the way of creative solutions or improvements. "To support creative work, managers should balance the enforcement process with an exemption process that is simple and rapid" (HHS, 2010, p.v).

As a final recommendation, we believe that it is helpful to conceptualize accessibility and us-

#### Accessibility and Usability Issues

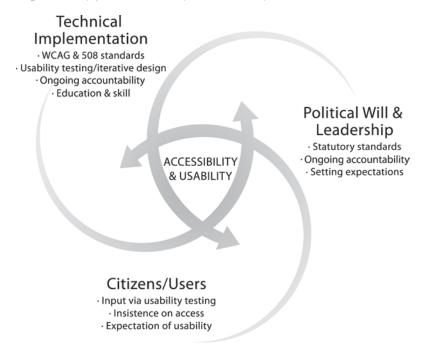


Figure 1. Shared responsibility for accessibility and usability

ability as requiring three elements. Usability and accessibility occur at the intersection of Citizen/ User Input, Political Will/Leadership, and IT implementation. Each is accountable to the other. This is a dynamic on-going process, not a onetime achievement.

Citizen/users are central to the concept of user-centered design. Although large numbers are not necessary, there is no usability or accessibility without directly involving the users in testing. Citizens are also important in terms of accountability. If government websites are inaccessible or not user-friendly, disability rights organizations and other citizens need to voice their expectations in ways that can be heard.

Political will and leadership are essential to sustaining accessibility and usability. First, leadership and political will are required for legislative enactment. Secondly, leadership must demand and provide support for implementation.

Finally, IT professionals are critical to implementation. They need the training and resources to implement accessibility and usability standards. In designing and building web pages and web applications, they make hundreds of decisions that affect the ultimate usability and accessibility of every product. They need to be held accountable to measurable standards that are assessed at regular intervals. They need to remember that citizen/ users are the experts when it comes to determining usability. Putting user-centered design at the front-end of development and re-testing as designs change are critical.

## TRENDS AND FUTURE RESEARCH DIRECTIONS

#### **Future Web Technologies**

As technology evolves and new Web standards and specifications are developed, the languages of the Web will also evolve. For example, in 2010, revisions of HTML (HTML5) and CSS (CSS3) emerged and promised a major leap forward in the "features" of the Web (e.g., offline data storage, 2-dimensional drawing, drag-and-drop interactivity, native audio and video support). These advancements permit developers to adapt their content more readily to different browser and device configurations. Governments that can leverage these new HTML and CSS technologies to provide equivalent content and transactions for users of all web-based devices will be better positioned for the future of the web and e-government.

#### Interoperability

The W3C vision is of a "Web of Devices," enabling "web access anywhere, anytime, using any device" (W3C, 2010). This vision begins with clear separations between content and presentation, but extends to a smarter framework for repackaging that content appropriately. Traditional web browsers will coexist with a growing number of devices that feature touch, multi-touch, and voice-activated interfaces. Governments that can successfully use technologies to develop content once and deploy for any web-enabled device ("create once, use anywhere") will approach the universal access needed for a truly open government.

#### **Mobile Device Design**

As our population becomes increasingly mobile, demand is growing for tools that deliver timely information and interaction "on demand" (Harrington, 2009). This mobility creates opportunities to transform the way we interact with information and each other, though it imposes added constraints. Commercial applications of the mobile web range from satellite navigation, to movie listings, product reviews, and banking applications. Mobile government examples include public service advisories for transportation systems (traffic / transit delays) and internal applications such as health care, incident reporting, and field inspections. Further research and user testing is required to determine how the freedom and limits of the mobile web contribute to citizen's access to information and interactions with e-government.

#### Semantic Web

A seminal 2001 Scientific American article stated, "To date, the web has developed most rapidly as a medium of documents for people rather than for data and information that can be processed automatically. The Semantic Web aims to make up for this" (Berners-Lee, Hendler & Lassila, 2001, p.37). The goal is to move beyond the web as a medium of related documents with mechanical relationships (i.e., links) and no associated meaning-that is, all web with little semantics. W3C workgroups continue "to build a technology stack to support a 'web of data,' the sort of data you find in databases" (W3C 2010a). This will allow machines to assemble, process and use data in useful ways. Encouraging governments to put their raw data on the WWW has been a targeted "vertical application" within the W3C international community.

#### "Raw Data Now!"

At a February 2009 Technology, Entertainment, Design Conference, Tim Berners-Lee called for moving beyond putting documents on the web to putting data on the web. "Let's start," continued Berners-Lee, "with government data." He cited Barack Obama's pledge to make government data available on the internet. "... And I hope that they will put it up as linked data. That's important. Why is it important? Not just for transparency-yeah transparency in government is important-but that data-this is the data from all the government departments. Think about how much of that data is about how life is lived in America. It's actually useful. It's got value. I can use it in my company. I could use it as a kid to do my homework. So we're talking about making the world run better by making this data available." He asked government decision-makers for "unadulterated data"

and invoked the rallying cry for "raw data now" from all enterprises all over the world (Berners-Lee, 2009, 9:45-11:23).

#### **Government Data Online**

Berners-Lee's TED talk (2009) was followed up with his written ideas, "Putting Government Data Online," and published on the W3C website (2009a). He gave suggestions of how to "Put the data up where it is: join it together later," but also cautioned to "leave the existing system undisturbed," to not "threaten or disturb the systems and the people who currently are responsible for that data" (Berners-Lee, 2009a). The W3C *eGovernment Interest Group* published a working draft of suggested standards for how governments throughout the world could publish open government data (W3C, 2009).

In the United States, the "Open Government Initiative" was formalized in a directive to executive branch agencies. Each federal agency is to create an Open Government Webpage located at http://www.[agency].gov/open (Orszag, 2009), and government datasets are to be presented in one place at http://www.data.gov/. This trend for government data online does not address every issue of usability or accessibility, but it clarifies several areas where more research is necessary.

#### FUTURE RESEARCH DIRECTIONS

It would be useful to see more implementation studies on how government agencies approach web design. It could be very fruitful to study those states and agencies that consistently score high on accessibility and usability. What management and design practices do they share? We hypothesize that they have savvy leaders, accountability standards that are enforced, user-centered design, and iterative usability testing. What types of accountability are in place? Who makes which decisions? More qualitative studies that interview key players would be helpful as a start for building larger quantitative studies.

Building on the current annual studies that rank government websites, it would be very useful to establish benchmark studies or "report cards" for government agencies and citizen groups to measure against.

#### CONCLUSION

Democratic governments seek to serve all citizens equally and fairly just as the IT profession itself is guided by a code of ethics that emphasizes equal opportunity for all. By extension, IT-enabled egovernment must maintain as its core value that it offers equal opportunity for all citizens to benefit from its services.

The accessibility and usability choices made by website development and management teams characterize a government's intent with regards to openness and transparency. At every level, the design and development of e-government must be guided by the overlapping concerns for usability and accessibility. Accountability and success must be measured in terms of the citizen/user.

Usability and accessibility can be assessed during the website development process. Development checklists, inexpensive automated tools, and direct observation of merely a handful of users can avoid potential design mistakes. Building these assessments into the development process can reduce overall development costs: design shortfalls can be addressed earlier, while user-citizens are able to participate in the e-government development process itself.

By investing in universal, user-centered design, a government's web presence can achieve transparency, participation, and collaboration the cornerstone of an open government (Orszag, 2009). The internet and, more specifically, the World Wide Web are technologies that have been created within this philosophy of openness. These technologies have created the capacity for governments—individually and collectively—to "form a more perfect Union."

If the power of a democracy is with "the people," then the future of e-governance should be citizen-driven. Government officials, website development teams, and academicians are all players in this process.

Executive leadership is more than simple implementation of laws and policies. Government leadership provides an opportunity to create rapid change, as President Obama's open government directive has proven. Government officials can provide inclusive and effective citizen engagement by creating and enforcing policies that ensure universal access to information.

If e-governance is like other paradigm shifts, its evolution will not be a smooth curve of expediency and involvement. The Athenian model of direct democracy may become a reality in the 21st century as more and more citizens expect to rely on technology for civic engagement. Whether or not they succeed will in large measure be determined by government's commitment to empowering democracy through the development of websites and web applications that encourage and enable participation by all.

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## **KEY TERMS AND DEFINITIONS**

Accessibility: Providing individuals with disabilities access to and use of information comparable to that provided to those members of the public who are not individuals with disabilities.

**CSS:** Cascading Style Sheets is a computer language used to describe how to display the struc-

tural elements of an HTML document, enabling the separation of content from presentation that improves accessibility.

**HTML:** The World Wide Web Consortium (W3C) defines HyperText Markup Language as a standard for describing the structure of a document for use on the World Wide Web.

**ICANN:** Internet Corporation for Assigned Names and Numbers, an organization assigned the task of verifying that network names and addresses remain unique to ensure the accurate routing of data and messages to the correct addresses.

**IT / ICT:** Information Technology / Information and Communication Technologies.

**Learnability:** How quickly a user can understand how to navigate a user interface to complete desired tasks.

**Open Government Initiative:** A program initiated by the Obama Administration for each Executive Branch agency to make government datasets available.

**Sunshine Law:** Freedom of Information legislation that governs public access to government information (e.g. records, meetings).

**Usability:** Attribute of a system that describes the efficiency and satisfaction with which a user can access information or complete tasks. It is usually measured by users' ability to accomplish a task, or find information efficiently.

**UX:** Acronym used to represent User Experience Design, the process by which developers incorporate aspects of psychology, accessibility, usability, sociology, industrial design, and computer science principles to create rich and satisfying human-computer interactions.

**WCAG:** The Web Content Accessibility Guidelines are a W3C standard for improving the accessibility of Web content.

**W3C:** The World Wide Web Consortium develops ongoing standards, guidelines, and protocols to ensure the ongoing development of the World Wide Web.

## Chapter 8 Facilitating Knowledge Sharing in E-Governance: Online Spatial Displays as Translating Devices

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#### ABSTRACT

This chapter introduces a case study that aimed at developing practices of neighborhood participation by utilizing information and communication technologies. A participatory action research project organized a citizen panel in the neighborhood of Tesoma in the city of Tampere, Finland. The panel tried to find meaningful ways for residents to influence the development of their neighborhood. The central aim was to articulate and mediate their local knowledge to administration that traditionally leans on technical-rational knowledge. The case study suggests that interactive online spatial displays have potential to facilitate meaningful exchange of information by three mechanisms of translation: 1) by giving access to information from viewpoints familiar to the residents, 2) aiding the translation of technical-rational information of public administration for citizens with illustrative visualizations, and 3) giving residents multimodal means of producing input to administrators and planners. Interactive online spatial displays, such as interactive maps and simulations, are considered to work particularly well as translating devices supporting these mechanisms.

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#### INTRODUCTION

Citizen participation at a neighborhood level is often perceived to take place in specific events that are arranged within planning processes and particular stages of decision-making. However, participation at this level is entangled with questions that rise from actions of everyday life. Therefore, reflecting on insights from complexity theory, we want to take a broader view of neighborhood participation and extend it to various practices that include continuous as well as sporadic interaction and collaboration between institutional and neighborhood actors, particularly between city government and residents.

One of the central questions of governance is how to provide settings and arrangements for meaningful interaction between local experiential knowledge and knowledge based on technicalrational information (Fischer, 2000). However, drawing on an approach that sees knowledge as being tied to practice (Cook & Yanow, 1993), we consider that dissemination of knowledge to the use of governance is not a straightforward matter. In addition, often knowledge that could be available is not used because it is situated in periphery from the viewpoint of decision-makers and public administration (Yanow, 2004). This means that much of the knowledge potential resides in different practices scattered around the city. If knowledge is understood from this practice-based approach as knowing, as a situated capability to act, there is twofold potential in information and communication technologies (ICTs) such as the Internet and geographic information systems (GIS)<sup>1</sup> to facilitate participatory arrangements in e-governance. They can 1) support building collective competences to act, and 2) facilitate interaction between different actors that are members of various different social worlds but do not share them all together<sup>2</sup>. In this chapter, we focus on this potential. Hence the crucial question: How can ICT be utilized to increase interactions between different actors in governance

of cities? The question has to be discussed while acknowledging that at the same time knowledge is not directly accessible but needs to be translated from the practices that created it.

The chapter opens up the above question by way of a participatory action research project, which aimed at developing ICT-mediated participatory practices with a citizen panel. After opening our conceptual framework consisting of insights from theories of practice-based knowing and complexity, we introduce our case study with a citizen panel in Tesoma neighborhood in the city of Tampere, Finland. Then we move on to consider how neighborhood participation can be understood as various interactions between citizens and administration where different kinds of information and knowledge merge. This leads us to discuss how the citizen panel discovered ways to apply interactive online spatial displays to support interaction and knowledge sharing between citizens and administration.

#### BACKGROUND

### Web-Based Spatial Technologies in E-Governance

Recent societal and technological changes, such as the move from government to governance (see Pierre, 2000) and rapid developments in information and communication technologies, have stimulated a vast amount of scholarly discussion of democratic practices and communication between institutional actors and the public. These changes have encouraged searching for more transparent and participatory decision-making processes (see Hague & Loader, 1999; Axford & Huggins, 2001).

Many of the initiatives around citizen engagement in e-democracy practices have focused on improving the efficiency of administration by paying attention to the ways how governmental information could be better accessed by citizens (see Hague & Loader, 1999; Hacker & van Dijk, 2000; Day & Schuler, 2004). This viewpoint easily directs the emphasis on technological tools and the competence of citizens to properly take advantage of the new electronic services offered to them by governments. In this vein, citizens are being placed into the position of the customer-user instead of being regarded as responsible and legitimate actors in decisionmaking processes.

In collaborative governance, citizens become co-producers of policies that affect their everyday life in society. In this view, ICT is approached as an arena that serves public, reflexive, and democratic negotiation of governance. (Coleman & Kaposi, 2006.) Coleman and Kaposi see the transformative potential of the Internet in encouraging emerging modes of communication. They explicate that the central role of civic networks in collaborative governance is bringing the experiential knowledge and perceptions of stakeholders to the center of accountable governance. (Ibid., 2006.)

In addition to the Internet, spatial technologies such as geographic information systems have received a lot of attention as means to facilitate public participation (for overviews, see Sieber, 2006, Craig et al., 2002). According to Richard Kingston (2007) "these tools are meant to help people make better planning decisions by enabling improved communication, design and analysis in place making" (Kingston, 2007, p. 139).

Broadly taken, the aims of the experimentation of the Internet in conjunction with spatial technologies include two dimensions. First, communication is enhanced as spatial technologies help convey meanings regarding spatial matters (Craig et al., 2002; Sieber, 2006). This is obviously a central aspect in urban planning. Furthermore, the Internet offers a possibility to extend and diversify public discussion and the interplay between different actors in planning processes. It has been suggested that with these technologies one can reach a much bigger audience than with traditional means such as town hall meetings (Bosworth et al., 2002). Second, GIS helps to store large quantities of information and, once archived, information can be retrieved from a database through user interfaces that allow assembling of information in a comprehensible and meaningful manner. This facilitates knowledge production.

We do not want to take a deterministic stance by bringing up this twofold potential. We are not interested in questions such as what the ICT does as a predetermined entity. Social studies of science and technology have rendered this kind of a question insupportable, as it presumes an objectively verifiable truth<sup>3</sup>. What we can do is to find out how certain technologies gain specific attributes (Grint & Woolgar, 1997; Akrich, 1992). Grint and Woolgar (1997) elaborate on this as follows: "This is not to suggest that machines do not have effects. Instead, what counts as an effect [...] is taken to be a social process involving the persuasive interpretation of information and convincing attribution of capacities" (Grint & Woolgar 1997, p.33).

Regarding this, there are questions relating to how the potential of the Internet and GIS in public participation is realized in practice. First, it depends on how public participation is understood. Is it restricted to some specific (and somewhat rare) occasions, such as voting in elections or public hearing in a certain phase of a planning process? Or, is it continuous but fluctuating interaction between actors? Drawing on insights from complexity theory, we take the latter point of view. Second, widening the knowledge base through more inclusive governance is not a straightforward matter but needs means of translation; the following approach that acknowledges the underlying complexity of urban governance and sees knowledge as being dependent on practices helps to tackle these questions.

#### On Complexity and Epistemic Diversity

Complexity is an overriding characteristic in governance of urban cities. Cities consist of multiple on-going activities that form a mixed bag. Processes related to industry, commerce, dwelling and recreation are practiced in cities. Different practices give shape and structure to cities. Governance tries to comprehend these processes and have an effect on them. The means of governing vary from reactionary responses of short-term events to the guidance of anticipated structural developments of the city. Complexity in modern cities brings in specific challenges concerning governance. The need for wide knowledge acquisition for robust decision-making and problem solving is immanent. However, the complexity in governance cannot be controlled or eliminated. This is because complexity does not rely on the number of parts within the system, but on the intensity and density of interaction in the system. Although control is not a viable option in tackling with complexity, complexity can be harnessed and understood, meaning that there are more or less worthwhile ways of dealing with it. (Wagenaar, 2007.)

Complex systems have emergent properties, which are produced by the interactions between separate parts of the system. The separate parts of the system do not have these properties; they are productions of the interactions between its parts. (Ibid.)Accordingly, the citizens' non-reductionist way of dealing with problems complements well the technical-rational decision-making that is disciplined by administrative borders because this way the system can better respond to its emergent properties. Policy analyst Wagenaar (2007) puts it as follows:

Because expert knowledge is primarily aimed at the understanding (and alleged control) of the separate parts of the system (e.g. members of ethnic minorities, food suppliers, school dropouts, employers, etc.), it threatens to miss the emergent properties of the system entirely. (Wagenaar, 2007, p. 24.)

Hence, complexity theory proposes that we should strive for participatory governance because

...it increases system diversity and system interaction. Both have the effect of contributing to the flow of knowledge through the system so that it enables the actors in the system to produce, appreciate, and select productive intervention strategies and arrive at coordination of problem solving and decision-making (Wagenaar, 2007, p. 29).

We follow the work of Wagenaar in considering the crucial role of citizen participation in governance when trying to harness the complex social systems of urban environment. In this light, we propose that governance in cities takes place in settings that can be described as systems of fragmented knowledge. Bruni et al. (2007, p. 83) define systems of fragmented knowledge as "learning settings in which people, symbols, and technologies work jointly to construct and reconstruct understanding of social and organizational action". They use remote consultation practice in the health care field as an example of a system of fragmented knowledge. They argue that in such a system, knowledge is not carried only by people but by artifacts as well. We believe the system of fragmented knowledge to be a useful concept in the context of city governance as well. This practice-based approach is useful as the concept of practice captures how specific forms of knowing are culturally and historically constructed with particular material arrangements (Bruni et al., 2007).

As an analogy, we draw on a perspective of citizen participation where actors, such as residents and city government, act inside a shared system of fragmented knowledge that consists of various practices. Actors interpret this system in social interaction from their own viewpoints; e.g. administratively created borders of municipalities and localities are guidelines for city planners, whereas everyday practices – which are not dictated by administrative borders – direct the perceptions of residents. As the system consists of various practices that emerge and take place somewhat independently on other practices, social worlds have specific ways of knowing. In order to function properly, the system needs means to translate knowledge from one form to another.

However, there are supposedly differences between the systems of remote health care and governance of cities. The system of fragmented knowledge in health care works more on a coded, routine-like basis, whereas the system of fragmented knowledge in city governance takes a more organic form, having multiple configurations. How can information move meaningfully in a system if the way of knowing, i.e. sense-making by utilization of information and knowledge in practice (Cook & Brown, 1999), varies from one social world to the next? Two interrelated problems can be drawn from the above: how to attain information and knowledge, and how to make sense of it?

These questions on information acquisition and interpretation should be considered from the viewpoints of administration and planners as well as citizens. Planners may perceive that some knowledge in the periphery is not valuable and thus there might be no means to acquire local experiential knowledge from the citizens. Administration often works without enough transparency, and hence citizens might not be able to acquire information even if the issues concern them. This does not have to be administrations' and planners' attempt to conceal their decisions, rather it may stem from the fact that administration does not know all the consequences of their decisions. In this chapter, the citizens' viewpoint is emphasized when approaching these questions. In what follows, we introduce a case study that will be discussed in order to tackle the questions of information acquisition and interpretation.

#### DELIBERATING ON KNOWLEDGE SHARING

### Case and Methods: Action Research Project in Tesoma Neighborhood

The complexity inherent to governance effectively evades the possibility of constructing a universal model for public participation. Solutions on how to arrange participation will always be contextspecific. Accordingly, we do not intend to build up a universally applicable model for public participation. Instead, by using an approach that combines case study analysis with action research methods, we want to bring up elements from the case that may provide insights about how and why interpretation and interaction between different actors could be facilitated by interactive online spatial displays. The advantage of case studies is that they can provide valuable knowledge that is concrete and practical. By taking a case study approach, we believe on "the power of the good example", which is often underestimated compared to formal generalization as a source of a scientific development (Flyvbjerg, 2001) <sup>4</sup>. However, the findings can find meaning and place in other cases through analogical generalization (Smaling, 2003). The case study allows us to trace particular characteristics of interactive online spatial displays that relate to participatory governance and citizen participation at a neighborhood level. In addition, the case study approach lets us discuss the potential of ICT in a specific context and practice. This is helpful, as we take technology to be inter-related with social practices.

The chapter bases on an empirical case study in which the University of Tampere and the City of Tampere co-operatively organized a development project in a local neighborhood of Tesoma<sup>5</sup>. The project was implemented at a time when themes of neighborhood renewal, diffusion of information society and development of civic participation started to intersect in the Finnish society<sup>6</sup>. Tesoma represents a typical neighborhood that was built during the rapid urbanization in the 1960s and 1970s. Initially, the Finnish neighborhoods of that era were facilitating the increasing population movement and housing pressures stemming from the migration from rural areas to urban towns. Since then, many of these neighborhoods, including Tesoma, have witnessed a lot of negative side effects of urbanization such as increased unemployment and crime rates.

In the neighborhood renewal project, the citizen panel played the role of an informant of civic knowledge at the neighborhood level. The starting point in this joint project was to consider the local residents as experts of their neighborhood. Traditionally, the kind of knowledge and expertise that have been recognized as relevant in processes of urban planning have been narrowly defined as rational, basically meaning technical-scientific planning knowledge. Nevertheless, technicalscientific knowledge has proved insufficient in situations where different agents and forms of knowledge come together (Irwin & Wynne, 1996; Fischer, 2000; Hajer & Wagenaar, 2003).7 Acknowledging the civic expertise, the project aimed at developing participatory practices by utilizing the potential of communication technology in civic participation.

The aim of the project was to give residents an opportunity to gain more voice in the development process of their living environment. A group of 12–15 residents of Tesoma neighborhood formed a citizen panel that brought its knowledge under discussion<sup>8</sup>. The project partners, researchers from the University of Tampere and practitioners from the City of Tampere, shared the view that ICT should be made accessible and available for citizens' use. The project emphasized mutual interaction and co-operation between the city government and the residents.

Researchers took an active stand in the process of local knowledge creation as the approach was based on participatory action research. Typically participatory action research emphasizes communities' local knowledge in naming and understanding social problems that emerge in their living environments (see Flicker et al., 2008). Action research has been described as empowering participants to independently define problems and opportunities in local settings and to creatively react and adapt to these situations and solutions (Tacchi et al., 2009).

The general understanding of action research approach has rested on a normative view which recognizes the potential of the approach in developing democratic and deliberative practices. Especially participatory action research has been defined through aims that make a difference to research participants' living situations as well as to their ways of producing, interpreting and understanding knowledge (Genat, 2009, 103; McTaggart, 1997). In the case at hand, the development of e-democratic practices was not only focused on empowering an acting community of residents but also inviting these civic participants to develop participatory practices of local governance. New means of information and communication were regarded potential, first, in making these interactive processes public and, second, in enhancing the mutual knowledge sharing and creation between different agents. The researchers were involved in encouraging and pursuing these aims by generating community activity in a local neighborhood in conditions where little public citizen activity was taking place<sup>9</sup>.

## Working With the Citizen Panel

The launch of the citizen panel was announced to the residents with invitations delivered to their homes that included directions on how to participate<sup>10</sup>. The panel was active for over a year, having two-hour meetings every two weeks. The meetings were usually held in a local high school in Tesoma<sup>11</sup>. In the meetings, the researchers and the city representative worked as the chairman of the discussions and as the secretary when documenting the meetings. First the panel's action was connected to the preparation of a general

development plan of Tesoma neighborhood on which our project partner in the city organization was working.<sup>12</sup> By collaborating with the panel, the City wanted to gather local knowledge of issues that residents considered important in their living environment. The issues varied from positive features of the neighborhood to issues experienced problematic and calling for repair. In the first meeting, the panel members were asked to bring up issues they had experienced important when thinking about Tesoma neighborhood, its current condition and issues that needed to be developed and taken under discussion. The issues raised concerned everyday life practices of the neighborhood residents: for example, traffic arrangements; appearance and character of the shopping mall in the area and its surroundings; maintenance of recreational areas and spaces for leisure activities; as well as discussion on how to organize social spaces for the local youth.

In the subsequent meetings, the panel members continued defining the issues. The panel formulated its action by discussing one issue over two or three meetings. Discussion started in one meeting was continued in the next meeting to allow panel members to reflect and reformulate solutions for current problems and to discover relevant information and knowledge to support their arguments and suggestions. Often the group rejected their first solution and then another one, a more grounded solution, was developed. After formulating their views, the city representative participating in this project helped to pass on the proposals and comments for the consideration of the city administration.

However, the residents, the researchers and the city representative together recognized in the panel's discussions that when forwarding the panel's proposals to the city government, the proposals needed to be well formulated and arguments clearly articulated. To escape the risk of being publicly blamed as presenters of information that bases on individual desires and opinions, on 'how one feels about it', we all recognized the

limits of the panel's knowledge, which resulted in our needing technical-scientific information on which to base the citizen panel's deliberation. (See Heikkilä & Lehtonen, 2004.) In addition, the group members carried out tasks between meetings that expanded the panel's knowledge to better cover the residents' point of view. They gathered background information for the discussions. They asked fellow residents for their viewpoints and suggestions on issues that concerned everyday life in Tesoma. They organized local happenings and encounters with relevant agents at their neighborhood locality. Hence their mostly experiential knowledge was made more robust with two types of knowledge: (1) rational, technical-scientific knowledge that was considered more legitimate in city governance, and (2) knowledge that represented views of a wider group of people than themselves.

The panel's discussions were supported by a vast amount of information resources that touched upon different aspects of the neighborhood, for instance documentation of the area's spatial development history and its current trends, information regarding plans of future land use and its priorities, demographic data of the neighborhood, and information of proprietorships of building sites on the area. The intensive participation of the city organization in the project opened a rare chance for the residents to access and analyze GIS-based information of their neighborhood and use this generally acknowledged technical-scientific information as a resource to co-construct and reflect their views<sup>13</sup> (see Heikkilä & Lehtonen, 2004). The panel members did not use GIS in the traditional sense. They did not work with specific desktop software designed for analysis of geographical information. Instead, they analyzed thematic maps by discussing them in their meetings. The thematic maps were previously produced for administrative purposes from GIS data on the City of Tampere. For example, the panel had a thematic map showing how the green areas in town were classified for maintenance. This kind of geographic information is not usually available

for the general public but is extensively used in the city organization.

Such intense co-operation between the public and public officials, as the work with the citizen panel in Tesoma exemplifies, was fairly uncommon in Finland in the early 2000s. In urban planning procedures, civic participation has been traditionally constrained to previously determined phases and occasions. In addition, the local political decision-making culture in Tampere has previously been closed with little possibilities for citizens to participate (Laine & Peltonen, 2003). Participatory methods started to gain more focus as the general atmosphere for participation in society opened up and new legislation was set up for land use planning. Currently, the land use and planning act gives general guidelines on how participation should be arranged in planning processes. The case of Tesoma was not connected to a planning process as such but to a national neighborhood development program, within which the Tesoma project was designed to chart the renewal process and the future development of this urban neighborhood. In this sense, the citizen panel worked beyond the usual assumptions of public participation.

## Examples and Experiences of Online Spatial Displays

Instead of relying on GIS data only as a provider of background information for citizens' discussion, the project wanted to take advantage of the potential of spatial technologies and the Internet to create concrete ideas or examples for public participation. Originally, the idea of developing web-based tools and services was raised by the researchers, because studying the web as a tool for public participation was one of the key aspects in the university's research project. At the same time, the participants of the citizen panel had a clear interest in developing the conditions of their residential area. This interest encouraged the panel to think about designing digital forms of public participation. The discussion was started on the kinds of possibilities the ICT could offer for residents. The panel members' focus was on what would increase their opportunities to participate in public discussion as well as their possibilities to follow the preparation processes of administrative issues for decision-making.

When utilizing thematic maps based on GIS data that the city organization provided, the panel members recognized that the most important and interesting type of data was usually inaccessible to them. With this they referred, for instance, to various databases of the local government that included specific information on the neighborhoods. The citizen panel acknowledged in their deliberation that they would need this kind of technical-rational information to contribute to the local development plan. This observation about widening the knowledge base of the residents was also addressed when the panel started to discuss the possibilities to enhance meaningful interaction with public agencies and public officials by web-mediated means.

The topic was approached by exploring online examples and applications. The researchers introduced examples that they considered as possibly interesting for the members of the panel and essential for the question at hand. All the introduced examples shared visual and spatial means for knowledge representation as they utilized a map as an interface. For instance, the city of Tampere shares information about services, recreational areas and traffic routes on a map-based application. Another example showed an interactive illustration of the development of rental housing and development of black people's residential neighborhoods in New York City. This example combined temporal view with spatial development, which evoked the citizen panel to ponder development trends in these New York areas and causalities that encouraged the development. The introduced examples clearly stimulated the panel to re-think processes of societal development as well as the question of how information is illustrated and visualized.



Figure 1. Proposal of the citizen panel for the development of green areas in the neighborhood of Tesoma

Presumably, the utilization of maps as illustrators may have directed the citizen panel to recognize maps as relevant and functioning tools for presenting information. However, the panel had already had encouraging experiences of map and GIS use earlier in the project. The feasibility of map-based presentation of knowledge was noticed when the panel relied on maps as an illustrative form of knowledge presentation that supported the panel's arguments. When it discussed the maintenance of local recreation and green areas in Tesoma, it got access to information that was categorized by the City organization for the general maintenance of green areas. The citizen panel then evaluated the accessed data to the experientially lived green areas in the Tesoma neighborhood. They observed the classifications and categorizations both on a map presentation and on a walking tour together with city officials and compared the technical-scientific information provided by the city of Tampere to their own knowledge. Then the panel created its suggestion on how to develop

the maintenance and use of recreational areas. The panel visualized its arguments with two maps by attaching brief explanatory comments on specific places that were experienced as meaningful and important, or which had problems (see one of the maps in Figure 1).

The citizen panel also pointed out some defects in their neighborhood that concerned traffic arrangements and security. It decided to construct a map that included places that were experienced as problematic. The problematic places were indexed with numbers and presented on a map with a brief comment and a photo of the specific place (see Figure 2). For example, number 1 on the map had a corresponding photo showing a road crossing. The photo was attached with a comment "Pavement missing from the other side of Kohmankaari Road". The maps with commentaries and photos were delivered to the city administration as well as published on the panel's web site.

Experiences from utilizing maps and other visual presentations to illustrate local place-

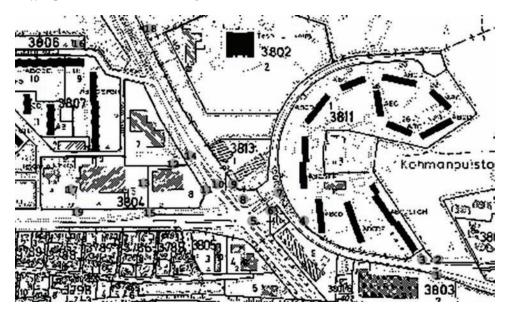


Figure 2. Traffic problems in Tesoma neighborhood

specific information functioned as reference points when the citizen panel started to discuss online participatory tools. Spatial view on web applications was emphasized as the citizens recognized the need for spatial demographic data as well as for data that would illustrate local temporal development online (e.g. trajectories of spatial infrastructural development or sufficiency of social services). The relevance of spatial data was addressed in the panel from two viewpoints: 1) information was needed to evaluate local governmental decisions and 2) to support local residency on the level of everyday life.

To equip citizens with competences to evaluate, for example, long-term policies that affected spatial development, the citizen panel emphasized the need to access temporal information. This information would encompass a wider view of an issue at hand. However, citizens also recognized the need for information that would facilitate local residents in arranging their everyday life. These requirements were linked to situations in which spatial-temporal information of one's livingenvironment would clarify city-governmental decisions, be it vast future policies or specific planning proposals.

After recognizing the potential related to the use of spatial data, the citizen panel's action was set up – as we mentioned earlier – with examples in which GIS data was represented by means of the Internet. This gave a springboard for citizens to develop their views on tools useful for webmediated participation. During this deliberation dialogical methods were used. For example, when documenting the panel's perceptions, one of the researchers typed the panel's views on a laptop and projected them on the wall. This way the panel could see that the researchers understood what the panel was trying to articulate. In addition, the researchers constantly double-checked that the arguments were entered accordingly and that everyone in the panel shared current views. The deliberation with the citizen panel helped to identify mechanisms that facilitate interaction and translation of different kinds of information and knowledge, which we will come to next.

## Interaction and Translation of Information: Three Mechanisms

Based on its deliberative discussions, the panel structured a proposal called 'the requirements specification'<sup>14</sup> to articulate and mediate its ideas about the development of online participatory tools from the residents' viewpoint (see Heikkilä & Lehtonen, 2004). Analysis of the work of the citizen panel and its requirements specification yields three different functions or mechanisms that facilitate the interaction and translation of information: 1) access and retrieval, 2) tracking and interpretation and 3) production and sharing of information. These will help in elaborating how we handled the interrelated problems of two-way information acquisition and interpretation of information acquised.

### Access and Retrieval

Regarding information search and access the panel recognized the importance of online information service that would serve residents in their activities, which would include for example: web services that would entail various information, for example contact details of local authorities, leisure facilities, parking lots, and available recreation areas or meeting spaces in the neighborhood. All this information would need to be arranged in a way that would be easy to find and use. The panel members had noticed the difficulty of searching for information of their neighborhood on the city's website; the website was built on the governmental way of knowing, which differed from the residents' way of knowing. Because of the difference between ways of knowing, the panel members felt that the city's website was difficult to use and cumbersome. One of the panel members elaborated this:

"The search engine is the weakest link on the city's website. In order to find correct contact

details, the user should know the structure of city government very profoundly."

In order to easily find information, citizens were supposed to understand bureaucratic processes and the sectoral logic of the administration (Heikkilä & Lehtonen, 2004). However, instead of thinking which administrative sector is responsible for their matters, residents would prefer to use a web interface where information would be arranged based on spatial division, such as neighborhoods. In the panel's view, spatial organization of information on the city's website would better serve citizens by giving access to information from the familiar viewpoint. This could possibly function as a way to a more effective governance by reducing unnecessary contacts from citizens to civil servants because the information would be more easily and accurately accessible online for city residents, as one panel member pondered:

"If information could be found this way, interaction would be efficient both from the viewpoint of residents and administration. Any [resident's] question would be channeled more precisely to the right address and it could be answered faster."

In the panel's view, the neighborhood is a concept around which public information services should be aggregated. The panel felt there was a gap between how residents and city government approached issues, and considered this gap as one reason for reducing meaningful interaction between institutional actors and citizens. The call for a better access to municipal information serves both residents in arranging their everyday lives and administration's efficacy, but furthermore, opens up operations and procedures of municipal organizations and makes them more visible and concrete to residents. In translating governmental actions to residents, the ICT may enable the interaction of rational and bureaucratically organized knowledge of administration with the experiential knowledge of citizens. This might encourage

mutual learning; for example, citizens could learn how government as an organization arranges its functions. Moreover, developing online tools that enhance the continuous and direct communication between citizens and public administration may open a way out of labeling public participation into specific stages of planning and policy-making processes.

Access and retrieval answers two questions that pertain to residents. First, how to find information on public services? And second, how to find the people who are responsible for particular issues within the institutions of governance? From this viewpoint, the function of access and retrieval is both retrieval of governmental *information* and access to *people*, i.e. the city officials whom to contact.

## Tracking and Interpretation

Whereas the question of facilitating information retrieval and access focused on information about specific details for conducting everyday life in the local neighborhood, the aspect of tracking and interpretation covers a more general focus; basically it would serve the civic awareness of decision-making and policy-making processes. The panel members recognized the lack of specific information that the city government used in its decision-making; for instance when making decisions on child care, retirement homes, or health care centers in neighborhoods. Equipping citizens with this information that administration holds important when making and executing decisions could decrease the gap between different available knowledge forms.

Online services that reinforce information interpretation would equip residents with diverse data that would support their capabilities to participate in public discussion and evaluate local decision-making. This type of information would, according to the citizen panel's view, help in understanding and interpreting governmental decisions and their grounds. This can be envisioned to improve the quality of reciprocal citizen–city interaction. Online spatial displays make it possible to use dynamic simulations that can illustrate long-term spatial-temporal information simultaneously binding it to neighborhood localities. For instance, representing temporal changes with visual and spatial tools combines different ways and forms to process and locate information. One panel member brought up an illustrative example:

"You could present on a map where families with children and the elderly live. At the same time, you could design a function to the map from which you could see the development of the population as years go by. This would be useful information when you plan for example where to locate nurseries."

In addition, regarding information tracking and interpretation, the citizen panel came up with the idea of a 'vigilant announcement system' that would automatically send email to registered users when a particular issue was under discussion in city government. This system would be maintained by the city administration and the citizens could join in by registering to certain themes and topics that they considered interesting. This kind of service can be seen as helping citizens to 'stay tuned' in governmental processes. (See Heikkilä & Lehtonen, 2004.) This would also encourage people to engage with issues. As political scientist Hajer (2003) has suggested, citizens are political activists on 'stand-by', meaning that nowadays it is often policy-making that triggers active citizenship. The kind of service that the panel suggested increases the potential for igniting citizens to act. This kind of system has been recently adopted by the City of Tampere<sup>15</sup>.

The information that was thought to serve the task of knowledge interpretation was interlinked with local spatial development trajectories, which was the kind of information that citizens usually have no access. The panel members addressed the need to increase awareness of the information and knowledge that the public decision-making leans on, as becomes clear from the comment of one member of the panel:

"The outlook and awareness about the aspects of one's own neighborhood would broaden and issues would be easier to discern."

Lack of knowledge is not a welcome situation in the interaction between citizens and public administration:

Both enter communications loaded with hopes and expectations based on a history of earlier experiences, understandings, and assumptions about the other and certain self-images, strengths, and vulnerabilities. Lack of knowledge inevitably results in an ascription of motives – almost always negative motives, such as stupidity, obstinacy, duplicity, or carelessness. (Wagenaar, 2007, p. 28.)

Making the privileged information of the administrative apparatus accessible to citizens would serve the aims of participatory democracy. Keeping both decision-making and the implementation of decision at the administrative or privatized level often results in strong opposition from citizen groups or administrative inertia (Wagenaar, 2007). The opposite strategy, we believe, would encourage the interest of the neighborhood residents in political affairs and policy-making. That is, the translation and the delivery of information that has functioned as a basis of decisions, strategies, and policies might help to decrease tensions and ambiguities that result from incapability to create shared meaning across different social worlds.

The tracking and interpretation aspect tackles the question: What is going on here and why? The vigilant announcement system would answer the first part of the question by informing citizens whenever they need to be aware of issues in which they might have or develop an interest. The second part of the question is about translating information the citizens feel they need to consider in deliberating on issues concerning their neighborhood. To take legitimate part in such deliberations, residents want to have technical-rational information that institutions of governance use in their decision-making. Here, online spatial displays were regarded useful in acquiring technical-rational information that could be combined with local knowledge to expand the capability of citizens, particularly residents, to act in the context of governance.

#### Production and Sharing

The panel's third point was that citizens should be legitimate actors in creating and producing local knowledge and in participating in the governance of the city. They highlighted situations in which citizens could use the Internet to provide authorities with neighborhood-level experiential information that the administration perhaps would not be aware of, e.g. issues that would need instant repairing or maintenance but might be too local to be detected otherwise within a vast organization. The panel drew heavily on the idea of equipping citizens with possibilities to illustrate and visualize their messages with photos, pictures or marking places on an online map. This, they argued, was to improve interpretation of civic knowledge at the city-government level. Following the citizens' logic, this service would help in making civic messages and knowledge clearer to civil servants. Moreover, this would facilitate the mediation of civic knowledge to civil servants. The panel also sketched an idea to combine written and visual messages when contacting civil servants:

"A map could be produced of the surroundings of Tesomajärvi Lake, in which one could design for instance paths and lighting."

Another member added that:

"In addition it would be good to attach photos of the area, for example photos of defects."

	Access and Retrieval	Tracking and Interpretation	Production and Sharing
Relates to questions	How to find information on public services? How to find administrators that are responsible for particular issues?	What is going on here and why?	How to let administrators know what is going on in the neigh- borhood? How to influence the future development of the area?
The function of online spatial displays	Arrange information in a mean- ingful manner	Aiding translation of technical- rational information of public administration for citizens	Assisting translation of local experiential knowledge to the use of public administration
The role of online spatial displays	Give access to information and people from a familiar viewpoint	Give means of evaluating decision-making	Give multimodal means of producing input
The type(s) of online spatial display(s)	Interactive maps	Dynamic simulations and inter- active maps	Interactive maps with the pos- sibility to user produced input

Table 1. Three mechanisms of translation

They acknowledged that it is sometimes difficult to express one's ideas, questions and other messages in a simple format, such as written text. They imagined the use of various communicative means could prevent possible misunderstandings as citizens' experiential knowledge was interpreted by the administration.

An arena for geographically referenced public discussion is an example that was developed partly based on experiences from the work with the citizen panel. This instrument was recently used in a land use planning process in the city of Tampere. Generally, the geo-referenced public discussion forum enabled multimodal means of public input (Bamberg, 2010). It consisted of aerial photographs that were displayed on the Internet. Users were able to move and attach graphic icons to the aerial photos. They could also make conjoined written commentaries with the icons. Users could retrieve earlier comments and express their opinions and counter-arguments to form threads of public discussion. The application was used in an early planning phase to start discussion on the 'character' of the neighborhood. The discussion was then used in planning to develop a vision for the area. (Ibid.) The previous example concerned the context of spatial planning. Another example related to everyday life is the use of online spatial displays for knowledge production. This refers to the City of Tampere service for informing about streetlight blackouts<sup>16</sup>. The system allows users to inform the administration about broken streetlights by producing a spatial interface with a map to point the exact location where the light has gone out.

The function of production and sharing is to give input into governance related processes. This contains both long-term developments, such as policy-making and planning processes, where input focuses on producing knowledge for these processes, and continuous interaction with administration that 'keeps the business going on as usual'. Hence, the aspect of production and sharing concerns the questions: How to let administrators know what is going on in the neighborhood and how to influence the future development of the area?

Table 1 summarizes the above discussion on how online spatial displays as translating devices influence interaction between residents and administrators, officials, and planners, through three mechanisms of translation. Accordingly, it illustrates aspects that may facilitate the city governance – as a system of fragmented knowledge–to harness complexity with aforementioned online tools.

#### Online Spatial Displays as Translating Devices

Many studies suggest that local experiential knowledge of citizens is needed to address the problems resulting from the complexity of contemporary governance. Our study underlines that there is a need to find ways to provide technicalrational information for citizens in illustrative forms that make sense from the perspective of residents. This would aid them in reflecting their own experiential knowledge with patterns of information that policy-makers and administrators use. We stress that it is not a question of simple transfer of local knowledge into (technical-rational) decision-making, or vice versa, but blending information from both. Actually, these two ways of knowing are not previously determined entities but created actively in practices. Knowledge is created in situations through practices and action of particular social worlds (Knorr-Cetina, 1981; Haraway, 1991; Cook & Brown, 1999; Wagenaar & Cook, 2003). In specific situations certain kind of knowledge enables action; this means that situations define valuable knowledge. Usually in governance knowledge is formulated and presented to serve previously determined aims of action.

Although we have made a distinction between experiential knowledge of local residents and technical-rational knowledge of city governance, we are not saying that situated local knowledge is reserved only for residents. We all are residents of some particular neighborhoods. Here, the keyword is particular. Although representatives of city government, officials, and administrators do have local knowledge related to neighborhoods where they themselves live, they cannot be experts of other neighborhoods because knowledge of those other neighborhoods is tied to daily practices. Certainly part of this kind of knowledge could be acquired by visiting localities and 'monitoring' local environments by walking around and taking part in the practice of everyday life. However, research does not show much evidence of this kind of knowledge acquisition, as Wagenaar (2007, p. 27) notes: "Time and again we find that the general rule is that elected officials and professional administrators are not well informed about the slice of reality that they deal with or about effects that their policy measures have on the ground."

We have illustrated how more attention should be paid to the form of illustrating and presenting information in interactive processes and knowledge production of city governance. In this interaction, spatial displays such as interactive maps proved to be useful means to present and visualize knowledge resources that different actors in a city environment utilize. For example, maps fit well to the bureaucratic approach of administration because they offer a general overview of spatial entities, such as neighborhoods. This kind of overview is not how residents usually approach issues of their neighborhood. However, even if locations in maps are viewed from above, from citizens' point of view they still provide means to point out specific details in them and thus a possibility to capture local particularities. Online spatial displays seem to provide a way to situate larger issues into the neighborhood and to the particular and vice versa, this way facilitating taking into account different scales of issues. Our experiences with the panel show that the panel members were able to set their ideas into wider scales. Although the ideas were connected to practical, everyday life and were pragmatic in nature, the citizens saw the importance of participatory tools from a broader perspective. This supports Wagenaar's (2007, p. 32) finding that residents approach problem solving with considerable pragmatism that addresses "a way of dealing with issues in which concreteness and a continuous awareness of complexity go hand in hand".

While our case study resonates well with Wagenaar's findings, it also points out that technicalrational discourse is so strong in governmental decision-making that citizens feel that if they are to be credibly considered within city governance, acquiring this kind of information is necessary. But what is the moral obligation of citizens to acquire technical-rational of information to widen their knowledge base? To put it in another way, are citizens the ones who need to be the experts, the ones who have the most comprehensive grasp of the issues? Another question is whether it is ethical to make all the information public and at what level of detail. By this we refer to things such as demographic data and issues related to the development of an area. The ethnic origin of residents could be used as an example here; e.g. the example given earlier about the development of black people's residential neighborhoods. Another example would be geo-demographic information about the income of residents. These obviously raise questions of the limits of transparency.

In their elaboration of the system of fragmented knowledge concept, Bruni et al. (2007) stress the importance of discursive practices to align different parts of the system. In our case, we bring up the possibility of online spatial displays to facilitate the alignment by three mechanisms of translation. In order to lend support to smooth interconnectedness between different actors in city governance, which is seen as a system of fragmented knowledge, information should be translatable between different social worlds. The citizen panel thought that spatial displays, such as interactive map interfaces, present a suitable format in connecting residents and administration. Administration could make its knowledge more approachable and understandable by utilizing visual communication tools, for example maps, as translating devices between its organization and residents. In this sense, practicality of the spatial view allows localities to function as a starting point for discussions in participatory and interactive processes and support mutual knowledge production.

#### FUTURE RESEARCH DIRECTIONS

The ICT, and especially spatial technology, are evolving rapidly at the moment. Their development is often directed at economic or entertainment purposes, such as offering users the possibility to geographically reference their holiday photos. However, any technology is a social-material arrangement, a heterogeneous network that is performed into being (Law, 1994). This means that new technologies, such as Google's street view, even if controversial, may potentially provide ways to support more inclusive governance with a wide knowledge base. There is a need for further research of these spatial technologies as they continue to develop. It needs to be stressed that the three mechanisms of translation of online spatial displays presented in this chapter most probably are not the only mechanisms upon which spatial technologies may operate in participatory settings. As new technological innovations emerge and their implementations are enacted in various settings, new mechanisms may become equally or more valid. We hope that these will not go unnoticed and wish that the mechanisms of translation presented in this chapter will inspire future research to find other mechanisms and elaborate on the ones we have brought up.

Our case has focused on the viewpoint of residents in producing and articulating their local knowledge, as well as on their apprehension of technical-rational information that is used in policy-making and planning. However, for a more comprehensive understanding, further research is needed to clarify how planners and administrators incorporate local knowledge in their practices when translating devices are utilized. In addition, we argue that instead of emphasizing the division of different forms of knowledge a priori, we should try to understand how they emerge and blend in situated practices and what kind of possibilities and constraints surface as they are enacted. Furthermore, focus should be paid on studying how these different forms of knowledge could best be

utilized in different contexts and circumstances in order to use them as accompanying each other instead of only emphasizing the differences of their origins. Therefore we call for more concrete methods for handling and bringing knowledge forms together. In our case, we utilized maps and GIS data to interpret citizens' experiential knowledge to the language of civil servants, such as urban planners. Similarly, means for visualizing or representing governmental or administrative communication could be explored.

The citizen panel's work has also raised the question of transparency and access, namely what kind of information should be made available. This is rather an ethical question, as more information can increase trust between different actors. However, certain kinds of information could affect neighborhoods' image, endanger equity and lead to conflicts or unwanted development of particular neighborhoods. This is a question of detail, as at some point information can be too specific<sup>17</sup>. However, general guidelines on this issue would be difficult to make; at what point information becomes too specific is a matter to be decided in practical situations. Research concentrating on this aspect would be most welcome.

#### CONCLUSION

This chapter has discussed how interactions between citizens and city government could be supported with the aid of ICT. The question of how certain e-governance applications could assist the translation and movement of different forms of knowledge in governance was brought up. In the case introduced above, interactive online spatial displays were found useful in this task. The case study suggests that online spatial displays, as *translating devices*, have potential to facilitate meaningful exchange of information by three mechanisms of translation: 1) by giving access to information from a viewpoint familiar to residents, namely their neighborhood, instead of organizing information according to administrative borders and sectoral logic, 2) by aiding the translation of technical-rational information of public administration for citizens with illustrative visualizations, and 3) by giving residents multimodal means of articulating information to administrators and planners and thus aiding the translation of local experiential knowledge for the use of public administration. Accordingly, these mechanisms serve to increase interactions within the system of governance and hence knowledge sharing between different actors.

The case study confirms previous findings that citizens approach issues in a holistic manner, and that they are able to work on complex issues and want to see different aspects. They approach issues with considerable pragmatism, in a manner in which practical orientation to situation specific problem solving intertwines with other larger problems and contexts. As Wagenaar (2007) found out in his study: "Over and over again, citizens demonstrated that a focus on practical problem solving went hand in hand with an awareness of the permanence of the problems in their neighborhood" (Wagenaar 2007, p.32).

This has consequences on what kind of information citizens prefer to use when deliberating on public issues. The experiential or situational knowledge of citizens is often restricted misleadingly to civic experiences only. However, people's knowledge is not only limited to their everyday experiences but builds on a vast combination of experiences and 'rational information' that is enacted in changing situations and based on habitus (Bourdieu 1990). Residents are capable of attaching their situational knowledge to a larger framework with various practices. In addition to local experiential knowledge, they would like to utilize technical-rational information that decision-makers use in their work. This kind of information should be available in a form that is comprehensible without extensive education.

One of our central ideas in the Tesoma project was to ponder with citizens how the Internet and

GIS could advance possibilities to act online as a democratic citizen. Therefore, at that time the starting point differed from the general trend where discussion of the development of information society development was focused on expert level of governmental and business worlds. Digital innovations were developed more from top-down, based on governmental needs, which did not recognize the potential of local knowledge of the residents. Increasing governmental transparency by providing citizens with wider access to municipal information fulfilled the democratization requirements for governance (e.g. Hague & Loader, 1999; van Dijk & Hacker, 2000, pp. 214–215).

New forms of digital applications during the past decade have shown that ICTs may take a central place in social practices. If the early innovations were developed more from governmental interests and were top-down-driven, the process has now, after the expansion of web 2.0 and diverse social media applications, turned to emphasize openness and peer-networks in developing practices of online activities (see Bowman & Willis, 2003; Bruns, 2005; Gillmor, 2004), as well as to incorporate versatile technological tools that in the early 2000s were inaccessible for ordinary people.

Despite the recent development, we think that many of the questions that were raised within our empirical case study are still relevant in discussing the area of participatory e-governance. We stress the need to move forward from discussing access and information delivery to analyze practices of knowledge production, presentation and interpretation. We argue that posting more information on the web to improve organizational transparency is not enough. More intensive attention should be paid to *the form* of access, meaning how information is organized and presented, which we have demonstrated by taking interactive online spatial displays as a focal point.

To enable encounters between different ways of knowing, processes of governance should become sensitized to the experiential knowledge of citizens and to the ways they express their opinions, stories and hopes about their everyday environment. Furthermore, citizen participation in governance needs to arrive at credible results. So far it has been rather difficult for citizens to access knowledge produced in policy-making and planning and, thus, to follow decision-making processes. To become legitimate and responsible participants in city governance, citizens want to hear and see the effects of their participation; they need to receive feedback on their input (see Coleman & Blumler, 2009).

E-democracy initiatives have been criticized for being too often developed in the name of convenience, which has made these developments rather hollow, if they are evaluated based on the real aims of democratic communication. It is not a question of instantaneity or easiness but a question of mutual recognition (Coleman & Blumler, 2009, p. 167). In this sense, we would call for accountability of city governance when it comes to citizen engagement and democratic interaction. We believe that this accountability is better achieved when interaction between different actors is increased, for example, by the three mechanisms of translation we have introduced.

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## **KEY TERMS AND DEFINITIONS**

**Complexity:** Found in systems having emergent properties that are productions of the interactions between its parts. Accordingly, these systems are more than the sum of their parts.

**Governance:** The activity of governing through various forms of formal and informal co-ordination of interaction between private and public actors.

**Local Knowledge:** Knowledge that is generated mostly through experiences and is made possible because of knowers' close exposure to context.

**Neighborhood Participation:** Various practices that include continuous but fluctuating interaction and collaboration between institutional and neighborhood actors.

**Online Spatial Displays:** Multimodal means of representing, generating, and transforming spatial information on the Internet; for example interactive maps.

**System of Fragmented Knowledge:** Heterogeneous settings that consist of people, symbols, and technologies. These settings enable learning through interaction between the parts of the system. **Translating Device:** Means that facilitate interaction and translation of information between different actors.

#### **ENDNOTES**

- <sup>1</sup> For the purpose of this study, a general definition from Wikipedia is sufficient: Geographical information system "is a set of tools that captures, stores, analyzes, manages, and presents data that are linked to location(s)." Retrieved November 15, 2010, from http://en.wikipedia.org/wiki/Geographic information system
- <sup>2</sup> The concept of social world has been developed by Strauss (1993). A concise definition would be: "In each social world, at least one primary *activity* (along with related clusters of related activity) is strikingly evident; such as climbing mountains, researching, collecting. There are *sites* where activities occur; hence space and a shaped landscape are relevant. *Technology* (inherited or innovative modes of carrying out the social world's activities) is always involved." (Strauss, 1993, pp. 212–213.)
- <sup>3</sup> *Laboratory Life* from Latour & Woolgar (1979) is a seminal early work.
- <sup>4</sup> See also Flyvbjerg's (2001) discussion on how Galileo's experiment from the leaning tower of Pisa can be taken as a single case study that is able to reject Aristotle's law of gravity.
- <sup>5</sup> The city of Tampere, with a population of c. 210,000, is among the biggest cities in Finland. The town is located in southern Finland approximately 200 kilometers north of the country's capital, Helsinki. The neighborhood of Tesoma stands 8–10 kilometers from the city center and has a population of c. 15,000 residents.
- <sup>6</sup> The project was active in 2002–2003.

For instance, in Cumbria, North England, drawing on scientific knowledge after the nuclear explosion in Chernobyl caused an economical crisis for local sheep farmers.
Instead of acquiring knowledge that would consider local practices, government in Cumbria leaned on rational, scientific knowledge at the expense of knowledge of farmers that knew the situation through practical work in local circumstances (Irwin & Wynne, 1996).

7

<sup>8</sup> The panel consisted of female and male participants whose age varied from 35 to 65 years. Their educational background was diverse. To name a few, the panel had a driving school teacher, maintenance man of public facilities, a photographer, an office worker, a priest, and an electrical engineer.

9 One of the central means for the action of the citizen panel was the Internet. The panel had a website at the local civic portal called Mansetori, which aimed at creating public discussion and communication between city government and residents of Tampere. The panel's website was designed to help in making citizens' intentions public and to communicate its activities to city residents. The Internet also functioned as a site for collective memory building of the citizen panel as its actions were archived in a process-like manner at the website. The panel's modes of public action have been analyzed previously elsewhere, see Heikkilä & Lehtonen (2003).

<sup>10</sup> Invitations were delivered to 2662 local households of Tesoma. Approximately thirty residents were keen on joining the citizen panel but only twelve actually showed up when the panel started two months later.

<sup>11</sup> In addition, the panel had various meeting places, such as the university and the office of the project partner, that is, the regional development unit of the City Tampere. One of the more peculiar places for meetings was the Tampere City Library's Internet-Bus called Netti-Nysse (see Harju, 2004). Different settings were provided to evoke discussion from new aspects and to build trust between actors.

- <sup>12</sup> In Finnish land use planning, the general development plan gives guidelines for future development and land-use of specific areas, such as neighborhoods.
- <sup>13</sup> Traditionally, the GIS data has been accessible solely by experts. Recently, the potential of spatial information combined with the power to visualise that information on maps has been acknowledged in developing dialogical means of participation (see Sieber, 2006).
- <sup>14</sup> Four useful questions guided the formulation of the requirements specification: 1) Who are the users of these online participatory tools? 2) What kind of functions would people need or require? 3) What would be the value of the proposed functions? And 4) what would help in illustrating or presenting information? At the time of conducting the study, the authors knew that these questions were used in usability design. However, they were not aware that the questions are actually outlined in the ISO 13407 Standard, *Human-centred design processes for interactive systems*.

- <sup>15</sup> There are also other examples, e.g., http:// www.planningalerts.org.au/, http://www. planningalerts.com/, and http://www.twitterplan.co.uk/. Retrieved November 3, 2010.
- <sup>16</sup> Similar service has been designed in Manchester where Environment-on-Call (EoC) system lets users to inform the local government of defects in the neighborhood (see Kingston, 2007).
- <sup>17</sup> For example, there is an online interactive map of insecurity (http://www.mapadelainseguridad.com/, retrieved November 15, 2010) representing locations of criminal action in the City of Buenos Aires, Argentina. This web application lets users mark on a map locations where they have witnessed for instance armed robberies or sexual abuse. It seems obvious that this kind of information should be available. However, this may increase the fear and feeling of insecurity among residents.

## Chapter 9 E-Governance in Slovenia: National Assembly and its Website as a Tool for Active Citizen Participation

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### ABSTRACT

Modern communication technology in principle makes political participation feasible. Information, consultation, and participation of citizens in the working of their highest political body – a parliament-should be easier than ever. This chapter analyses if this is really so on the case of Slovenia and its parliament, the National Assembly. Parliamentary website of the Republic of Slovenia is studied in terms of usability, usefulness and utility those are the key criteria in discussion about website performance. The analysis of e-democracy takes into account citizen participation in the legislative procedure, enabling direct communication with the members of the parliament, possibilities for citizen initiatives, and procedure and content transparency at each stage of the decision-making process. The chapter reports on limits of the current website of the National Assembly of Slovenia and proposes guidelines for better use of new technologies in the political process and for improving user experience.

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#### INTRODUCTION

The purpose of this chapter is to analyze the existing web site of the National Assembly of the Republic of Slovenia and to assess possible, reasonable and necessary upgrade with new web technologies, to make the page user friendly and more e-democratic. The starting point is that web pages of such important political bodies reflect country's attitude towards civic engagement and public's participation in decision making.

The study is based on qualitative methodological approach and it was executed in two phases. Each dealt with three thematic sets: web page of the new generation, usability of the web page and the web page as a source of e-democracy. The first phase was concentrated on theoretical analysis, analysis of similar studies in other countries and finally on the analysis of good examples of parliamentary web pages worldwide. Students of three major Slovenian universities took part in the second phase of the research. All together 122 students contributed. The research was based on their 'daily expertise' of internet knowledge and usage and their already gained academic knowledge to explore the three aspects mentioned above (e-democracy, usability and new generation web technologies) through the existing web page of Slovenian parliament.

#### CITIZEN PARTICIPATION IN E- DEMOCRACY

The study was founded on guidelines on e-democracy and e-governance provided by various international organizations (e.g., Council of Europe 2009, the Council of Europe Recommendation 2009, CAHDE 2009, UN 2005, 2008, and OECD 2001, 2003, 2007). In its 2009 Recommendation on electronic democracy and the accompanying explanatory memorandum (hereafter Recommendation), the Council of Europe attempted to define in detail the notion of e-democracy and called on its member states to commit themselves to its active promotion and implementation in (their) local environments, while also including the guidelines for a successful inclusion of all participants in political processes with the help of ICTs.

E-democracy, states the Recommendation, is primarily democracy in which ICTs are employed as the (technological) support to enhance the operation of democratic institutions and democratic processes. Its fundamental objective is the electronic support of democracy. However, even if the efficiency of e-democracy depends on adequate use of ICTs, better and more technology cannot by itself ensure better and more democracy. While it creates a possibility, it is not a solution in itself.

E-democracy exacts comprehensive information, enables dialogue, communication and consultation, as well as continual creation and maintenance of an open public space that enables citizens to participate, co-decide and co-shape public policies. E-democracy does not exclude the media but presupposes their active involvement in public life. The task of the media is not only to exercise critical supervision over the operation of power centres, but also to provide a forum for public debate and to defend the interests of citizens in the public sphere. Social cohesion is closely connected with social capital possessed and created by individuals (Putnam, 2000, pp. 22-24). In this respect, it is participation (rather than representation) that helps citizens create social capital. The decline in the participation in civic (and consequently political) life is, according to Putnam, a consequence of the lack of social capital.

The Council of Europe Recommendation also includes a "guide" on generic tools and policies for electronic democracy (see Krimmer et al., 2009). To this we should add the control list for the introduction of e-democracy tools (Kozeluh, 2009) and the planned approach to e-democracy (Rössler, 2009). These make three of the five framework guidelines that accompany the 2009 Council of Europe Recommendation. On reviewing more than 100 e-democratic platforms, Krimmer and

his collaborators (2009) proposed 33 tools and policies for efficient and all-encompassing implementation of e-democracy. Rather than describing in detail individual tools or policies, we will try to establish how sensible the "inventorying" and "standardization" of e-democracy is. Although the Recommendation states that e-democracy is primarily democracy supported and enhanced by ICTs, a review of the lists of tools (those included in the Recommendation itself plus framework guidelines) suggests that fundamental democratic processes and postulates are put on a par with institutions, branches of government, governing techniques and concrete tools. However, the key concern when implementing e-democracy should be how to ensure the most efficient use of ICT to democratize political processes, i.e. to activate state institutions and citizens. The introduction of e-tools therefore makes sense only if the fundamental goal is to enable everyone, under equal terms, to participate in the decision-making processes involving issues of the public interest (Fishkin, 2009). Accordingly, there is no difference in content between online and offline democracy.

Since the subject the analysis is the website of the National Assembly of the RS, the notion of e-parliament should be defined. The basic goal of an e-parliament is to involve citizens in its work (see also OECD, 2001). Although e-parliaments are based on the principles of representative democracy, they can offer efficient tools that have the potential to change the culture of (political) representation by introducing more inclusive, consultative and participative forms of democracy.

In her analysis of the influence of the Internet and other ICTs on the work of four parliaments (British, European, Portuguese and Swedish), Cristina Leston Bandeira (2007) draws attention to the fact that the role of a parliament exceeds that of representing political interests in a specific society (pp. 655-674). In addition to the representative and legislative roles, its tasks also include resolution of conflicts, education, legitimization and transparent supervision. ICTs are not meant to replace classic interpersonal communication between MPs and citizens, but to contribute to the shaping and strengthening of a new democratic architecture of the public sphere that should attract as many citizens as possible and provide an adequate environment for public debate. The key components of effective e-democracy are, in our opinion, citizen participation and citizen activity.

E-participation denotes all forms of technologically supported communication for active inclusion of citizens, be it only an exchange of opinions and viewpoints, or interactive participation in the preparation of proposals, or even participation in decisions on an equal footing (Pičman Štefančič, 2008, pp. 43). E-participation implies not only cooperation, but also citizens' involvement in the decision-making process. Networked government, which is believed to be characteristic of today's public sphere dominated by "mass personal communication," therefore engages the public, the private sector and civil society on an equal footing. For Castells (2009), it is through mass self-communication that individuals create content, direct its dissemination and make selective use of it. Although it is no longer possible to speak about the traditional concept of the public, it is still mass communication by virtue of its nature, where many individuals communicate with many others (pp. 70-71).

And yet, although ICTs do enable greater inclusion of citizens in the public sphere, technology alone cannot ensure the achievement of the desired goal. Citizens' activation largely depends on the political will and activity of all state institutions (Trechsel et al., 2003). E-participation will not happen by itself. It is necessary to create conditions for its promotion, but we cannot rely on technological development alone to create such conditions. There must be a political decision that citizen participation in decision-making processes is one of the main goals of democratic politics. E-democracy and e-participation are a result of carefully planned state politics. If we start from this fundamental assumption, i.e. that adequate state politics is a prerequisite for greater citizen participation, and then a brief overview of guidelines given by international institutions for the shaping of adequate policies seems to be in order (UN, 2005, 2008 and OECD, 2001, 2003 and 2007).

The UN 2008 Report on the development of e-governments introduces an analytical shift from e-government to connected or networked governance of public affairs. When working towards an integrated approach to government, the focus should be shifted from those governmental initiatives and policies whose objective was to deliver services to citizens by means of ICTs to the approach in which emphasis is placed on the value of services. Put differently, the task of networked or connected governance is to replace the traditional model in which services to citizens were delivered using ICTs with the new model of public service focusing on the higher quality of services and integration of citizens into the shaping of these services.

The strengthening of networked governance exacts a well-orchestrated operation of all state institutions while taking into account that the primary goal of politics as a public service is to satisfy the needs of citizens. The understanding of politics as a service, or as a public service requires, in our opinion, a thorough consideration given the dominant model of representative democracy. Unfortunately, no such consideration can be found in international documents mentioned above. The UN report (2008) states that ICT-enabled connected governance has internal and external implications. It is obvious from the report that citizen participation is just one of the external consequences of enhanced delivery of services in networked governance (p. 7). In our opinion, citizen participation should be a goal rather than a consequence (i.e. equally an internal and external benefit) of a more efficient governance of public affairs. It is also necessary to emphasize in this connection that a more efficient provision

of services in itself does not automatically imply better democracy.

The UN report also contains the E-Participation Index, which indicates the readiness of a state to include citizens in decision-making processes with the help of ICTs. Slovenia occupies the modest 55th place on the list of 192 world countries; within the EU, it lags behind 14 other EU member states. However, although its online services intended to encourage citizen participation in decision-making processes are comparatively less developed, the e-government readiness index for 2008 puts Slovenia at the 26th place, meaning that it has retained the development level achieved in previous years (26th place in 2006, 27th in 2004 and 28th in 2003) (Pičman Štefančič and Delakorda, 2008, p. 8). This data clearly indicates that there is no direct correlation between development of e-governance (a more accessible and more efficient state administration) and development of e-democracy.

Citizen activity is important mechanism in successful governance through e-democracy. The figure explains the levels of efficient e-democracy. E-democracy is related to the interaction between the state and citizens at the information, communication and participation levels.

Interaction between the state and citizens can be illustrated using a three-tier triangle comprising the information, communication and participation levels. The information level is characterized by one-way information flow, i.e. from the state towards citizens. The state provides information that it deems important for citizens (or information that it must provide by law). The information level only rarely includes citizens' response, meaning that citizens are not given the opportunity to co-decide what information will be accessible. Citizens' feedback occurs at the communication level. However, this feedback has features that are more characteristic of assistance (with the assistance options being determined by the state) than of co-decision or co-governance. The third level involves a two-way relationship between

the state and its citizens, and among citizens themselves (horizontal participation). What is important is that citizens are given not only the opportunity to receive answers to the questions placed on the political agenda by the state, but also an opportunity to decide which issues should be prioritized in public debates. In such a case, citizens truly participate in the public sphere and have the opportunity to co-decide and discuss the important public issues. The participation level in the interaction model between the state and citizens can be described as Vita activa-activity dedicated to public affairs (Arendt, 1981). Individuals who have no possibility for public activity, or have no formally established public space, are, as Hannah Arendt (1981) argues, áneu lógou, deprived of speech. This is not to say that they cannot speak, but they cannot talk to each other, confront their opinions and engage in public life through debates. Only slaves and barbarians lived in the sphere of privacy, because they were denied access to the public sphere (Arendt, 1981). Modern citizens, who are subjects of talk in the sphere of politics, those who are talked about but whose speech has not been formally recognized, are modern slaves and barbarians - private individuals deprived of speech.

### USABILITY OF WEBSITE AS AN IMPORTANT TOOL IN E-GOVERNANCE

Internet has potential for making citizen participation in public life easier, deeper and broader. It makes access to public information cheaper and instantaneous, feed-in and feed-back of citizen initiative and opinion smoother. Besides hipertextuality interactivity presents an important feature of the World Wide Web. Interactivity is crucial to establish a relationship between a provider and user of a web page. With the help of interactivity user co-creates the web page, while the institution, which set the web page up, gains an opportunity to acquire important information about users' wishes and thoughts on the subject or product (Jensen, 2000). Feedback is crucial for every company or institution with a web page and the same goes for parliaments and governmental institutions. Feedback is based on three levels. The first level represents simulative response, the second level receptive response and the third level reaction on the response. Simulative response is every action or possibility to take action given to the user to make contact with the institution. Receptive response gives the institution an opportunity to save all feedback information received, while the last step presents a reaction to that response. The website of Slovenian parliament is not active on any of these options. Its web page does not enable feedback as we discussed it above.

Usefulness of internet websites is defined in many ways. Nielsen (1993) defines usefulness as a multidimensional characteristic of user interface that is affected by five attributes. These are: learnability, efficiency, memorability, errors, and satisfaction. We can recognize usefulness trough two basic components: utility and usability (Nielsen, 1993). Utility is understood as an answer to a question if the system serves the needs of its users, while usability answers the question how successfully can users use the system provided by the web page. Kragelj (2003) analyses web pages trough three connected terms: (1) Usefulness as functionality of a web page. A web page is useful if it satisfy all the planed and wanted goals for both involved parties. In this case functionality does not mean technical characteristics, but it has a broader meaning because it brings together utility and usability. (2) Utility is a characteristic which mean that a web page enables performance of certain functions. Utility is capability of a web page that tells us if the web page enables what it was set up for. (3) Usability is a characteristic connected with how well; fast and successful users can use page's functions. Usability mostly concerns the interface and its success in leading the user through the application.

Usefulness is above all the characteristic that has to account for different aspects and goals of functioning, to enable satisfying usage and search for information. Jacob Nielsen (1998) claims that there is web pages user interfaces of World Wide Web, which is based on communication-interaction relationship between a man and computer. Essential property of every user interface is its support of user's tasks. Usefulness of a web page is measured with user's ability to reach his goals and execute his tasks, based on an interaction with the web page, fast, without unnecessary mental efforts and with tolerance of possible mistakes, which all leads to satisfying results (Kragelj, 2003, p. 638).

Redish (2003) indicates six features that should compound a good web page: informative, actuality, credibility, pleasantness, simplicity, speed and visiting (p. 50). This means that the user can find all the information he was looking for, what is more these information has to be up to date and credible. The web page has to give positive first impression; it is pleasant, attractive, without unnecessary disturbing visual elements, with properly used colours and easy to read typography. Navigation trough the web page has to be simple, logical and efficient. The same goes for the design, which should be neat and unobtrusive. The user should be able to know at any time where he is, inside which menu or sub-menu, inside the structure of the page. The web page should also work fast, not to make the user wait. If longer download is expected, the user should be beforehand notified. High number of visits is the first sign of a useful web page, it means that the user's needs were met and he is more likely to visit the web page again.

World Wide Web and especially new internet technologies, which enable their users' active participation, collaboration and even creation of contents, carry extensive democratic potential. In our research we took into consideration the key elements of active national politics, established by OECD (2001) which fortify the relationship with citizens and enable active citizenship (pp. 19-20).

#### PARLIAMENTARY WEBSITE IN SLOVENIA AS A COMMUNICATIVE MECHANISM FOR CITIZEN PARTICIPATION

A comparative analysis of several governments' websites in the EU (a report on e-democratization of parliaments and political parties in Europe, Treschel et al., 2003) shows that one-way information provision and two-way communication between the state and citizens are quite developed components of these e-democracies, while complex communication involving discussions and consultations on e-forums, which seems to be vital for democratic participation, has not yet developed to a substantial degree (p. 19). The analysis of the website of the National Assembly in Slovenia has shown that the range of information and communication e-tools provided is wide, while e-tools necessary for participation are practically absent.

Accordingly, it is possible to expect that edemocracy will begin to move into full swing within those areas that provide new forms of participation in the public sphere (the participation level). One of the main mistakes when introducing e-democracy is the assumption that use of e-tools will grow even within the areas that do not promise greater participation in public life. The key factors enabling efficient implementation of e-democracy are giving political power to the public and strengthening its critical and control functions. Democratic government does not only ensure transparency of its operation (the public sphere in the sense of visibility and accessibility), but also bases its decisions on the critical assessment of public opinion (Habermas, 1974, p. 55).

Despite the beneficial effect of ICTs, citizens' political and social activity has been steadily declining over the past years. Norris (2010) writes about the phenomenon of "critical citizens" who are ever more sceptical and disapproving of the operation of political systems and the fundamental institutions of representative democracy (primarily political parties, parliaments and governments), but at the same time strongly supportive of democratic ideals, values and principles (p. 9). One characteristic of this phenomenon, Norris establishes, is a tension between the (low) evaluation of political performance and the (high) evaluation of democratic principles. According to the findings of the Politbarometer survey (June 2009) conducted by the Public Opinion Research Centre, Slovenian citizens have most confidence (measured on the 1-5 point scale) in the President of the RS (49%) and the military (47%), but are highly distrustful, well above the average, of the Church and the clergy (48%), courts (44%), political parties (41%), the government (38%), Prime Minister and the National Assembly (32%) (Politbarometer, 2009, pp. 17-18).

When the "critical citizen" distrusts politics and institutions of representative democracy, then the question is not how to bring democracy (and democratic decision-making processes) "closer" to the people, but how to "enforce" democracy on politicians. As J.S. Mills (1974) wrote in his work On Liberty more than 150 years ago that the worth of a State is the worth of the individuals composing it.

If e-democracy is democracy in which ICTs are primarily used as the (technological) support to enhance the operation of democratic institutions and democratic processes, the question that remains open is how much technological options change the foundations of representative democracy. Most debates on the introduction of e-democracy revolve around the question of how to ensure that citizens become more involved in the decision process (i.e. which e-tools to use to achieve this). However, in our opinion, the basic question when analyzing any kind of political system is a "Why?" question (Why do we want to include citizens and why is their inclusion important?). When it comes to e-democracy, it is not important to what extent democracy is (more or less) "electronic", but to what extent ICT-supported democracy is more democratic (Davies, 2005, p. 8).

John Keane (2009) argues that today's democracy is monitory democracy. Its typical feature is that a multitude of (unelected and non-representative) organizations continually monitor the operation of all the branches of government and all state institutions. They are continually on the lookout in the name of "people," "the people," "the public," "citizens," "public accountability" and the like. These new forms of supervision have also changed the language and notions of modern politics. Monitory democracy uses the terms such as "empowerment," "stakeholders," "participatory governance," "communicative democracy" and "deliberative democracy," while its tools are surveys, focus groups, deliberative polling, online petitions and audience and customer voting (pp. 689-691).

The power of monitory democracy stems from active use of the media. If representative democracy derived its "communication power" from traditional mass media (e.g., newspapers, radio and television), monitory democracy is deeply embedded in multi-media networked environments where information is no longer a rare asset and communication is no longer the monopoly of media providers. In the age of the abundance of communication, every communication within a public space is a subject of permanent negotiations, compromises and conflicts (Keane 2009, pp. 736–746). In the light of these conclusions, the taken-for-granted glorification of new communication possibilities and the assumption that ICTs bring better democracy become untenable. If we do not challenge them, we may find ourselves mired in banal explanations to the effect that the use or accessibility of tools (i.e. form) could enhance democratic processes (content).

## Citizen Participation Through National Assembly Website

The criteria for democratic political process (Dahl, 1998) are effectiveness of participation, voting equality, control over the agenda, equal opportu-

nity and most important enlightened understanding. To realize all the steps of democratic political process, education and awareness of citizens has to be considered. This step could be most successfully executed trough the Parliament's web page. This is why educational contents intended to be used by children and youth should have their place on the web page, since the internet is the most frequently used medium inside this focus group. At the same time it also has to be considered, that precisely that segment of the public expects specific and balanced elements of content, visual representation and technical support integrated in the web page.

Moreover, electronic democracy (Hagen, 1996) is perceived as a system where computers and computer networks represents the base for the key democratic functions: information and communication, articulation and political decisions (p. 64). The concepts of tele-democracy, cyber-democracy and electronic democratization build the important relationship between the communication technology and democratic society.

Usefulness of Parliament's web page is considered to be a foundation of modern development of governance in information society. Porte and others (2002) are stressing out the importance of governmental web pages:

- a. They contribute to efficiency
- b. They enable new connections between public and private sector and citizens
- c. They enable higher role of citizens in political participation

In accordance with the aspirations for a high level of useful web sites that include the complex role of users and providers, guidelines for the content and structure of parliamentary Web sites were introduced (IPU, 2009). The first two guidelines relate to the content, the following two to the tools that the site contains and the last two to creating and managing the Web site:

- a. general information about the Parliament;
- b. information on legislation, budget and control;
- c. search tools and information;
- d. tools for communication, cooperation and dialogue with citizens;
- e. usability, accessibility, standards, and language;
- f. management.

According to proposed model, some results collected in analyses of students can be summarized:

- General information about the Parliament's web page is offered in a limited extent. Key information cannot be found on the first page. Difficulties finding the right information occur very often.
- b. To find information on the legislative process, we need quite a lot of time and knowledge.
- c. Search tools, display and dissemination of information would be useful and is very much needed in additional function offered by the web page "frequently asked questions".
- d. A useful web site allows visitors quick and easy interaction with the Parliament. Tools for communication with citizens on the website of are: "dialogue", "contact," "frequently asked questions" and "write to a member of parliament, parliamentary group or to the President of the Parliament." Deficiency in the current tools is that it does not allow direct interaction and the user often do not know if he established the contact with the desired person. Thus, based on the analysis, we can summarize, that all possible options to enable a simpler and more effective dialogue with citizens have not yet been exhausted.
- e. In terms of usability design and form of a web page play an important role, which should reflect the characteristics of target users. Graphic design must be consistent with the conceptual structure. In the opin-

ion of students, the analysis showed visual monotony of the web page and its failure to address certain target groups.

Viegas (2009) based on IPU guidelines presents a model of maturity of parliamentary web pages where he continues with the requirements for the highest level of maturity:

- At least 60% of the citizens must have access to broadband internet connection;
- At least 50% of citizens use the Internet regularly;
- Good parliamentary website (must meet at least Level 4 of IPU guidelines for parliamentary web site).

These requirements have not yet fully met in Slovenia:

- According to Strategy Analytics there is 58-percent penetration of broadband Internet access at the household level.;
- There were 58% of regular Internet users in the 1st quarter of 2008 in Slovenia.

The objective of the implementation of Web site usability analysis was to gather information on the usefulness of web sites based on direct user experiences. The target group of the users was members of young generations who have specific needs and habits. To this end, we described the function of the provider's website (Slovenian Parliament) and needs and objectives that determine the usefulness of the site for our target population.

## Experiences Through Good Practices

Green (2009) points out that it is necessary to clearly define the objectives that we want to achieve with the Web site. The English Parliament has set the following goals for its own website (Green 2009):

- Better knowledge and understanding;
- To increase active participation;
- Improvement of legislation, supervision and decision making.

Vargas (2009) mentioned, as one of the best practices of parliamentary Web sites, defining target groups and the concept sub-pages devoted to a specific target group. In addition to websites dedicated or children, the Portuguese Parliament prepared a special website for some important topics (e.g. the introduction of the euro) (Ferreira 2009). There are some good examples of the segmentation, in particular, to provide (educational) activities for children. Some parliaments are offering interactive games and quizzes that promote learning about the Parliament in a fun way (www. parliament.uk/education/, www.sweden.gov.se).

The website of the Danish Parliament has its own supply of information divided into three levels:

- 1. information intended for professional audiences (employees in the public sector, NGOs, international partners and organizations);
- 2. information for Information intermediaries (journalists, librarians, teachers), and
- 3. Information for citizens (for various interested publics, information tailored for children and youth, voters, immigrants and even random visitors from abroad).

By defining the target groups they 'segmented' contents, which are useful for different audiences.

English Parliament divides their information in several types:

- 1. information on matters of content (thematic presentations, video / audio links on the various options civic participation);
- 2. Calendar of events / developments;
- 3. Legislation (explanations, amendments ...)
- 4. official reports and

## 5. Promotional activities using social networks (Twitter, Flickr, You Tube).

Analysis of information / communication activities of the Belgian Parliament has showed that thy have two target groups: the larger group of 75 percent are so called "professionals" (those who seeking information for professional reasons), the other group of 25 percent other combines different niches of users who are using the web page actively only when certain issues are addressed.

Some parliaments are (such as Portuguese Parliament, English Parliament) also focused on measurements of their web site's performance and usefulness (Green, 2009).

A survey of the websites of several EU member states' parliaments (Treschel et al., 2003) has shown that typical content found there is as follows: the description of the process of political operation, the decision-making process and administrative procedures; the archives of laws, parliamentary sessions and MPs' questions; in addition, visitors are offered access to individual MPs, various projects and daily work of the parliament. Parliament websites are therefore vast archives which, on the one hand, ensure the openness and transparency of political operation and on the other, provide the basis for citizen participation, but do not guarantee the achievement of the goal.

The information on the website of the National Assembly of Slovenia is much the same as that found on other parliament websites across the EU. A missing feature is an option that would enable citizen participation. Moreover, Slovenia still waits for a portal that would bring together all the tools of e-democracy. The official portal of the Republic of Slovenia describes e-democracy as follows:

Your opinion is relevant! E-democracy sub-portal enables you to actively participate in decisions that affect your life. Most importantly, you can influence the making of laws by putting forward your opinion, suggestions, objections and initiatives (e-uprava (E-administration), 2010).

None the less, the website of the National Assembly does not mention e-democracy, but it does provide a link to the website E-uprava/E-administration. This is a kind of a paradox.

Although public administration substituted bureaucracy, that is the rule of nobody, for personal rulers hip (Arendt, 1981), it enables citizens to participate in decisions concerning their "own lives." Similarly the government, where the government by all the people is executed by one person, gave an opportunity to citizens to participate in the public sphere through the project entitled "Propose to the government." By contrast, the National Assembly, the only representative political body which governs on behalf of all the people and for all, is less open to input from citizens than the government or public administration. It communicates with citizens the least of all and remains the least e-democratic institution on the Slovenian political stage. Obviously, the balance of power has shifted from the legislative to the executive branch of government.

#### **FUTURE RESEARCH**

Active citizenship as it is stated in the conclusions of the chapter, is the prerequisite for modern democracy. The suggestions according to the suggested principles could bring greater efficiency in governance and enable participation in democraic political process. The proposed soultions should be implemented in the area of govenance and the future study could brings us the results of implementation to e-democracy. New generation of web users are citizens and voters of the future. Therefore future reserach should focus more toward the new generation and their engagement in e-governance.

### CONCLUSION

One of the basic conclusions that proceed from this analysis is that it is necessary to establish a web portal that would integrate the principles of e-democracy, e-participation and active citizenship. Government (and state) employees are also citizens; web users are both consumers of information and valuable authors, commentators and conveyors of information. Technology obliterated the boundaries between the (traditional) roles of content consumers and content providers, and similarly the clear-cut borderline between the state and the public sphere has disappeared. The employees of state institutions (including politicians, or MPs in our example) are the authors and executors of governmental policies as well as their users.

- This shift (or a leap) from a web portal (where visitors are mainly offered access to existing materials and data) to a political network designed to enable participation (where citizens do not only use information but also create it) should be based on the following principles (adapted from OECD, 2001, p. 75):
- Commitment Political institutions should make a clear commitment to the public that they will create room for public debate and that they will include all interested individuals, groups and institutions. The website of the National Assembly should be an open public space for communication (social media) or an online gathering place for all citizens participating in political debate. It cannot remain exclusively an archive or a library offering access to ("lending") valid legislation.
- Rights Citizens should be aware of their rights and exercise them actively, while the website of the National Assembly should assist them in exercising their rights. Active citizenship presupposes an active

state pursuing active politics, one that educates citizens about politics and educates politicians about civil rights.

- Clarity The layout of such a website should be comprehensible, it should be easy to navigate and user-friendly. Citizens without knowledge about technology should be provided training. Such a website should develop continually and adjust to the needs of citizens – it should respond to these needs in terms of technology and of content. It should provide uninterrupted communication with users.
- Credibility and impartiality All information published on the parliament website should be verified, accurate, impartial and credible.
- Collaboration The website of the National Assembly should be an "entry point to the world of politics" for citizens. All state institutions should provide information support for such a website, rather than the other way round.
- Responsibility Responsibility should be part of every public communication; it should rest on respect for professional standards.
- Active citizenship Active citizenship is not a new communication policy but a new type of communication about politics and within politics. Active citizenship rests on open and responsive policies and options of (co)decisions on the issues of public interest.

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## **KEY TERMS AND DEFINITIONS**

**E-Democracy:** Refers to the use of information technologies and communication technologies and strategies in political and governance processes.

**E-Governance:** Information and communication based interaction between government and citizens.

**E-Participation:** Denotes the citizens' involvement in the decision making process.

**Interactivity:** Explains the feature of World Wide Web to establish the relationship between a provider and user.

**Internet:** A vast computer network linking smaller computer networks worldwide. The Internet includes commercial, educational, governmental, and other networks, all of which use the same set of communications protocols.

Parliament: A legislative body.

**Usability of Website:** Is a performance criteria that explains how well and efficient the website fulfils the aims of the website provider.

**Website:** A connected group of pages on the World Wide Web regarded as a single entity, usually maintained by one person or organization and devoted to a single topic or several closely related topics.

## Section 3 Digital Divide

## Chapter 10 The Global Digital Divide and its Impact on E-Governance

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#### ABSTRACT

As technology has continued to advance, a disparity in the diffusion, adoption, and utilization of technology has become apparent. This chapter explores the digital divide and the scholarly research investigating the factors which have been found to influence it. The major finding from extant research is that the digital divide is largely explained by variations in national wealth. These same variations also explain differing levels of e-government readiness and e-participation. The chapter concludes with a discussion of policy choices and dilemmas posed by the digital divide.

#### INTRODUCTION

Over the past 50 years, changes in technology, particularly information and communication technologies (ICT) have been vast. The growth and diffusion of ICTs has not followed a uniform pattern across the globe, however. This disparity is often referred to as the *digital divide*. This chapter examines the evidence for the digital divide and the empirical research that has studied its causes and correlates. The chapter then explores the connections between the digital divide and prospects for e-government and e-governance worldwide, studying the relative capacity for e-government in the nations of the world. Because, the digital divide is deeply rooted in the persistent economic disparities between nations, policy options to narrow the digital divide often face the same set of constraints and criticisms as more general development-related policies. Nevertheless, there are some policy options that lend themselves to easier implementation which could have a substantial effect on narrowing the digital divide.

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The chapter proceeds as follows: the first portion of this chapter presents a series of statistics which document the digital divide among nations in terms of their ICT infrastructures, usage and capacity. The second section reviews scholarly research on the determinants of the digital divide. The third part of the chapter turns to the domains of e-government and e-governance, defining the concepts and how they relate to the digital divide. The fourth section presents empirical measures of nations' readiness for e-government and eparticipation, showing large gaps between low income and high income nations. The chapter concludes with a discussion of policy alternatives and the dilemmas policymakers face in attempting to bridge the digital divide.

## MEASURING THE GLOBAL DIGITAL DIVIDE AND ITS DETERMINANTS

Over the years, scholars have documented large disparities in the usage and ownership of ICT, a disparity which has been coined as the *digital* divide. In short, the digital divide is the gap in technological infrastructure, prowess and capacity which separates the digital "haves" from the digital "have nots". Koss writes, "the term digital divide refers to the gap between individuals, households, businesses and geographic areas at different socio-economic levels and their opportunities to access information and communication technologies" (p.79). It is clear from Koss's definition that the digital divide may be examined at a number of different scales, comparing individuals, groups and various higher level geographic aggregations of people. For the purposes of this chapter, the focus is the digital divide among nations of the world,.

In studying the global digital divide, it is useful to cluster nations in such a way that the disparities are easily discernable. Because ICT is generally resource intensive, it requires a fairly sophisticated electrical and telecommunications infrastructure and is most intensively used by higher socioeconomic status populations, one would expect to see large differences in ICT usage, ownership and capacity between wealthy and less wealthy nations. To help facilitate such a comparison, the ICT measures in this section are stratified by three levels of national income, low, middle and high; these grouping are based on an income typology devised by the World Bank. The World Bank classifies countries using Gross National Income (GNI) per capita. Using 2009 figures, low income countries have GNI less than or equal to \$995, middle income countries lie between \$996 and \$12,195; high income countries have GNI per capita of \$12,196 or greater. The low income group contains 43 nations; examples of countries in this class are Afghanistan, North Korea, Ethiopia and Haiti. The middle income group contains 97 nations; examples of members in this group are Brazil, Egypt, India and Romania. There are 50 countries in the upper income group, which includes countries such as Great Britain, Japan, New Zealand and the United States.

A fairly straightforward measure of the digital divide is the extent of personal computer ownership. Figure 1 compares computer ownership rates for low income, middle income and high income nations from 1999 to 2006.<sup>1</sup> The data show a clear and growing separation in computer ownership between the different groups of countries. In 2006, there were 60.61 computers per 100 population in high income countries, but only 5.05 and 1.71 computers/100 persons in middle and low income countries, respectively. This amounts to a sizeable gap. High income nations had roughly 35 times the rate of computer ownership for low income countries and 12 times that of middle income countries.

Another common measure of the digital divide is internet usage. Figure 2 shows internet usage rates from 1997 through 2008, which shows some interesting trends. First, high income countries have the greatest rate of internet use, with 69.07 users/100 persons as of 2008. Yet it is also appar-

#### The Global Digital Divide and its Impact on E-Governance

Figure 1. Personal computers per 100 population

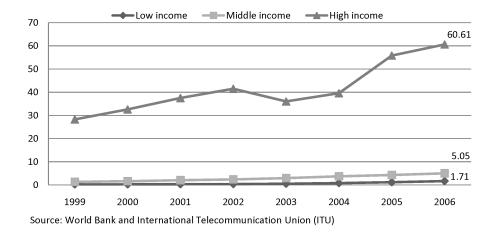
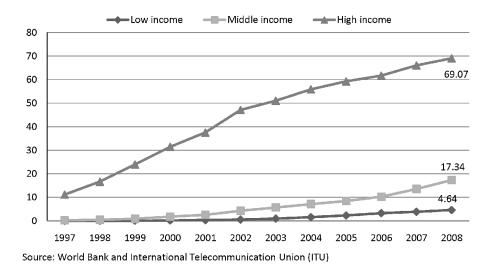


Figure 2. Internet users per 100 population



ent that the usage rate in high income countries, though increasing, is doing so at a diminishing rate; after 2002, the rate of increase begins to diminish for high income nations. This pattern fits the well-know S-curve pattern of technological diffusion, where early adopters of technology see an accelerated period of diffusion, followed by a slow down as a technology permeates a society (Rogers, 1995).

The trends for middle and low income countries also show an interesting pattern. Much more so than with personal computer ownership, there is a visible *increase* in the rate of internet usage in both groups of countries, suggesting that they may be entering a period of rapid diffusion of internet technologies. By 2008, there were 17.34 internet users/100 persons in middle income countries and 4.64 internet users/100 persons in low income countries. This amounts to much less of a relative gap than with computer ownership. High income nations have about 4 times the internet users of middle income nations and almost 15 times that of low income nations. The gap in internet usage is relatively smaller than that for

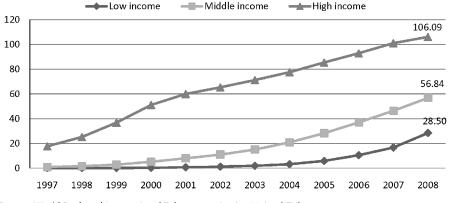


Figure 3. Mobile subscriptions per 100 population



computer ownership, perhaps because of the availability of public computers in internet cafes, which have seen a great deal of use in the developing world (Hill & Dhanda, 2003; United Nations [UN], 2008).

In the 21<sup>st</sup> century, mobile phones and handheld computing devices have become much more commonplace. Accordingly, examining mobile phone usage is also an appropriate measure of the digital divide. Figure 3 shows trends in mobile subscriptions over time. There is a similar pattern to internet usage here. Again, though high income countries have the highest absolute number of per capita mobile subscriptions, it begins to grow at a diminishing rate past 2001. In contrast, middle and low income countries are demonstrating a sharp increase in the penetration of mobile subscriptions.

By 2008, high income countries had 106.09 mobile subscriptions/100 persons (due to the presence of personal service and duplicated business-provided service for some individuals in these countries). Middle and low income countries had 56.84 and 28.5 subscriptions/100 persons, respectively. Repeating the gap analysis comparisons offered earlier, high income countries had 1.86 times the rate of mobile subscriptions as middle income countries and 3.72 times that of low income countries. Clearly, among the three

measures of the digital divide, it appears that the gap is most rapidly closing in the mobile phone market. This is understandable given that mobile phones require far less in the way of physical infrastructure, as opposed to regular land lines for telephone or fiber optic cable for broadband. As ICTs increasingly rely upon wireless infrastructures, this may bode well for nations that have found themselves on the wrong side of the digital divide.

In sum, there is clearly still a large disparity between countries in terms of technology ownership, access and usage. Yet, though disparities in computer ownership remain quite large, the gap in internet usage and mobile phone usage is much smaller in relative terms. Indeed, middle and lower income countries continue to display an upward trend in their usage of the internet and mobile phones. The next section of the chapter reviews the scholarly literature that has examined the factors which account for the digital divide.

# THE DETERMINANTS OF THE GLOBAL DIGITAL DIVIDE

There exists a wealth of accumulated empirical scholarship that has sought to uncover the salient

factors which serve to explain the digital divide among nations. Generally, most of the research on the digital divide follows a similar pattern, examining the statistical association between a variety of country-specific attributes and an ICT outcome variable, which measures the digital divide. Most research operationalizes technology access by measures such as internet users per 100 population or computer ownership; a few studies have also looked at internet hosts. There are several classes of factors which have been investigated as possible drivers of global differentials in ICT diffusion. This chapter will examine the primary socioeconomic, political, and economic factors which have been uncovered by extant research.

Before getting into the specific findings of the literature, there are a few general observations about studies of this type which are useful in fixing ideas. In reviewing the evidence, it is important to remain cognizant that in many cases a causal relationship can be somewhat difficult to ascertain. For example, it is true that internet usage drives national income by promoting economic development. But it is also true that increases in national income create demand for internet service.<sup>2</sup> Thus, in examining the literature, it is important to keep in mind that statistical associations among factors do not necessarily indicate causation. It is especially important to remain mindful of this as policy options are deduced from the findings of research.

In addition, there is little uniformity in model specifications used in the empirical work. As a result, there are differing results as to the magnitude and significance of variables. Some of the attribution for these differences is due to the twin ills of multicollinearity and omitted variable bias. On the one hand because many of the factors employed in models are so closely correlated with one another, using a variable which is correlated with one or several others may introduce collinearity causing a drop in statistical significance for other variables in the model. On the other hand, leaving a correlated, but relevant variable out of the model can have large effects on the coefficients of the remaining variables, even causing a change in the sign of a coefficients (for further reading on the subject see Gujarati, 2001). Thus, when parsing empirical work, differing conclusions as to effects and significance of certain variables may be partially attributable to model specification issues.

#### **Socioeconomic Factors**

Perhaps the most common finding in the empirical work is that the continuum of nations along the digital divide largely mirrors the continuum according to national incomes. Differences in national income has been shown time and time again to be a very important correlate of ICT usage and ownership (Andres, Cuberes, Diouf & Sebrinsky, 2010; Billon, Marco & Lera-Lopez, 2009; Chinn & Fairlie, 2006; Guillen & Suarez, 2005; Koss, 2001; Milner, 2006; Norris, 2001). There are at least two principal reasons why such a relationship exists. First, country-level wealth is a proxy for many other important underlying characteristics of national economies. In general, countries with less-developed industrial and communications sectors do not have the requisite infrastructure or industrial mix for extensive ICT, particularly internet-related technologies. Second, less national wealth translates into less buying power for businesses and individuals. For example, the UNDP reports that the cost of internet access for a month is roughly 278% of the average monthly income in Nepal and only 1.2% of average monthly income in the U.S. (United Nations Development Programme [UNDP], 2001). To the extent that technological access in the form of computer ownership or internet access is determined by personal income, less wealthy countries will see a lesser degree of ICT diffusion. However, national income is not the only factor which accounts for the digital divide. Research

has uncovered a number of other factors which serve to explain the global digital divide.

A variable closely related to national wealth is the fertility rate, which generally drops when a country undergoes the so-called demographic transition accompanied by industrialization and economic modernization. Research has shown that countries with high fertility rates have less internet usage (Robison & Crenshaw, 2010). This result is not unexpected since most countries with high fertility rates have not yet seen a widespread modernization of their economies with attendant demands for information-intensive technologies and services. Thus the fertility rate may be a proxy for national income.

Another socioeconomic factor often found to be a significant predictor of internet diffusion is the average educational or literacy level of a country's population. Especially with more complex ICTs such as the internet, a certain level of education is required for their use. Numerous studies have confirmed the link between a more educated populace and higher ICT diffusion (Billon et al., 2009; Chinn & Fairlie, 2006; Norris, 2001). The age distribution within countries also matters, as younger people are usually the early adopters of new technologies. Several studies confirm that countries with younger populations have greater ICT usage and ownership than countries with older populations (Billon et al., 2009; Chinn & Fairlie, 2006; Robison & Crenshaw, 2010). Urbanization also seems to be associated with ICT diffusion, though results are inconsistent. Some research has found that countries with larger urban populations have more ICT usage and ownership (Crenshaw & Robison, 2006; Milner, 2006; Robison & Crenshaw, 2010), although others have found an inverse relationship (Chinn & Fairlie, 2006).

#### **Political and Policy Factors**

Aside from national wealth and population characteristics, research has also shown that the

political structure has an impact on the digital divide. Because ICTs allow for the broad creation and dissemination of information, these technologies would certainly be considered a threat to authoritarian regimes who desire to maintain monopolization of information flows within their countries. In addition, because the internet does not have a defined and controllable center, it is unlike other media such as television, which are easily controlled by a single, central source. Milner (2006) and Norris (2001) have shown that countries with a more democratic orientation see greater usage of internet and other ICTs as compared with more authoritarian regimes. Other work has failed to find a consistent, statistically significant relationship (Crenshaw & Robison, 2006; Guillen & Suarez, 2005).

Other studies have found that government policy affects a country's place along the digital divide. In particular, countries with more deregulated telecommunications systems have been shown to have higher ICT usage, presumably because deregulation can serve to increase competition and reduce prices (Bortolotti, D'Souza, Fantini & Megginson, 2001; Chinn & Fairlie 2006; Guillen & Suarez, 2005). Although, Milner (2006) finds that deregulation lowers internet usage, holding regime structure constant. Perhaps one of the most basic ways to enhance competition is to cede government ownership of telecommunications to the private sector. Research confirms that countries with less government ownership have more ICT usage (Guillen & Suarez, 2005). Moreover, this illustrates the interaction between regime type and policy, as authoritarian regimes are more likely to employ state ownership in various national industries.

Looking beyond the variation in regime structure and policy frameworks within nations, the politics of the world system are also relevant. Based largely in dependency theory, scholars have proposed that there exists a set of core nations (The United States, Western Europe and parts of Asia), which maintain their wealth and status often at the expense of the peripheral nations (McChesney & Miller 2000). To the extent that core nations also tend to have the most highly developed economies with the attendant technological sophistication, it stands to reason that they will have higher levels of ICT usage and ownership. Empirical research confirms that this is the case, even when controlling for a wide variety of other factors (Guillen & Suarez, 2005). But again, core or periphery status is also highly correlated with national income.

#### **Economic Factors**

Personal computers, the internet, mobile phones and other ICTs all are subject to the basic economic laws that govern production and demand for other goods and services in an economy. A key factor of production for advanced ICT is an adequate telecommunications infrastructure, which affects both access and pricing. Research has shown that more expansive, less costly telephone infrastructures enhance ICT diffusion (Andres et al., 2010; Chinn & Fairlie, 2006; Dasgupta et al., 2005; Guillen & Suarez, 2005; Milner, 2006).

The competitive structure of the telecommunications industry also seems to have an effect. Studies have shown that places with more competition generally have higher rates of ICT diffusion (Andres et al., 2010; Dasgupta et al., 2005; Guillen & Suarez, 2005). Of course, it is hard to sort out the causal relationship here since it is equally plausible that places with higher demand for ICTs will support more providers than places with lower ICT demand.

The forces of globalization have dramatically reshaped the world economy over the past 25 years. Some research has surmised that the extent of a country's integration into the global economic system is also linked to ICT usage and diffusion patterns. In general, it seems that the more economically integrated a nation is into the global economy, the greater the ICT diffusion (Crenshaw & Robison, 2006; Robison & Crenshaw, 2010). But again, causal directionality is difficult to establish here. It certainly is true that linking up with the global economy creates some increase in the degree of information and communication infrastructure, but it is also true that pre-existing levels of ICT diffusion are probably necessary for such integration to occur in the first place. Guillen and Suarez (2005) take a slightly different tack on the idea of global integration, looking instead at cosmopolitanism. Cosmopolitans are mobile, sophisticated professionals with broader social ties who often travel. They measure cosmopolitanism by tourism expenditures, finding an association between higher tourism expenditures by citizens and internet usage. Crenshaw and Robison (2006) show an association between the number of tourist visitors from Western nations and internet hosts.

#### Summary

Reviewing extant research on factors associated with the digital divide reveals that there are some variables which appear to be more important than others. Perhaps the most robust finding is that national income, as measured by GDP per capita, is almost always a consistent predictor of ICT usage, diffusion and ownership. National wealth is necessary to generate the demand for, and infrastructure to support, ICTs on a widespread scale. Education and the age distribution also appear to matter, but the evidence is less clear on the effects of urbanization.

Regime type shows some inconsistency, though the preponderance of evidence seems to support a relationship between democracy and ICT usage. In addition, that relationship may be obscured by the intervening variable of regulatory policy. That is, democratic regimes are more likely to have frameworks which lean more toward enhanced competition and lasissez faire. It seems equally clear that policies and market structures which enhance competition in telecommunications serve to enhance ICT diffusion and usage.

Empirical work on the global digital divide is instructive because it provides some clues as to which policy variables might be plausible candidates for effecting change in nations on the wrong side of the digital divide. Certainly enhancing the national incomes of developing nations would have the effect of increasing ICT usage, but the rich poor gap between nations seems to be far more intransigent. Despite the challenges associated with reducing the gaps in global income, there do appear to be some variables which may more easily lend themselves to manipulation by policy change. These will be discussed more in depth later on in the chapter. The next section turns attention to an examination of the implications of the global digital divide for e-government and e-governance.

### THE IMPACT OF THE DIGITAL DIVIDE ON E-GOVERNMENT AND E-GOVERNANCE

As technological change has become more commonplace, new words have began to enter the lexicon, often preceded the prefix "e-" to denote an association with electronics, computers and the internet. The public sector has now followed suit the with the term *e-government*. The term's ubiquity is evidenced by its presence in everyday discourse about government; a Google search on the term reveals about 428 million hits. What is meant by e-government and how might we define it? A taxonomic definition is offered by Grant and Chau (2005) who define e-government as,

- the use of technology to enhance the access to and delivery of government services to benefit citizens, business partners and employees
- electronic information-based services for citizens (e-administration) with reinforcement of participatory elements (e-democ-

racy) to achieve objectives of balanced e-government

- the use of information and communication technologies, particularly the Internet, as a tool to achieve better government; and
- the use of information and communication technologies in all facets of the operations of a government organization. (p.75)

E-government then is inclusive of the ideas of service delivery, information provision, citizen participation, and usage of ICT in government operations. Clearly, e-government has a multiplicity of meanings, but beyond its specific functional applications it carries the notion of using ICT as a means of improving and transforming government.

To illustrate this point, consider one example of a paradigm shift associated with e-government. One of the underlying philosophies of e-government is a shift toward thinking of citizens as consumers or customers with an emphasis on efficiency. Evans and Yen (2005) write:

Government departments and procedures are commonly held to be inefficient because they have little motivation to please the citizen, and the citizen does not have an alternative provider available to him for these services. The increase in technology and communications has changed some of these attitudes on the part of the government. A more enlightened view has begun in the ranks of government to treat the citizen like a consumer whose transaction satisfaction is important. This change in attitude is actually more efficient for the government, as well as for the citizen, as it allows the government to deal with the citizen one time instead of multiple times and allows the government to process information more efficiently and collect data while doing so. An important byproduct of this transaction is customer/citizen satisfaction (pp.354-355).

As knowledge about e-government practice has grown, scholars have been able to observe vary-

ing degrees or stages of e-government. Though several models exist to explain this progression (i.e. Hiller & Belanger, 2001; Moon, 2002), the underlying logic is usually the same, showing an evolution from simple, piecemeal e-government projects or services to a higher-order integration of government systems that ultimately transforms government. The UN's (2008) model of the stages of e-government is a good example:

- Stage 1: Emerging. The web presence of the state is at its genesis. Most content is strictly informational, with minimal or no interactive applications
- **Stage 2:** Enhanced. A higher level and breadth of information is made available, including archives, reports, and statistics.
- Stage 3: Interactive. Online forms and applications are available to citizens for download
- Stage 4: Transactional. Citizens may now conduct business with government online, paying fees, making application for programs.
- Stage 5: Connected. Government systems increasingly connect with each other, providing seamless horizontal and vertical integration. Information is shared between systems, reducing inefficient duplication. Citizens are able to comment on and help shape policy and other government decisions through a variety of online participation channels.

As we ascend the ladder of stages in this model, there is advancement from basic governmental information, to richer, more integrated information, from mere provision of information to interactivity and active participation and finally from fragmented systems to integrated, cross cutting systems.

As governments have gained experience with the nuts and bolts of e-government and delivering basic information and services online, there has been a realization that there is a need for greater coordination among agencies in sharing information and service delivery. Rather than solely focusing on what one agency does, managers are beginning to embrace a "whole-of-government" paradigm which encompasses a larger vision of what other agencies are doing and how their efforts can be coordinated to deliver services to citizens in an efficient, timely and non-duplicative manner (UN, 2008).

This realization of the need for greater coordination and integration gives rise to the concept of *e-governance*. E-governance surpasses the individual agency and looks toward greater integration of systems across agencies and other actors using functional networks. Historically, government agencies and organizations evolved largely within silos. Thus, their policies, procedures and information systems were also created within disparate organizational silos with the primary goal of serving a particular organization's needs and objectives. Because these individual information systems evolved differently, this has created some challenges for cross-system integration. Different platforms, security measures and other components may create barriers to interoperability among government agency information systems. E-governance seeks to overcome those boundaries.

Looking back at the stages of e-government it becomes evident that the ultimate stage of egovernment is, in fact, e-governance. At this stage, a high level of system integration and citizen participation has been achieved, transforming the business of government in fundamental ways. Garson (2006) explains that, "E-government refers to one aspect of digital government: the provision of governmental services by electronic means, usually over the internet. E-governance, in contrast, refers to a vision of the changing nature of the state. Under e-governance, networks rather than agencies become primary" (p.19).

So in defining e-government and e-governance, there is a clear progression, from posting basic information on fledgling websites, to comprehensive system integration, online participation and a wholesale restructuring of government, driven by these changes. In its highest form e-government promises no less than a true reinvention of government. The next section of the chapter provides an examination of where the nations stand in terms of their e-government readiness and capacity.

#### An Empirical Look at E-Government Capacity

Thus far, we have explored the determinants of the digital divide between nations and have also defined and highlighted the growing importance of e-government and e-governance. To the extent that e-government requires the same types of infrastructural investments and capacities as for basic ICTs, it is reasonable to expect that some of the existing divides will once again reappear in the context of e-government. In 2008, the United Nations prepared a report that assessed the egovernance readiness of nations (UN, 2008). The methodology for measuring readiness involved the creation of a multidimensional index which measures three components of e-government readiness: web presence, telecommunications and human capital.

The first component of the e-governance readiness index is a multidimensional telecommunications infrastructure index. This additive index is comprised of several variables which measure telecommunications: internet users/100 persons, personal computers/100 persons, main telephone lines/100 persons, cellular subscribers/100 persons and broadband subscribers/100 persons. The second component is a human capital index which assesses the general educational level of a given country's population (measured by adult literacy and enrollments). The last component is a web index which provides a measurement of the sophistication each nation's web presence. Countries with a larger scope and diversity of online services scored higher on this index and countries with a lesser online presence scored lower. All of these three sub-indices are added together to form the UN's e-government readiness index.

Contemplating the first two components of the e-government readiness index, there are some clear connections to the literature surveyed earlier on the digital divide and its determinants. The telecommunications infrastructure index is comprised of many elements which have been used in other empirical work to directly operationalize the digital divide. For example, empirical work often employs internet or broadband usage or PC ownership as the dependent variable for analysis. The UN's telecommunications index contains many of those elements. The second component of the UN index also contains some familiar elements, using literacy and enrollments. The research reviewed earlier showed that education was an important predictor of ICT usage. Thus, the first and second components of the UN's egovernment readiness index are largely comprised of elements that directly measure the digital divide or the human capacity to utilize technology. The last component of the index, web presence, is not something encountered in the literature reviewed earlier, but it seems reasonable to expect that nations with lesser ICT usage and infrastructure will also have a lesser web presence.

Figure 4 shows the average levels of egovernment readiness for low, middle and high income nations. Unsurprisingly, the pattern here seems to mimic the general pattern we saw earlier using other digital divide measures. Low income nations have a mean index score of .242, the mean for middle income nations is .431 and for high income nations the mean is .67. An ANOVA of the means confirms that these differences are statistically significant (F=171, p=0.00).

Thus it appears that the digital divide, as measured by ICT usage and ownership, carries over in terms of e-government readiness. This should come as no surprise given the components of the index itself. Indeed, the index's components (web presence, telecommunications infrastructure and

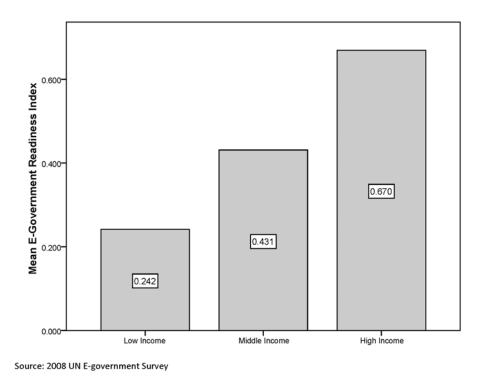


Figure 4. Mean e-government readiness by income category

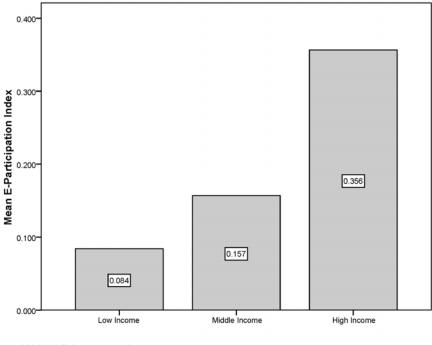
human capital), are all largely determined by a given nation's wealth and the average socioeconomic status of its citizens.

#### **E-Participation**

In defining and discussing e-government, it was noted that there is a progression in the stages and sophistication of e-government. At the upper levels, e-government allows for and facilitates citizen participation in government decision-making. So aside from looking at the readiness of countries for e-government, it would also be useful to see how far various nations have gotten in their government to citizen relationships toward realizing substantive participation. In 2008, the UN created an index of e-participation in its E-government Survey which measures three dimensions of e-participation: information, consultation and decision-making.

The index of e-participation is conceptually wed to the stages of e-government discussed previously. The first component, information, indicates the lowest level of e-participation. Here the UN evaluated government websites on the level of information provided, such as names of elected officials, budgets, laws and other pertinent governmental information (UN, 2008). The second component benchmarks consultation. That is, the degree to which governments provide channels for their citizens to offer comments or feedback. Finally, the third component is e-decision-making, which measures the extent to which citizen inputs are actually carried over into government decisionmaking. As with the stages of e-government, each component of the e-participation index measures an ever-increasing level of sophistication with respect to government-citizen relationships, with e-decision-making representing the highest level. Figure 5 shows the mean e-participation index for low, middle and high income nations.

*Figure 5. Mean e-participation by income category* 



Source: 2008 UN E-Government Survey

As we have seen with other measures, the eparticipation index tends to follow the income gradient. Low income nations had the lowest mean score of .084, middle income nations had a mean e-participation index of .157 and high income nations possessed the highest average score of .356. An ANOVA of the means confirms that these differences are statistically significant (F=27, p=0.00). This result is also not unexpected. For a country to have widespread usage and experience with e-government, it must first have the capacity in place. That is, there must be a sufficient resource base to fund the various information systems and hardware needed to run e-government enterprises.

Based on the evidence here, it appears that both e-government readiness and e-participation follow a similar pattern with respect to the global income gradient, with low income countries scoring low on both measures and middle and upper income countries scoring higher. Nevertheless, a natural question still presents itself: what is the relationship between e-government readiness and e-participation? Figure 6 shows the relationship between e-government readiness and e-participation in a scatter plot. Low, middle and high income nations are all denoted by different shapes. It is clear from the figure that the two variables have a high degree of positive association.

What is far more interesting is the *non-linear-ity* of this relationship.<sup>3</sup> Notice that the slope of the curve becomes much steeper as we move to higher levels of e-government readiness. As e-government readiness reaches a high level, there is an exponential increase in e-participation. This result serves to reemphasize the importance of having a an adequate infrastructure in place as a necessary foundation for e-participation. What is also telling is that the high income nations are, for the most part, grouped within the region of

#### The Global Digital Divide and its Impact on E-Governance

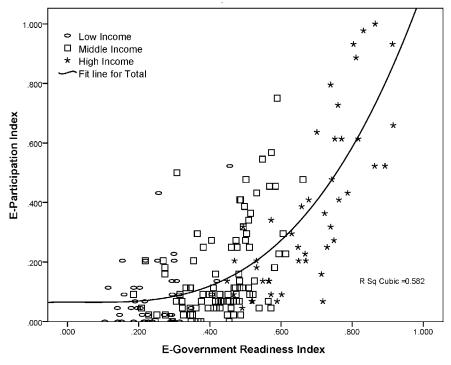


Figure 6. Scatter plot of e-government readiness and e-participation

Source: 2008 UN E-Government Survey

inflection on the graph where the slope of the curve is the steepest.

It is important to remain cognizant of what the e-participation index is supposed to measure. Low levels of the index indicate little or no government to citizen contact, where even basic information about government officials and structures is absent. Higher scores indicate a good basic volume of information availability and citizen input through e-consultation. Countries with the highest scores are generally doing well in the first two areas and are using citizen input to mold and shape decisions and policy outcomes. When we consider how the nonlinearity of the relationship maps onto the income groupings of countries, it becomes apparent that only nations at the highest end of the income spectrum are seeing the kind of e-participation which empowers citizens to exercise their voice in policy matters. This is certainly a function of both

technical capability and government resources, but is also driven by human capital differences and literacy. The former barrier is more easily traversed through technology transfer; the latter calls for more resource-intensive, fundamental change to the economic and educational systems in developing nations.

In addition there appears to be a greater degree of institutional resistance to higher levels of e-participation in developing nations The UN's 2008 report notes:

It is largely because of this service orientation and chronological evolution that electronic democratic reforms have not easily fit into e-government plans of developing nations. Not only is there no obvious organizational apparatus to address such issues from within the government of the day, but in many countries, politicians are often *uncertain and resistant of e-democratic reforms as a result. (p.114)* 

The forgoing analysis suggests that there are large gaps in e-government readiness and e-participation. It is also evident that only the highest levels of e-government readiness result in high levels of e-participation. The next section of this chapter discusses the implications that these and other challenges pose to policymakers.

#### POLICY OPTIONS TO BRIDGE THE DIGITAL DIVIDE

A recurring theme in this chapter has been that the underlying economic and social inequality manifest in the world is a critical driver of the digital divide. Some scholars would go as far as to say that the digital divide is nothing but a reflection of these age-old economic disparities between nations. The recurring question many have asked is how to best facilitate a more balanced landscape of ICT usage in the face of this underlying social inequality. As low income developing nations continue to struggle with other more immediate, first-order concerns, such as disease, poverty, political instability and conflict, it seems unlikely that they will be able to devote the necessary financial, technological and human capital necessary to achieve critical mass in e-government (UN, 2004; UN, 2005; UNDP, 2001). Furthermore, those countries beset with largely illiterate populations have dim prospects for creating any kind of meaningful government to citizen interaction over the internet. The prospects for more widespread e-government seem better for middle and high income countries, which have greater resources to draw upon and higher levels of citizen education and literacy.

If we narrowly construe the digital divide as merely a problem of access and nothing more, then the symptomatic answer lies in technology transfer to developing nations. We have in fact seen some of this through the efforts of private sector actors, such as OLPC (One Laptop per Child), which has provided thousands of its low-cost XO laptops to children in developing nations around the world. As noted earlier, the availability of wireless communications technologies has also facilitated somewhat of a leapfrogging by developing nations, though it has not completely closed the ICT gap (Hill & Dhanda, 2003; UN, 2008).

But even if developing nations have access to some of these new technologies, will their populations be able to use them? Clearly in countries where literacy rates and average education levels are low, access to technology is a necessary, but insufficient solution (Hill & Dhanda, 2003; Norris, 2001). On the other hand, focusing on the next generation by targeting efforts at children may pay dividends in the future (Koss, 2001). Enhancing access through technology transfer may help some, but change will be slow and the ripple effects may take years. Yet many believe that failing to embrace technology will only perpetuate the cycles of poverty. Norris (2001) warns:

As international agencies including the UNDP, World Bank and G-8 have emphasized, wiring the world matters, not just in itself, but also because access to digital technologies is likely to reinforce the economic growth and productivity of richer nations while leaving the poorest ones farther behind (p.234).

The empirical research reviewed here was clear on the positive effects of deregulation on ICT diffusion. In general, it appears that government policies which focus on deregulation, on reducing state ownership and enhancing competition in the telecommunications sector are associated with greater ICT diffusion and usage.

An example of the effects of deregulation can be seen in the Philippines. Until the 1990s the telecommunications industry was largely a monopoly; access to telephone service was poor and waiting times to establish new service were long. In 1993, a series of reforms was initiated which liberalized the telecommunications industry. The result has been a dramatic increase in telephone access and service quality. Moreover the whole ICT sector has grown into a dynamic leading sector in the Philippine economy (Mirandilla, 2007). In fact, Chin and Fairlie (2007) attempted to quantify the effect of changes in regulatory quality (a measure of market openness and deregulation), estimating that differences in regulatory quality account for as much as 32% of the gap in internet usage between the United States and the North African/Middle Eastern region (p.41).

These types of market-oriented policies are finding active advocates in several non-governmental organizations, such as the World Bank and International Monetary Fund. One of the central vehicles for changing and reforming government has been to encourage more widespread use of ICT and e-government. The logic behind this approach is that e-government, with its sharing of information, will encourage transparency and accountability in government. This in turn will lead to efficiency, greater citizen trust and reduction of corruption which will purportedly enhance opportunities for economic development.

But there is an even larger context here which deserves attention. Support for enhanced e-government, deregulation and market-oriented reforms is a smaller subset of a much larger reform agenda aimed at revamping governance structures in developing nations (Amoretti, 2007). Otherwise known as Structural Adjustment, this larger framework is based upon the assumption that the key to spurring economic development in low income countries is to encourage reforms to move those nations toward democratic, marketoriented forms of governance. These reforms serve the intermediate objective of encouraging countries to open their borders and engage in trade with the rest of the world. In short, the goal is for developing nations to embrace and be swept into the inexorable flow of globalization, which presumably will result in export-led growth and economic development (World Bank, 2002).

The structural adjustment framework and its policies are certainly not without their detractors. Some argue that structural adjustment is really just another means to maintain the dependency of peripheral nations upon the core. By advancing structural adjustment, the rule-makers are able to set the parameters for trade in such a way that their advantages are perpetuated. Amoretti (2007) writes:

Developing countries are in danger of locking themselves into a new form of dependency on the West as they introduce new hardware and software systems that they cannot maintain for themselves and that become crucial to the very functioning of their corporate and public sector... These innovations, already problematic in contexts of advanced democracy, might lose some of the democratic charge when related to developing countries. Both in terms of the reengineering of government functions as a principal objective and in favoring means of democratic participation via ICTs, their economic integration in the world economy not only seems to widen existing disparities, but even creates new fractures and dependency (pp.338-339).

Other scholars have focused on expansion of the discussion to include not only the digital divide, but the innovation divide (Drori, 2010). The point is that even with access to technology, the centers of innovation are still mostly concentrated in the richer, more developed nations. If the focus becomes solely access, then other countries may still be laggards in innovation, and thus lose out on a critical path toward enhancing their own economic development.

### CONCLUSION

This chapter has explored the global digital divide, looking at patterns of ICT usage and ownership over time and e-government. Extant empirical work overwhelmingly concurs that the predominant variable which explains the difference in the level and rate of ICT diffusion is national wealth. But other variables, such as education and age structure were also important. Research also has established that more authoritarian regimes see less ICT diffusion than more democratic regimes. In addition, nations who pursued a greater degree of deregulation and policy aimed at enhancing completion in the telecommunications sector have seen more ICT growth.

The dominant influence of inequalities in national wealth also carried across to e-government readiness and levels of e-participation. Low income nations were the least ready for e-government and had the lowest levels of e-participation, where higher income nations showed more readiness and more e-participation. E-government itself is reflective of a market-based philosophy that views the citizen as a consumer, and seems to be more readily compatible with systems of government that are more democratic and have well-established systems of public administration. Indeed, the empirical analysis showed that only the highest income nations had very high levels of e-participation.

The policy options for dealing with the digital divide are fraught with entanglements in much larger structural impediments which have maintained economic inequalities between nations for many decades. The dominant strategy for many international non-governmental organizations seems to be one which encourages developing countries to pursue and embrace the forces of globalization. One of the central platforms of this philosophy is to encourage countries toward more democratic, market-friendly forms of governance, presumably because such structures are more compatible with trade and international commerce. E-government plays a crucial role in this strategy, as some thinkers believe that it can serve a fulcrum to leverage and accelerate the process of government transformation.

Though critics are wary of what they consider to be heavy-handed attempts by NGOs to compel such reforms in the developing world, it is equally true that not pursuing policy to enhance ICT access and capacity will only further balkanize nations in terms of existing economic disparities. In the end, some level of reform in developing countries appears necessary for them to be able to enjoy the full benefits of ICT and e-governance, but the concerns raised by skeptics should exhort policymakers to the ever present possibility that certain reform efforts may only serve to deepen historical dependencies between developing and developed nations.

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#### **KEY TERMS AND DEFINITIONS**

**Dependency Theory:** A critical perspective on international development which asserts that there exists a set of rich, core nations, with developing nations on the periphery and other nations somewhere in between. Dependency theory suggests that participation in the global economy by developing nations contributes to their continued exploitation by the core because the rules of trade and exchange are stacked against them.

**Digital Divide:** Inequality in access, usage, capacity and ability to utilize information and communications technology. The digital divide is often measured by differences in computer ownership, internet or mobile access or broadband penetration. It can also be measured at a number of scales, looking at differences between individuals, social groups or higher levels of geographic aggregation such as nations.

**E-Governance:** The highest level of the egovernment progression, where a government has attained widespread system integration, services and transactions are interactive and citizens are able to enjoy a high level of –participation in government decision-making.

**E-Government:** The usage of ICT and the internet to provide information and services to citizens. At its highest levels of sophistication, e-government involves extensive system integration and reinvention of government.

**E-Participation:** A set of practices used in e-government to encourage citizen participation. Examples include citizen commenting, gathering of citizen opinions online, and online voting. Most scholars agree that the most substantive eparticipation occurs when it can be documented that citizen inputs affect subsequent government decisions and policy.

**Globalization:** A trend in the global economy, particularly since the late twentieth century toward increased linkages between nations in

terms of international trade, communication and information flows. Globalization is also often associated with a tendency toward great cultural homogenization as more nations appropriate western cultural norms.

**ICT:** Information and communications technology. This terms encompasses a number of different technologies including computers, the internet, telephony, network infrastructures, wireless and broadband infrastructures. ICT also is inclusive of the software and systems design and programming necessary to maintain, utilize and integrate these systems.

**Multicollinearity:** In multiple regression models, when two independent variables are highly correlated, they are said to be collinear. When collinear variables are included in the same model, this can cause inflation of standard errors of the estimates, inflating the variance in the model and reducing statistical significance.

**Omitted Variable Bias:** When an important variable is left out of a multiple regression model and this factor is correlated with others in the model, this can lead to a bias in the model estimates. Omitted variable bias often trades off with multicollinearity.

#### **ENDNOTES**

- <sup>1</sup> Note that the World Bank has complete data on computer ownership from only 1999 to 2006. More extensive data are available for both internet usage and mobile subscriptions.
- <sup>2</sup> In truth, this example illustrates a simultaneous relationship, which would call for a more sophisticated simultaneous equation model to identify the separate effects.
- <sup>3</sup> The nonlinearity of this relationship is supported empirically. Models were estimated using a normal linear regression, quadratic and cubic specifications. In model to model

comparisons, both nonlinear models fit the pattern of the data much better. The linear model produced a model r square of .48, while the quadratic had an r square of .58. The cubic specification had the best fit with an r-square of .582.

# Chapter 11 Global Digital Divide: Language Gap and Post-Communism in Mongolia

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#### ABSTRACT

This chapter explores several factors of the global digital divide in the former socialist country of Mongolia. By analyzing manifest media content on the Internet, as well as by interviewing people involved in Internet development, this chapter goes beyond the question of access to the Internet and asks how language factors exacerbate the digital divide in an impoverished country. Initiating non-Western alphabet domain names and setting culturally inclusive non-Western alphabet standards have been important steps in achieving linguistic diversity on the Internet and overcoming the global digital divide in countries like Mongolia. Furthermore, this chapter explores how a post-communist political setting, aid dependency, and international organizations influence Internet development. The analysis of in-depth interviews provides nuanced explanation of the socialist legacy that is traced in institutional routines, people's attitudes, and social practices.

#### INTRODUCTION

The discrepancy in Internet use between developed and developing countries is referred as the "global digital divide." In recent years, there have been studies showing that the use of information and communication technology has grown at an impressive rate in developing countries, thus narrowing the global digital divide. The International Telecommunications Union (ITU, 2006),

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an organization of the United Nations, reported that the difference in the ratio between the Internet users per 100 persons in developed and developing countries has been reduced from 73:1 in 1994 to 4:1 in 2004 (James, 2008). Yet, less than 5% of Africans and 15% of Asians used the Internet in 2007, whereas in Europe and the Americas 43% and 44% of population used the Internet respectively (Tryhorn, March 2009). One half of the 1.6 billion Internet users worldwide speak non-English languages (Sang-Hun, Oct 2009) and Asia alone has twice the number of Internet users that the North America has. The access-centered and Western-focused digital divide research has not explored the language factors of the global digital divide.

An increase in mobile phone use in developing countries in recent years has also contributed to the closing of the global digital divide. The ITU reported that by the end of 2008, there were 4.1 billion mobile users (six out of 10 people), twothird of whom are users in developing countries. Though the Internet is increasingly accessed on mobile phones, the rhetoric surrounding the closing the global digital divide based on increasing mobile phone use in developing countries does more harm than good. This rhetoric reinforces the access-centered approach that oftentimes translates into policies that benefit multinational corporations (MNC) helping them tap into markets in developing countries.

Unlike mobile phones, Internet development directly reflects social and cultural settings and existing inequalities. In this paper, I strive to explain the interplay between society and Internet technology in the context of the developing former socialist country of Mongolia. By analyzing the web sites of government and non-government organizations, as well as by interviewing people involved in Internet media development, this paper goes beyond questions of access to the Internet and explores three factors of the global digital divide. First, this chapter explores how language factors such as non-Latin domain names and the Cvrillic alphabet use exacerbate the digital divide in the impoverished country of Mongolia. Second, this paper explores how post-communist settings impede Internet development. And last, this paper shows how aid dependency and international organizations influence Internet development in Mongolia.<sup>1</sup>

#### THE CASE STUDY OF THE GLOBAL DIGITAL DIVIDE: THE INTERNET IN MONGOLIA

With a nomadic culture, a Buddhist tradition and a communist past, Mongolia has a unique struggle with the digital divide. At the same time, the Mongolian case demonstrates common challenges typical to other developing and former socialist countries. Mongolia is a Central Asian developing country landlocked between Russia and China with a small population of 2.7 million. Like many other developing countries, Mongolia has an underdeveloped economy and weak infrastructure indicated by the GDP per capita of US\$1,991 and 12.5% Internet access per 100 persons in 2008 (UN, 2008).

Though access to the Internet has steadily been increasing since the first Internet node MagicNet was established in 1996 as shown in Figure 1, for many Mongolians the Internet is still a distant priority. The Mongolian case clearly shows the challenges of the global digital have-nots. The vastness of the territory, the underdeveloped infrastructure especially in the provinces of Mongolia, and the high price of international connections have hindered the access to the Internet for many Mongolians.

The Mongolian case also shows the challenges associated with achieving language diversity on the Internet. The Mongolian language content on the Internet is worth studying to understand the exacerbating factors of the global digital divide in small developing countries. By examining how Internet domain names are managed and the Cyrillic alphabet is used in Mongolia, this paper explores linguistic factors contributing to the global digital divide. Despite the relatively high literacy rate of 96% common to former socialist countries, Internet use is still low partly due to the use of the Cyrillic alphabet and the low degree of English knowledge among Mongolians. From the beginning of the thirteenth century until 1941, Mongolians used the uighur

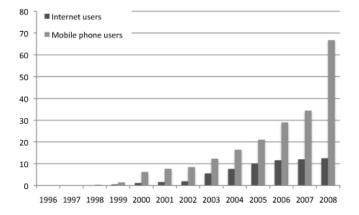


Figure 1. The growth in the numbers of Internet and mobile users per 100 people in Mongolia from 1996 to 2008

*alphabet*<sup>2</sup>, and then switched to the Cyrillic alphabet under the influence of Soviet Union. The Mongolian version of the Cyrillic alphabet has two extra vowels,  $\Theta$  and Y, that do not exist in the Russian Cyrillic alphabet. Developing standards to include these two letters have caused much challenge for Mongolians until 2000, when Microsoft released Windows 2000 which supported Unicode Standard 2.0. Even though adoption of the Unicode standard solved the Mongolian language two letter problem, few people have the Windows XP system, and it takes some time to adapt to a new standard.

Scholars of the global digital divide research acknowledge the "symbolic power" of English and are concerned about the linguistic diversity on the Internet (Warschauer, 2003, Norris, 2001, Hargittai, 2003; Hassan 2004). On the 40th anniversarry of the Internet in Nov 2009, the Internet Corporation for Assigned Names and Numbers (ICANN) approved a new standard for internationalized domain names (IDN)<sup>3</sup> in the Chinese, Arabic, Korean, Hindi and Cyrillic alphabets. This is one of early steps toward making the Internet more accessible for people who do not speak English which already constitutes a half of 1.6 billion Internet users worldwide (San-Hun, 2009).

Furthermore, this chapter strives to locate the global digital divide within a context of Mongolian polity and society to understand broader implications of the global digital divide for other post communist countries. Even though Mongolia is one the three legitimate democracies in Asia along with Japan and South Korea, as this chapter shows communist residual habits are still evident in Mongolia: leaders strive to control information and the media and the general public is uninformed. Similar to Eastern European and former Soviet Union countries, which went through "double-rejective" (Holmes, 1997, p. 14) democratic revolutions, Mongolia also threw off both external domination by the Soviet Union and the repressive communist party control in 1990. According to the new Constitution of 1992, Mongolia is a democratic country characterized by the rule of law and the freedoms of speech, press, and information. The role of the Internet in post-communist countries has been debated among scholars; some emphasizing the difference of the Internet from the traditional media and the Internet's democratic potential in expanding the public sphere (Zassoursky, 2004; Coleman & Kaposi, 2006), while other scholars see a "marked degree of continuation" of old propagandistic mass media

(Sparks & Reading, 1998). This chapter brings empirical evidence into the debate surrounding the role of the Internet in the post communist country of Mongolia and suggests practical steps to overcome these challenges.

#### THEORETICAL FRAMEWORK: GLOBAL DIGITAL DIVIDE

There are ongoing debates concerning the definition, the causes, and the consequences of the digital divide, including whether or not special policies should be established to close the digital divide. Initially coined by the Clinton administration, the term "digital divide" tends to dichotomize "haves," who have knowledge and resources to use the Internet, and "have-nots," who do not possess such knowledge and resources. Reflecting the initial rhetoric, digital divide studies have been access centered by asking: "How many people or households have access to the Internet?" Scholars have identified Internet access disparities associated with the differences in geographical location, income, age, race, and gender (Norris, 2001; Warschauer, 2003; Hargittai, 2003; DiMaggio et al., 2004, Sassi, 2005; James, 2007; Stevenson, 2009).

The theoretical views on the digital divide vary from technological deterministic to social constructionist and from the social equality approach to the world society approach<sup>4</sup>. The first perspective is the technological deterministic view which claims that the unlimited information available via the Internet and its two way communication possibilities enrich and strengthen societies and eventually bring change in society (Rheingold, 2000; Rogers, 2000). It is assumed that the Internet, like other communication technology, is adopted by different groups of societies over a certain period of time starting slowly by earlier adopters, who have better social economic status (SES), better education and more resources than the general public, until it reaches the critical mass as Rogers (2000) elaborates. However, only a few developed nations reached the critical mass thanks to a great deal of policies to facilitate the diffusion of the Internet, and the Internet adoption pattern slowed down earlier than the patterns of radio and TV diffusions (DeMaggio et.al, 2004; Hargittai, 2003).

The second opposing school of thought, led by the social constructivists, claims that a technology like the Internet is not an external changing force, and the relationship between society and technology is co-constitutive. People create, modify, and adopt technologies to do things more effectively. Therefore, social constructivists suggest that Internet studies should go beyond the narrowly defined access issue to a broader context of social settings, local languages, literacy levels, as well as the existing disparity in media development (Carey, 2005; Slevin, 2000; Bellamy & Taylor, 1998; Van Dijk, 2006; and Warschaur, 2003). Since there are fewer textbooks and other forms of written knowledge in less developed countries like Mongolia, the global digital divide is exacerbated by the poorly developed old media and the lack of written knowledge available in print and other non-digital media in local languages. The issue of the lack of printed and produced knowledge is even more important in a former socialist country where information was censored because of communist party ideology. The political, and social context in which technology is embedded tends to shape Internet development through agents who emphasize certain technological capabilities over others.

The third theoretical perspective on the digital divide, the social inequality perspective, tends to argue that new technology like the Internet exacerbates existing disparity in an already unequal society and creates new inequalities unless special measures are taken to alleviate them. The great discrepancy of language representation on the Internet, and the geographical imbalance in Internet content production are the most complex issue of the global digital divide. "Global English" is a lingua franca in international communication and on the Internet, and it has become a new barrier to equal opportunity in developing countries because unequal access to learning English coincides with other social inequalities (Warschauer, 2003). The difference in language representation on the Internet reflects an existing asymmetry in content creation in old media between developed and developing countries (Hargittai, 2004; Downie and Kaiser, 2003), since new media production is oftentimes "repackaged," or "remediated" from traditional media onto the Internet.

The fourth perspective, the world society approach, in general derives from the political economy perspective and is critical of the underlying structural and ideological differences in the north-south divide. Researchers arguing from this perspective point out that global digital divide studies have been moving away from the inequality perspective toward the rhetoric of new market opportunities as the role of multinational corporations (MNC) rose in global media governance (Hamelink, 2002; Siochru, 2002; Stevenson, 2007). Dominated by MNC, international organizations tend to push forward the access-centered approach in developing countries that translates into a neo-liberal economic agenda when used without discretion, which assumes 1) economic development is accelerated with information technology; 2) the growth of ICT needs the investment of foreign companies; and 3) foreign companies invest when the market is liberalized. The scholars of the world society perspectives criticize the dominance of multinational corporations in international governance that reinforce the existing north - south divide. As a technology invented in and designed for the American society, the Internet brings not only technological and economic development, but also brings western capital flow, technological domination and ideology (Hamelink, 2001; Hansen, 2005; Stevenson, 2007). When developing countries follow the

patterns of consumption of developed nations in an effort to catch up, the only people who benefit are the corporations in the developed countries (Hamelink, 2001; Hansen, 2005). Furthermore, an access-centered and western-focused approach to the digital divide leaves unexamined specific social, and cultural aspects, and actual Internet content in developing countries (Hamelink, 2000; Slevin, 2000; Warschauer, 2003; Van Dijk, 2006).

The global digital divide should use a different discourse that takes into account the existing power dynamics between developed and developing countries, local social and political settings, cultural and linguistic diversity and the influences of international organizations.

#### Digital Divide in Post-Communist Countries

Media scholars are just now beginning to study the social and political consequences of the Internet in so called "third wave democracies" (Coleman& Kaposi, 2006). The few studies that have examined Internet development in former socialist countries mostly focus on access (Dimitrova & Beilock, 2005; Kolko, Wei & Spyridakis, 2003; Herron, 1999; Boje & Dragulanescu, 2003), or lump together countries that are very different politically and culturally.

In former socialist countries, information was tightly controlled and censored in all political, social and economic spheres of society. The communist parties built state-surveillance systems through democratic centralization, the *nomenklatura* system and various secret police institutions (Spark & Reading, 1998, p.32). The one party ideology, a centrally planned economy, and a preference for a certain type of cultural product all were expected. The repressive partystates purged counter-revolutionaries, religious and capitalist elements, and critical intelligentsia<sup>5</sup>, yet brought somewhat egalitarian social service networks with free higher education and a social welfare system.

Though patterns of democracy development and new media adoption in these countries vary widely, some similar residual patterns seem to persist. Munkhmandakh & Nielsen (2001) point out that the Mongolian leaders' desire to retain control of information, and to use the media to "agitate the masses" remains strong despite achievements such as the dismantlement of the censorship authority, the adoption of a new Law on Media, and a boom of independent media outlets6. Klvana (2004) also criticized Czech media for perpetuating infused communist taste and nostalgia for communism in the Czech Republic. The Czech Republic, Estonia, Slovenia, Hungary and Poland are among the most successful post communist countries which joined the European Union. In these successful post communist countries the Internet is embraced and new media has contributed to open and free societies indicated by their democracy indexes (Coleman & Kaposi, 2006; Dutta, 2007; Klvana, 2004).

The situation is very different for other former socialist countries in Central Asia and Russia that reverted back to the authoritarian regimes. Here the Internet is tightly controlled. Even though Mongolia did not revert to the authoritarian regime, the corruption index in Mongolia is high, and that lead to an ambiguous evaluation by the Transparency International (2010) partly due to a low economic development. Communication practices in impoverished nations call for a different methodological approach, which takes into consideration different communication practices such the use the Internet in public cafes, centers, and at work. Like in many other developing countries, the majority of Internet users in Mongolia are business subscribers. Furthermore, in former communist developing countries, where consumption was suppressed and the statistical data used to be fabricated for ideological reasons, discrepancies exist between the official numbers of Internet users and the actual number of users (Kolko et al., 2003; InfoCon, 2003; Warschaur, 2003).

Elsewhere I pointed out (Baasanjav 2007, 2011) the social divide that exists between rural and urban areas and the institutional divide that exists between government organizations and educational institutions as the most evident forms of the digital divide in Mongolia. I argue that while government organizations, especially agencies in the capital, tend to have better Internet access due partly to the support of international organizations, educational institutions like libraries and secondary schools, especially in the countryside, constitute obvious "have-nots." I went on to recommend a policy that will help overcome this difference by adopting programs like E-rate in the USA that set aside funds for schools, libraries, and hospitals to guarantee Internet access. Since digital divide theory in general posits that those who use the Internet tend to be better educated and socially better off than those who do not use the Internet, people in remote places and less powerful organizations need to have policies to help them overcome these disparities. In the sections to follow, I'll discuss three factors contributing to the global digital divide in Mongolia: the language issues, post-communistic settings, and the aid dependency on international organizations.

#### NOTES ON METHODOLOGY

The analysis in this essay is based on data gathered in 2005 using a) a quantitative content analysis of the web sites of Mongolian government and civil society institutions and b) qualitative in-depth interviews with people working in Mongolian institutions. The researcher analyzed 157 web sites of Mongolian government and civil society institutions<sup>7</sup> for evidence of such post-communistic characteristics by coding for the presence or the absence of the following features: 1) nationalistic mottos; 2) religious images; 3) images of Chinghis Khan,<sup>8</sup> landscapes and flags; 4) flames<sup>9</sup> and negative postings; 5) traditional Mongolian script;<sup>10</sup> and 6) the Cyrillic alphabet distortion.<sup>11</sup> Furthermore, the descriptive characteristics such as the URL address, the types of the web site, and the funding mechanisms are also coded.<sup>12</sup> The sample was constructed from a "snapshot" of all of the publicly available web sites of Mongolian governmental and civic society organizations written in the Cyrillic alphabet based on the aggregated search results of the term "Монгол"<sup>13</sup> by the five major search engines listed by SearchEngineWatch with the Cyrillic alphabet search capabilities - AllTheWeb, AltaVista, Google, MSN and Yahoo. The sample (N=157) consists of 37 government organizations (23.6%), 38 educational and research institutions (24.2%), 22 non-government and international non-government organizations (14%), 28 media and Internet portals (17.8%), 23 interest groups and political parties (14.6%), and 9 diaspora web sites (5.7%). The list of the Mongolian web sites analyzed and the accumulative post-communist index are shown in Appendix 1.

The results of the content analysis of the Mongolian web sites were expanded and elaborated on by conducting in-depth interviews with 23 leaders and managers of Mongolian institutions. Appendix 2 lists the pseudonyms of the interviewees and their institutional affiliations. Each interview was transcribed in Mongolian prior to analysis. Excerpts from the interviews that the researcher chose to illustrate the argument were translated into English by the author.

#### LANGUAGE FACTORS: DOMAIN NAME SERVICES AND THE MONGOLIAN CYRILLIC ALPHABET USE

The symbolic power of global English is explored in this study by examining use domain names and the challenges relating to the use of the Cyrillic alphabet in Mongolia. The domain name system is an important part of global Internet governance, and the Internet Corporation for Assigned Names and Numbers (ICANN) ensures the stability of the current development of the Internet by issuing pro-competitive and legitimate domain names without violating trademarks and intellectual property rights. Adding five lanugages into the domain name systems will create challenges to the stability of the current Internet governance system, at the same time this will create many business opportunities based on the fact that recent additions of two generic level domains ".biz" and ".info" generated approximately one million US\$ each in registrations in one year (Mueller & McKnight, 2004). The domain name market is a business of two billion US\$ annually, and 85% of the market share at the registration level is controlled by a single company, VeriSign.

Non-western characters in domain name systems will unquestionably increase participation possibilities for non-western developing countries in Internet governance, which has historically been marginal. At the same time, the process will heighten the tension between the opposing views regarding Internet governance, one emphasizing the importance of nation-states in Internet governance and the other advocating an ad-hoc and non-hierarchical governance of the Internet. The former approach advocates for the involvement of international organizations like the International Telecommunications Union in Internet governance, while the latter approach advocates the continuation of existing administration of ICANN which was formed on the bases of the system by Dr. Jon Postel who administered domain names at University of California at Los-Angeles during the earlier development of the Internet.

The above debate surrounding the domain names system has been tangential and remote for many developing countries. Poor and technologically underdeveloped nations like Tuvalu and the Federation of Micronesia sold their country code .tv and .fm to television and radio industries in the first world for reasonable sums (Hrynyshyn, 2008). Mongolian country-code domain names with the suffix ".mn" are registered and issued by MAGICNET, the only private domain name

registrar in the country. Mongolian organizations are more likely to use country code (cc) domain names ending with the ".mn" suffix such as www.parl.gov.mn than generic code domains (gc) domain names such as ".com," ".net," and ".org." The results of the content analysis of the Mongolian language web sites reveals that 113 web sites or 72% out of 157 web sites use .mn domain names, while only 44 web sites or 28% of web sites have generic code domain names. Even though Mongolian organizations seem to prefer to use ".mn" domain names partly due to the ease of working with the local domain name registrar and partly due to the perceived legitimacy of the nation-state in media governance in the country, they frequently use English words and acronyms in domain names. The examples include www. open-government.mn for the Prime Minister's Office web site, www.mongolia-foreign-policy. net for the web site of the Ministry of Foreign Affairs, and www.apemongolia.mn for the web sites of the Academy of Political Education. These textual URL addresses are tailored for an audience with knowledge of the English language. In fact, a content analasys in this study found that 117 web sites or 74.5% of the sample use English words or the acronyms in their textual URL addresses. As the Mongolian case shows, English remains a necessity for Internet users and an amplifying factor of the global digital divide.

Furthermore, though the addition of Cyrillic domain names will allow for a more inclusive approach to bridging the digital divide for Mongolians who use the Cyrillic alphabet, it will also highlight a problem associated with the use of the Cyrillic alphabet. The content analysis of Mongolian language web sites in this study discovered that 80% of web sites analyzed displayed distorted Mongolian Cyrillic letters as of 2005. When I interviewed people in Mongolia, the interviewee discussed the problems associated with the use of the Cyrillic alphabet, which range from digitizing Mongolian language resources onto computer systems (Suren, interpersonal communication, June 27, 2005) to a lack of Cyrillic alphabet possibilities in synchronous online chat environments (Ariun, interpersonal communication, June 27, 2005). Suren, an information specialist in the city library, says that there is no software that recognizes the Mongolian Cyrillic alphabet, therefore the indexing of library resources falls behind. Another interviewee Ariun, the manager of a government web site, said when government officials try to discuss public issues with citizens using online chat features at the Open-Government web site, both government officials and citizens have to use the Latin alphabet which makes communication cumbersome for Mongolians who use the Cyrillic alphabet.

Initiating non-western alphabets domain names and setting culturally inclusive non-western alphabet standards have been important steps in achieving linguistic diversity on the Internet and overcoming the global digital divide in countries like Mongolia. This process requires deliberate efforts by international organizations and multilateral bodies to initiate and carry out new policies, otherwise small developing countries and people with diverse cultural heritages will be excluded.

#### THE INFLUENCE OF THE SOCIALIST LEGACY ON INTERNET DEVELOPMENT

New technology, especially the Internet, widens the social divide due to different levels of access to information, and tends to undermine nationhood and national identity as digital divide scholars point out (Poster, 2001; Slevin, 2000; Norris, 2001). Following the collapse of communism in 1990, Mongolians witnessed the rise in nationalism, the revival of religion, and increasing political fragmentation similar to other post-communist countries as Holmes (1997) observed in eastern European countries. In order to understand whether or not these post-communistic characteristics of nationalism, religious revival, and rudimentary consensus building are reflected on the Internet, the content of web sites of Mongolian organizations was analyzed for variables such as presence of the Mongol traditional script, and images of Chinghis Khan that were suppressed during the socialist time.

The content analysis did not reveal a manifestation of the symbolic rise of nationalism on the web sites of Mongolian government and civil society organizations. Only five web sites or 3.2% of all 157 web sites display some nationalistic motto such as "For the development of Mother Land-Mongolia." Religious symbols are present only on the web sites of two institutions; national flags, the images of Chinghis Khan and landscape are present at only 23.6% of web sites, most of which are government institution web sites using the national flag. Eight web sites or 5.1% of Mongolian institutions displayed the traditional Mongolian script on the web. Furthermore, the content analysis of web sites shows that flames and negative messages occurred in seven web sites or 4.3% of web sites. This result can be explained by taking into account Norris's (2001) view of Internet culture as a distinctive culture more inclined toward secular, egalitarian and international values. Furthermore, the scholars of the post-communism era also point out that "the euphoria of independence" (Holmes, 1997) from the Soviet dominance in post-communist countries has declined as the transition deepens and the polity and society becomes more deeply concerned with economic and political problems.

When I interviewed people regarding the role of the Internet in Mongolia, my interviewees tended to situate problems within the broader context of society and polity rather than specific problems pertaining to the use of the Internet. A few interviewees mentioned that the Mongolian legislative, government, media, and non-profit organizations are all in transition and are struggling with the challenges of newly established organizations. *The State Great Khural* (the Mongolian Parliament), that once used to unanimously approve the bills created by the communist party apparatchiks, is now learning to function as a law making institution and a representative governing branch. In an earlier work (Baasanjav, 2007), I pointed out overlapping functions of the web sites of the Parliament and the Prime Minister's Cabinet, both placing pending legislation, bills and other legislative documents on their web sites, and hosting discussion forums for citizens to discuss their views. I went on to say that checks and balances between the key legislative and executive branches are still in flux in Mongolia. This situation is similar to what Sparks and Reading (1998) point out as the fusion of political and economic powers that characterize the broadcasting institutions in eastern European former socialist countries.

The problems of new institutions in Mongolia are even clearer in the experiences of new online media companies. Olloo.mn is a new online media organization operating as an online provider of news and services. The company started by building online information sources on schools, hospitals, banks, shops and real estate services, since there has been a lack of information on these services available in Mongolia. During the socialist time, all these services were state-owned and state-run, and there was no need to provide information on service providers. Privatization with the "hands-off" approach by the government created some competition in economic and social sectors; at the same time there have been plenty of incidences of fraudulent and corrupt banks, schools, and medical malpractice in Mongolia since the collapse of socialism. That is why building information databases on schools, hospitals, banks and real estate services is important. Yet, Olloo.mn faces many challenges as Bayar, the head of the online media, said:

People are unenthusiastic because they do not understand [the Internet] ... they prefer traditional ways and maintain overly cynical views thinking that we, online media companies, are going to make windfall profits on the information they give us. Even non-governmental organizations do not easily provide studies and information that they are supposed to distribute (Bayar, personal communication, July 7, 2005).

These challenges are related to the complexity of the current Mongolian society and people's anxiety in coping with such complexity and plurality. The interviewees emphasized the information flow problem, that is "the difficulties in obtaining information" in Mongolian organizations. Even though everyone - the government officials, the Prime Ministers and the media - talk about the importance of openness of information, as Jargal, the director of an influential NGO, puts it "people are uninformed" (Jargal, personal communication, July 18, 2005). The interviewees often explained "the difficulties in obtaining information" in relation to people's attitudes and routines inherited from socialist institutions. Public officials in ministries are wary even of providing information to the Open-Government web site team, using the excuse that "a draft is not finalized." A web master in the ministry has created a "black list" of departments and officials who "would not give information to be posted to the web site." During the socialist time, government controlled information via television and newspapers, had the function of propagandizing first, and controlling and censoring information second. Since there was no need to produce and create information, government institutions did not have professionals who could provide information for the public. Only after the democratic revolution have Mongolian institutions set up media and public relations divisions.

Ironically, the traditional media that used to control information and censor other views still seems to play a huge role in Mongolian society due to its nation-wide mass audience, which was cultivated by the ubiquitous socialist media, while the reach of new media is constrained by access, language, and economic sources. Key organizations like the Parliament and political parties emphasize traditional media - television and newspapers - and in some cases this preference for traditional media is a reason for weaker efforts to develop the Internet by Mongolian organizations.

Furthermore, the overall lack of library resources and educational materials and an acute shortage of funds for educational and research institutions also encouraged content creators to "recycle" information and material from socialist times. Suren (June 27, 2005), who created a digital library project in the Central Library of Ulaanbaatar, said that he collected clips of old newspapers and magazines to include into his digital library project by removing only "ideological parts." Besides, the library does not have to pay for "copyright" because these materials are conveniently in the public domain already.

As Bellamy and Taylor (1998) explain, the shaping of Internet technology is not simply "a process of free and conscious choice" (p.151), rather the use of the Internet is shaped and constrained by existing routines of organizations and by the uncertainty of the transition. The Mongolian case shows that post-communist settings are impeding Internet development because of the traditional ways, slow information flows, uninformed people and a preference for traditional media.

#### FOREIGN AID DEPENDENCY AND THE ROLE OF INTERNATIONAL ORGANIZATIONS

According to the Economic Intelligence Unit (2005), international aid money provided by donor countries amounted to 2.9 billion US dollars during the period of 1991-2002. This money was given to help Mongolia overcome the loss of Soviet support and COMECON (an economic bloc of the former communist countries)<sup>14</sup> support. Reflecting the immense role of international organizations, many institutions maintain their web sites in two languages - Mongolian and English – in order to provide the "right" information for donors whose

money Mongolia really depends on. This situation offers an opportunity to understand how international organizations influence the content and the use of the Internet in Mongolia by examining the manifest content of web sites of Mongolian organizations and by talking to people in those organizations.<sup>15</sup>

The analysis of the content of 157 web sites of Mongolian organizations shows that 22.3% of all web sites were donor funded, while 28.7% of web sites were coded as funded by ads, subscription and other mechanisms and 49% of the sample was organizationally funded (See Appendix 3). Even though the percentage of donor funded web sites is not high, the chi-square test indicates a significant association between the variables "type of web sites" and "funding mechanism" ( $\chi^2(10,$ N=157)=104.14, p<0.01) suggesting certain types of organizations are more likely than other types of organizations to be supported by donors. 59.1% of NGO and INGO websites were donor funded, while diaspora, media and Internet, and interest groups' web sites were more often funded by ads, subscription and other means.

A businessman and former deputy minister Bat (July 14, 2005) said that "donor money of 300 million dollars a year in the one-billion-dollar Mongolian economy brings some changes." He was critical of economic policies of the Mongolian government that lacked a coherent vision and was driven by rent-seeking behaviors of public officials and the opaqueness of using aid money. He participated in several cycles of creating policy documents on the use of information technology in order to ask for foreign aid. Policy researcher Naran (July 18, 2005) said that "the government becomes especially interested in the participatory policy making process if someone [a donor organization] is willing to finance the process." Naran also highlighted the donor organizations' influence on the policy process in Mongolia through the leverage of funding. Steiner-Khamsi and Stolpe (2006), who analyzed the donor assistance in the education sector in Mongolia, pointed out how the Ministry of Education in Mongolia used such catch phrases as "choice," and "individual choice" that resonate with the strategy of donor organizations to attract international funding. In a similar vein, the Mongolian government emphasizes catch phrases like "increasing transparency," and "combating corruption" when it comes to Internet use in Mongolia. When donor money is received, Bat went on to say, the government translates policy into actions which benefits only the factional or private interests of politicians such as those selling computers at a lower rate that benefit only a certain company, not the general public. Socially beneficial applications of the Internet such as developing useful government services tends to fall behind the implementation of an access centered policy. Other interviewees had different opinions regarding the policy of selling cheap computers, basically approving of the government policy as a tangible step to increase access to computers.

International donor organizations such as (UNDP), the Soros Foundation, the Canadian International Development and Research Center have been very active in supporting the development of the Internet, and related policies in Mongolia. Executive offices of government institutions - the Prime Minister's Cabinet, and ministries - have established their online presence in many cases thanks to donors such as the United Nations Development Program UNDP, the Asian Development Bank, and the World Bank. The Parliament established an Internet connection and created its web site with the support of the Open Society Institution or the Soros Foundation, a philanthropic organization based in New York.<sup>16</sup> The Prime Minister's Open-Government web site is financially supported by the U.S Agency of International Development (USAID) and the maintenance of its content is contracted to the Asia Foundation, a U.S. semi-government foundation. These examples of donor organization support for government organizations tend to suggest that government institutions are benefiting more from this donor aid than the other organizations according to the results of the content analysis.

There are a few efforts by international organizations to help non-government and educational institutions in Mongolia, as well as the "havenots" in rural Mongolia. The Citizens Information Centers funded by the UNDP and the Community Information Centers and Internet Schools in the provinces both supported by the Soros Foundation were all evaluated as "not sustainable" due to the high cost of rural communication and the low paying power of people in rural Mongolia. The role of international and donor organizations in using and promoting the use of new technology in Mongolia is nevertheless noteworthy. The interviews in this study suggest that support from international organizations have focused on the issue of access to computers and the Internet, especially in providing this access for government organizations. Though the context of Mongolia is unique, this situation raises several digital divide issues. First, government organizations in the capital, which are already "better-off" in Mongolia, benefit more from these international organizations' support. The "have-nots" in the countryside of Mongolia and the educational and research institutions have been supported less. This situation suggests that donor aid money distributed by government organizations tends to benefit organizations that are in charge, and does little to bridge the digital divide. Second, the greater emphasis on access tends to translate into a government policy that pours international donor loans and other assistance into infrastructure and technologies that are rapidly changing and may soon be obsolete. A deputy director of a government agency Erdem expressed this concern:

Since 1992 we invested more than 80 million dollars, mostly from donor aid and loan money, into the expansion and renovation of telecommunication networks and services...However, technology changes rapidly. For instance, we received a 40 year loan from the international bank groups to invest into infrastructure and communication equipment. The technology and communication equipment we installed in 1997 are almost outdated now, while the payment for the 40 year loan has just begun. A long-term loan to invest into a rapidly changing industry becomes something of dubious value (Erdem, personal communication, July 20, 2005).

Erdem discussed the challenges Mongolia is facing in finding venture capital to invest in the rapidly changing telecommunication sector in Mongolia. More than half of this investment went into the expansion and renovation of the telecommunication network of Mongolia (ADB, December 2003).<sup>17</sup> Given the fact that half of the donors' 2.9 billion dollar aid and assistance came in the form of loans, the situation raises concern over Mongolia's debt in the long run. This heavy investment in infrastructure and access to telecommunications services was the reason for Hamelink's (2001) warning that developing countries should not try to follow the pattern of consumption observed in developed countries. Hamelink was of an opinion that this accesscentered and neo-liberal economic approach in developing countries would only benefit the corporate sector. In the case of Mongolia, the government is investing loan money borrowed from international bank groups in ways that benefit some businesses more than the rest of society.

#### CONCLUSION

This chapter aimed at bringing evidence of the digital divide in developing post communist countries like Mongolia to contribute to the global digital divide scholarship that goes beyond Internet access. The exploration of the content of web sites features of Mongolian organizations and interviews with people in Mongolia examined the fact that even a remote country like Mongolia is much affected by the decisions made by global

Internet governing organizations, as well as by international donor organizations and multinational corporations. The ICANN's initiation of Cyrillic and other alphabet domain names is a promising development toward achieving linguistic diversity on the Internet, yet, Internet development in Mongolia is much dependent on multinational corporations like Microsoft, which dominates browser and computer operation systems marketed worldwide. Setting international standards that include Mongolia's Cyrillic alphabet into browser and computer systems helped Mongolians use the Internet to communicate with each other more fully, and participate in the global information society. The world society approach to the global digital divide underlining the structural and symbolic power differences between developed and developing countries seems to suggest the necessity for deliberate steps to bridge the global digital divide by creating inclusive Internet governing practices and promoting linguistic diversity on the Internet.

Furthermore, the geographical digital divide between the capital city and the rest of the country, as well as the institutional divide between organizations with political and economic power and the less powerful are exacerbated by the Internet. When a certain policy is implemented to bridge the digital divide in developing countries like Mongolia, first, it tends to focus on access and second, it tends to benefit the institutions with the most political and economic power. The Mongolian case clearly showed that government organizations and powerful non-governmental organizations in the capital achieved much better integration with the global information society than the rest of the country. The organizations, which are supported by donor funding or international organizations, seem to take advantage of the Internet more fully.

The role of new media in relation to the socialist legacy and socialist media needs nuanced explanation in the context of Mongolia. Post communist characteristics such as the rise of nationalism, religious revival and the rudimentary consensus building have not been manifested on the Internet when the features of web sites of Mongolian organizations are analyzed. However, the analysis of the interviews in this research brought more nuanced instances of both the continuation of the socialist legacy and the departure from it. The interviewees in this research commented that institutional routines, people's attitudes, and social practices do not change immediately. Public officials' attitudes toward the role of civil society and the public show that government institutions are not completely separated from the paternalistic principles of communist party ideology. The secrecy in society, inherited from the socialist time, also amplifies "the difficulty of obtaining information" at all levels of Mongolian society, as the interviewees point out. The fusion of economic and political power is evident in managing international aid and resources in Mongolia and is reminiscent of similar problems in the media development of eastern European post-communist countries. Yet, many challenges in using the Internet in Mongolia are associated with newly established institutions. Further research needs to explore the comparative aspects of new media development in former socialist countries taking into account historical context, language factors and other media developments as suggested by the social constructivists.

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#### **KEY TERMS AND DEFINITIONS**

**Global Digital Divide:** The discrepancy in Internet use between developed and developing countries.

**Linguistic Diversity on the Internet:** The inclusion of all languages in cyberspace including diversity in the naming and numbering system of the Internet.

**International Domain Names:** Web site and Uniform Resource Locator names written in non-western alphabets.

**Cyrillic Content on the Internet:** Internet content written in the Cyrillic alphabet.

**Post-Communistic Characteristics:** Characteristics such as the rise of nationalism, the revival of religion, the boom of independent media outlets, and institutional routines that were prevalent in former socialist countries and continue after the fall of the Iron Curtain.

**Socially Beneficial Internet Applications:** Services and information on the Internet provided by government and non-government organizations, as well as by individuals that benefit the general public.

**Preference for Traditional Media:** Preference of key political and social organizations such as the Parliament and political parties for traditional media -- television and newspapers—that in some cases lead to weaker efforts to develop the Internet.

#### **ENDNOTES**

- <sup>1</sup> By the year 2003, foreign aid per capita was \$100 comprising some 20 percent of its gross national product placing Mongolia in the category of the fifth most aid-dependent country in the world (Landman, Larizza & McEvoy, 2005).
- <sup>2</sup> Uigur alphabet was adopted from Turkic Uigurs in Central Asia and is written vertically using twenty four letters, each letter having three different forms in the beginning, in the middle and in the end of a word. The most famous Mongolian literary text, *the Secret History of the Mongols*, a part history and part epic mythology depicting Chinghis Khan's (westerners say Genghis Khan) conquests is written in the *uighur script*.
- 3 Domain names are easy to remember textual names that are used by browser software to locate resources on the Internet, and consist of the highest level domain names placed at the very end of a URL, and sub-domain names separated by dots. For example, www. parl.gov.mn domain name has the highest level top domain name .mn which corresponds to Mongolia's country code top level domain name (ccTLD). Mongolian web sites can also be located at the generic top-level domain (gTLD), names such as .org, .com, .edu, .net. For example, The Mongolian Embassy to South Korea has a web site address http://www.mongolembassy.com which is located within the .com gTLD name.
- Sassi (2005) classifies these four different approaches into 1) technocratic approach, 2) social structure approach; 3) information structure and exclusion approach; and 4) modernization and capitalism approach.
- <sup>5</sup> The number of monasteries destroyed and monks affected during these purges varies from one document to another, since information was censored and controlled tightly during the socialist days. Sanders (1987)

states that there were eight hundred monasteries with eighty thousand monks and 7,700 *jas* (monastery properties) in Mongolia at the beginning of the 1930's. By the 1980's, there was only one operating monastery; a few reserved monasteries operated as museums, and around one thousand monks lived in Mongolia.

- <sup>6</sup> In 2004, there were 161 newspapers, 69 journals and magazines, 43 radio channels, 37 over-the-air and 15 cable television channels in Mongolia (Press Institute of Mongolia, 2005).
- <sup>7</sup> The sample for the web site content analysis was built based the results of five different search engines. Search results were also corroborated with man-maintained directories to include Mongolian language web sites that are relevant to political, social and cultural life of Mongolians.
- <sup>8</sup> Known in the West as Genghis Khan.
- <sup>9</sup> Flames are offensive and uncivil messages on the Internet often appearing in discussion forums.
- Traditional Mongolian script or *Uigur* script was used in Mongolia until 1941 (see Chapter 1).
- <sup>11</sup> The variable "Cyrillic letter distortion" was coded "1" if any Mongolian Cyrillic letter is incorrectly displayed on a web site. Though the official Mongolian official alphabet is now the Cyrillic alphabet, it uses two extra letters  $\Theta$  and Y<sup>1</sup> recorded in the Unicode standard as "barred O" and "straight U." Early character standards such as those of the American National Standard Institutions (ANSI) allocated fewer bits for coding different alphabetic sets. This made it difficult to later include these two letters on computer keyboard layouts.
- <sup>12</sup> A part of this research examining the web use pattern for civic discourse is under review with another journal.

- <sup>13</sup> The word "Монгол" (Mongolia) in the Cyrillic alphabet was chosen avoiding an inconsistency in search results due to different Cyrillic alphabet standards.
- <sup>14</sup> Generous Soviet aid in the 1980's made up one third of the gross domestic product of Mongolia at the time. During the socialist era, universal access to education and health care in Mongolia resulted in a literacy rate of 96 percent and the extension of life span by 15 years between 1960 and 1990 (UNDP and Government of Mongolia, 2000).
- <sup>15</sup> By the year 2003, foreign aid per capita was \$100 comprising some 20 percent of its gross national product placing Mongolia in the category of the fifth most aid-dependent country in the world (Landman, Larizza & McEvoy, 2005).
- <sup>16</sup> The Soros Foundation in Mongolia mostly works with non-governmental and civil society institutions. The first speaker of the new Mongolian Parliament Gonchigdorj personally requested that George Soros, the philanthropist, help the Mongolian Parliament embrace the Internet in 1997.
- <sup>17</sup> The Asian Development Bank and the Nordic Development Fund were the major supporters of this US\$ 49 million project for the renovation and expansion of Mongolia's basic telecommunication network (ADB, December 2003).

# **APPENDIX 1**

Table 1. List of Mongolian language web sites and their post-communist indexes

	Name	URL	Index
Govern	ment		
1	The Parliament of Mongolia	www.parl.gov.mn	1
2	Open Government	www.open-government.mn	1
3	ICT Agency	www.icta.gov.mn	1
4	Millenium Challenge Account	www.mca.mn	2
5	Dornod Province	www.dornod.mn	0
6	Ministry of Foreign Affairs	mongolia-foreign-policy.net	1
7	Information and Computer Center of the Ministry of Environment	www.env.pmis.gov.mn	2
8	Mongolian medical site (official)	www.monmedline.com	1
9	Civil Aviation Authority	www.mcaa.gov.mn	1
10	Energy Regulatory Agency	era.energy.mn	1
11	IT Park	www.itpark.mn	1
12	Ministry of Industry and Trade	www.mit.pmis.gov.mn	2
13	Energy Sector of Mongolia	www.energy.mn	1
14	Expanding Employment Opportunities Programme for Disabled Citizens	www.tdi-ajil.mn	1
15	5 Ulaanbaatar City Reference Book niislel.com		2
16	General Department of National Taxation www.mta.mn		1
17	National Statistical Office	www.nso.mn	2
18	State Property Commission	www.spc.gov.mn	1
19	Judicial Reform Program	www.ncsc.mn	1
20	Ministry of Defence	www.pmis.gov.mn/mdef	1
21	Mongolian Communication Regulatory Commission	www.crc.gov.mn	0
22	Mongolian Embassy in Korea	www.mongolembassy.com	1
23	The Cabinet Secretariat	gate1.pmis.gov.mn/cabinet	1
24	Water of Mongolia	www.water.mn	2
25	Embassy of Mongolia in Washington, D.C.	www.mongolianembassy.us	1
26	for Child	www.huuhed.mn	0
27	Intellectual Property Organization www.ipom.mn		0
28	Mineral Resourse Agency of Mongolia www.mram.mn		1
29	Mongolian Customs General www.customs.pmis.gov.mn		1
30	Huvsgul Province Gate1.pmis.gov.mn/huvsgul/		2
31	Capital city Road and Transportation Department www.ubtrans.mn		1
32	Free Economic Zone "Zamyn-Uud" www.zamynuud.mn		1
33	Government Election Committee www.gec.gov.mn		1
34	The President of Mongolia	pmis.gov.mn/presiden	3
35	5 Center of Infectious deseases with Natural Foci www.ccd.mn		

	Name	URL	Index
36	Darkhan-Uul Province	www.darkhan-uul.com	0
37	Uvs Province	www.uvsmongolia.mn	2
Educat	ion and Research		
1	Mongol Education	www.mongoleducation.mn	1
2	Metropolitan Central Library of Ulaanbaatar	www.mcl.edu.mn	2
3	Industrial Technology and Design School	www.itds.edu.mn	1
4	Diplom.mn	www.diplom.mn	1
5	School of Economics Studies	www.ses.edu.mn	2
6	Mongolian Institute of Certified Public Accountants	www.monicpa.mn	1
7	Internet Based Distant Learning	www.elearning.mn	1
8	Mongolian University of Science and Technology	www.must.edu.mn	1
9	Institute of Financial Education	ife.edu.mn	1
10	Computer Science and Management School	www.csms.edu.mn	1
11	Climate Change	www.mongolclimate.mn	3
12	Ulaanbaatar University	www.ulaanbaatar.edu.mn	2
13	Huree Institute of ICT	www.hureeict.edu.mn	1
14	University Management Information System	www.unimis.edu.mn	1
15	The National Center for Legal and Judicial Researches	www.legalcenter.mn	0
16	Online English Mongolian Dictionary	www.dic.edu.mn	1
17	Educational Advising Resource center	www.earcmn.org	1
18	State Central Library	www.mnlibrary.org	0
19	National University of Mongolia	www.num.edu.mn	1
20	Tushee University	www.tushee.mn	0
21	Technological School in Uverhangai	www.tsu.edu.mn	1
22	Technological School in Orkhon province	www.techinst.edu.mn	2
23	Technological School in Darkhan province	www.tsd.edu.mn	1
24	Orchlon School	www.orchlon.mn	1
25	Mongol Business Institute	www.mbi.edu.mn	1
26	Khan-Uul University	www.khan-uul.mn	1
27	Institute of Commerce and Business	www.icb.edu.mn	1
28	Institute for Strategic Studies	www.issmon.mn	1
29	ICT Training center	www.icttc.mng.net	1
30	Geological labaratory	www.cengeolab.com	1
31	Construction Engineering School	www.ces.edu.mn	1
32	Technological School in Sukhbaatar	www.tss.edu.mn	1
33	Orkhon University	www.orkhon.edu.mn	1
34	Natural History Museum	www.naturalmuseum.mn	1
35	National History Museum	www.nationalmuseum.mn	1
36	Management 45 Anniversary	www.management.edu.mn	1
37	Print and Publishing Education Center	www.ppecmongolia.net	1
38	Otgontenger University	www.otgontenger.edu.mn	1

	Name	URL	Index
Non-G	overnment Organizations		
1	Open Web Center	www.owc.org.mn	1
2	OpenForum	www.openforum.mn	0
3	The Chamber of Commerce	www.mongolchamber.mn	2
4	Cooperative sector of Mongolia	www.mongolia.coop	2
5	Zorig Foundation	www.zorigfoundation.org.mn	1
6	Mongolian student association in Korea	www.cmox.org	0
7	Amnesty International www.amnesty.mn		1
8	The Amarjargal Foundation	www.amarjargal.org	1
9	Strengthening the Disaster Mitigation and Management System in Mongolia	www.mongoliadisaster.org	2
10	Liberty Center	www.libertycenter.org.mn, www.liberty- center.org	1
11	Mongolian Camel Polo Association	www.owc.org.mn/camelpolo	2
12	Gender Center for Sustainable Development	www.wirc.mn	1
13	Academy of political education	www.apemongolia.org	1
14	Hans Heidel Foundation	www.hss.mn	0
15	World Wild Foundation Mongolian Branch	www.wwf.mn	2
16	Energy Association	www.energyassociation.mn	1
17	Save the Children	www.savethechildren.mn	1
18	Rural Poverty Reduction Programme	www.rprpmongolia.mn	2
19	Mongolian Danish Soceity	www.owc.org.mn/mondaso/	2
20	International Association of Mongolian Studies	www.owc.org.mn/iams/mon	1
21	Amarbayasgalant Monastery	www.amarbayasgalant.org	3
22	Management Association	www.mma.mn	2
Media,	Online Media, and Internet Portals		
1	Olloo	www.olloo.mn, www.mp3.mn	1
2	Mongolia Online	www.mol.mn	1
3	Mongolmedia	www.mongolmedia.com	1
4	TV 5 - Internet TV	http://69.57.158.13, www.tv5.mn	2
5	Sonin.mn	www.sonin.mn	0
6	Mongolica@mn portal	www.mongolica.mn, www.bambar.url.mn	1
7	MN-Today www.mongolnews.mn		1
8	Mongolian Topsites www.topsites.mn		1
9	Sainuu.mn www.mongoliatoday.mn		0
10	Rural Business News www.rbn.mn		1
11	Montsame	www.montsame.mn	1
12	Mongolian Search Engine	www.hailt.com	0
13	Mymongol-online newspaper	www.mymongol.com	2
14	Mongolian employers' portal	www.businessmn.com	1
15	Infor Radio 105.5	www.inforadio.mn	1
16	Great Nation	www.greatnation.mn	4

	Name URL		Index	
17	Zar.mn www.zar.mn			
18	UBS TV www.ubs.mn			
19	Ganzam Weekly Newspaper www.railcom.mn/ganzam/			
20	Yellow Book www.yellowbook.mn		1	
21	Computer Times	www.computertimes.mn	0	
22	Jobs.mn www.ajil.mn		1	
23	Bodrol.com	www.bodrol.com	0	
24	All Mongolian Web Awards	www.webawards.mn	1	
25	Newspapers.mn	newspapers.mn	1	
26	109 Mongolian Web Directory	www.mn109.net	1	
27	Link.mn	link.mn	1	
28	Saya Medee (Recent news)	www.saya-medee.com	0	
Interes	t Groups			
1	Mongolian Open Source Developers	www.openmn.sourceforge.net, www. openmn.org	2	
2	Tanhim Net	www.tanhim.net	1	
3	Youth Club at the National Foundation against AIDS www.dotno.mn		1	
4	Asuult.net	www.asuult.net	3	
5	Temujin Children Literature Web site     www.temujin.url.mn		1	
6	Young Economists Club     www.asuult.net/zez/		1	
7	Nairamdal friends	www.elab.mn/nairamdal, www.elab/teenag- ers	2	
8	Tsahim Net	www.tsahim.net		
9	Reform club	http://www.erkhzui.net/		
10	Orkhon Net			
11	Banjig.Media	www.banjig.net	1	
12	Mongolian People's Revolutionary Party	www.mprp.mn	1	
13	Democratic Party	www.demparty.mn	2	
14	Shaazgai Network	www.shaazgai.net	3	
15	Farmer Club	www.mongol.agrimongol.org	1	
16	Nano-Mongolia	www.nanomn-cg.com	1	
17	Mongolian Language Computerized Foundation	www.owc.org.mn/mglcf	1	
18	D20club www.d20club.mn		1	
19	Mongolian Lesbian information and Community Center www.mongoldyke.org.mn		1	
20	Mongolcarp www.mongolcarp.mn		2	
21	Future Mongolia www.ireeduinmongol.net		1	
22	Citizens Will-Republican Party www.izbnn.org.mn		2	
23	ThinkQuest children web contest www.owc.org.mn/ibook/		1	
Diaspo	ra			
1	1 Mongolian Student Network www.monstudnet.mn			
2	2 Mglclub.com www.mglclub.com			

#### Global Digital Divide

	Name	URL	Index
3	Tsahim Urtuu Net	www.tsahimurtuu.mn	2
4	4 Medeelel World (Mongolians in Chicago) www.medeelel.com		1
5	Gant-Friends.com	www.gant-friends.com	1
6	Mongolian in D.C.	www.mongoliadc.us	2
7	7 MNG-UK.net www.mongoluk.net		1
8	American Mongols	www.americanmongols.com	2
9	Mongolians in LA	www.mongoltown.com	0

# **APPENDIX 2**

Table 2. Pseudonyms of interviewees, the date of interviews, and associated institutions and web sites

	Pseudonyms	Date of the Interview	Institution and Web site the interview is associated
1	Dorj	June 27, 2005	The Asia Foundation (Open-government.mn)
2	Ariun	June 27, 2005	The USAID (Open-Government.mn)
3	Odnoo	August 1, 2005	The Parliament of Mongolia (parl.gov.mn)
4	Elbeg	August 3, 2005	The Parliament Strengthening for Democratic Governance Project (parl.gov. mn)
5	Tumen	July 29, 2005	The Ministry of Foreign Affairs (Mongolia-foreign-policy.net)
6	Erdem	July 20, 2005	The Information and Communication Technology Authority (icta.mn)
7	Bold	July 15, 2005	The Information Technology Park (itpark.mn)
8	Suren	June 27, 2005	The Metropolitan Central Library of the Capital (mclibrary.mn)
9	Tuya	July 19, 2005	The Mongolian Education Alliance (mongoleducation.mn)
10	Gant	July 15, 2005	The Mongolian National University (Tanhim.net)
11	Bayar	July 7, 2005	Pixel Co. (Olloo.mn)
12	Tuul	June 30, 2005	MGLclub (MGLclub.com)
13	Luvsan	July 8, 2005	DataCom (mol.mn)
14	Bat	July 14, 2005	Datacom (mol.mn)
15	Tomor	August 26, 2005	Asuult Net (asuult.net)
16	Devshil	July 26, 2005	TV 5 (tv5.mn)
17	Jargal	July 18, 2005	Open Forum (Openforum.mn)
18	Naran	July 18, 2005	Open Forum (Openforum.mn)
19	Tungaa	July 6, 2005	Amnesty (amnesty.mn)
20	Enkh	August 1, 2005	MIDAS/MONITA (www.midas.mn)
21	Mend	July 5, 2005	The National AIDS Foundation (Dotno.mn)
22	Zol	August 3, 2005	The Democratic Party (demparty.mn)
23	Tsog	August 29, 2005	Openforge.mn

## **APPENDIX 3**

*Table 3. Funding and types of Mongolian language web sites of Mongolian government and civil society institution web sites* 

	Government	Education & Research	NGO & INGO	Media & Internet	Interest & Political	Diaspora	Total
Organizational	29	29	9	4	5	1	77
	78.4%	76.3%	40.9%	14.3%	21.7%	11.1%	49.0%
Donor	6	8	13	3	5	0	35
	16.2%	21.1%	59.1%	10.7%	21.7%	0.0%	22.3%
Ads, Subscription, &	2	1	0	21	13	8	45
Other	5.4%	2.6%	0.0%	75.0%	56.5%	88.9%	28.7%
Total	37	38	22	28	23	9	157
	100%	100%	100%	100%	100%	100%	100%

 $\chi^2(10, N=157)=104.14, p<0.001$ 

# Chapter 12 Internal Digital Divide in Organizations

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#### ABSTRACT

In this chapter, internal digital divide problems in organizations are identified and discussed. A longitudinal case study focusing on the implementation of e-Government at a public organization in Sweden is used as a starting-point for the discussion. Although the general use of information and communication technology is very high in Sweden there are still problems with digital divide. Such problems could hamper the implementation process of e-Government. In the case study the older employees were especially stressed and had problems to renewing their competencies and adapting to new working situations due to the implementation of e-Government. Internal digital divide is, however, a complex phenomenon, and involves aspects of learning, motivation, professionalization, management strategies, and organizational culture. Some ways of bridging internal digital divide problems are discussed. Soft systems methodology could be used for analysis and change of internal digital divide aspects involving a discussion with the concerned communities.

#### INTRODUCTION

The use of information and communication technology (ICT) is high in Sweden and e-Government is also very established in public organizations, compared with other countries. According to a

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ranking study of e-government maturity made by the United Nations (2008), Sweden was in fact ranked as the leading country in 2008 for the first time. However, there are still problems with aspects of the digital divide in Sweden. The implementation of e-Government puts demands on increased IT use of the citizens and the development of ICT related competencies. Digital divide problems are not limited to external problems with access to computers or limited ICT literacy in the every-day life for some groups of citizens. There are also internal problems of digital divide in the workplace, for example for organizations implementing e-Government. Examples of such problems are the lack of ICT literacy and/or motivation to change established work routines and the development of ICT related competencies, especially among older employees.

Implementation of e-government means change of the organizational culture. Cultural changes involve changes of human habits and attitudes, social aspects that could take long time to change. In this chapter we will focus especially on social aspects. Implementation of eGovernment has earlier been criticised for focussing too much on technical aspects (Grönlund, 2001; Schedler & Summermatter, 2003), thereby ignoring the importance of social aspects. Indeed, the technical challenges seem to be relatively simple compared with the cultural changes (Castells & Cardoso, 2006).

The goal of this chapter is to identify, analyze and discuss internal digital divide problems and solutions related to the implementation of e-Government. A longitudinal interview study focusing especially on social aspects of the implementation of e-Government in a public organization in Sweden is used as a starting-point for the discussion.

#### BACKGROUND

#### The Traditional Definitions of Digital Divide

The origin of the concept "digital divide" is unclear, but in the United States it became popular after the National Telecommunications and Information Administration (NTIA) used the phrase to describe disparities in access in its 1998 report (Mossberger, Tolberg & Stansbury, 2003). In 1995 the development of the National Information Infrastructure ("the information superhighway") started as a priority of the Clinton administration. The concept "digital divide" generally refers to the socio-economic gap between communities that have access to computers and the Internet and those who do not. The term could also refer to aspects affecting availability to quality, useful digital content such as ICT literacy and technical skills e.g. OECD (2001) defines the term "digital divide" as the gap between individuals, households, businesses and geographic areas at different socio-economic levels with regard to both their opportunities to access information and communication technologies (ICTs) and to their use of the Internet for a wide variety of activities.

Mossberger et. al. (2003) also identifies information literacy as the ability to recognize when information is needed and to locate, evaluate, and effectively use the needed information. Servon (2002) states that the content dimension is clearly related to the training dimension; IT skills are needed in order to access and create content. There are however methodological problem of studying the use of the Internet as a technology and user habits are rapidly changing (Norris, 2001). Most existing studies are made in the US concerning the use of the Internet, and it is not possible to generalize for other cultural contexts (ibid.). There is also a lack of empirical studies.

Norris (2001) differentiates among three different levels of the digital divide; the first cleavage is found on a global level, this cleavage is also explored by Castells (2001) for example between those regions and countries that have a developed ICT structure and those who do not. The next level can be found within a country and has to do with socio-economic status. The third level is a democratic cleavage according to Norris; some groups use the Internet to reinforce a political and societal engagement (e-Democracy aspects). Kirschenbaum and Kunamneni (2002) also identify the organizational divide as the lack of technology capacity among local communitybased organizations (CBOs).

# Extended Definition: Internal Digital Divide in Organizations

In this chapter we extend the concept of digital divide to even include internal digital divide aspects in organizations, especially related to the implementation process of e-government. Such digital divide aspects are hitherto not focused on much in research studies. However, Byrne and Hart (2010) argue that internal digital divide is discernible in all modern organizations, both private and public.

Internal digital divide in organizations refers to the gap among employees between those who are reluctant and not motivated to engage in the implementation process of e-government, and those who are interested and motivated. There could be different reasons for being reluctant and not motivated to learn and work with new IT-related work routines. The implementation of e-Government requires new competencies and new work routines e.g. related to new IT systems, new e-services, and changes of the work organization. Internal digital divide problems could hamper the implementation process and lead to efficiency and quality problems for the organization. Internal digital divide could also lead to psycho-social problems for the employees concerned.

## **Digital Divide in Europe**

In 2007 a majority of all households in Europe had Internet access for the first time (Eurostat, 2008), and almost one third of all individuals made use of e-government initiatives to access public services. The use of the Internet is highest in the Nordic countries (Statistiska Centralbyrån, 2010). 93% of individuals between the ages of 16-74 in Sweden used the Internet in 2009. However, access and use of the Internet varies a lot among different groups. Age, family type, educational level, employment status, income level and to some extent country of birth affect Internet access and use. Groups with the lowest levels of Internet access are older people, people with lower levels of education and households with an adult without children. There is a main digital divide between different generations in Sweden: Among the young people there is virtually no one who has never used the Internet. Among older individuals between the ages of 65-74, 38% have never used Internet (ibid.). Older individuals also use e-Government services more than younger. During the first quarter of 2009 the use of e-services was most frequent for individuals from the ages of 25 to 44 years old. Men used e-services more than women, according to the study (ibid.).

A digital divide is mainly a matter of age and education even in Europe (Eurostat, 2005). Among 16 to 24 year olds the proportion of computer or Internet users was three times higher than among persons aged 55 to 74 (ibid.). Among citizens over 54 years of age, the decrease of computer and Internet use was particularly sharp. This can partly be explained by the fact that people in these groups might lack computer skills. The use of ICT was highest among students and lowest among retired persons. Groups with older ages were less inclined to use the Internet outside their homes, but more than three in ten in the youngest group only accessed the Internet at places other than home. Among highly educated persons the use of ICT was about three times higher than among the less educated. Among the less educated, men scored much higher on ICT use than females.

There are big regional differences depending on the degree of urbanization and between poorer and richer regions in Europe. There also appears to be a divide not only between "haves" and "haves not" but even a divide between "have more" and "have less" could be observed. Although the use of ICT is growing among all groups considered in the study, the gap between groups tends to remain stable over time in terms of percentage points, and for some groups e.g. the disadvantaged groups the relative divide is actually widening compared with young and highly educated persons living in prosperous regions.

## A CASE STUDY OF IMPLEMENTATION OF E-GOVERNMENT IN A PUBLIC ORGANIZATION

#### Introduction

A longitudinal case study of the implementation of e-Government a public organization in Sweden was made by the author (Grundén 2005; 2008; 2009). The focus of the study was on social aspects. Different employee categories at different departments at different geographical locations were interviewed about their attitudes towards e-Government and their knowledge about e-Government implementation in the organization and society. The first interview study was made in 2005 and the second in 2007.

A vision and a strategy for the implementation of "e-Government 2007" for the organization were formulated in 2004. National government policies for e-Government were taken as a starting point for the internal development work, and a project group was appointed for the development work. According to the vision the organization should become an e-Government authority at the end of 2007. Then work activities mainly should be dealt with using electronic documents, electronic communication and electronic information retrieval. Electronic services to the citizens should be produced and delivered irrespective of time and geographical location. The development presupposed increased electronic co-operation with other authorities. The development process should lead to increase internal efficiency, quality and insight into work activities (in Sweden we have a law allowing public insight into official public records). The vision would influence the development of IT support, changes of the organization as well as the work situation of the co-workers.

The public organization was a very big public organization in Sweden. The employees dealing with matters in these areas mainly had an academic background and worked as handling officers in different expert fields. A majority of the employees were over 45 years old. This situation is similar compared to the situation in the other government administrations in Sweden. According to national statistics 52, 5 percent of all employees in government administrations were over 45 years old in 2008 (Statistiska Centralbyrån, 2010b).

The first interview study was initiated in order to survey the current situation before implementation of e-Government in the organization (Grundén, 2005). Five persons from different personnel categories (administrative assistants, handling officers and managers) at different geographical locations were interviewed. The respondents were asked about their attitudes and knowledge about e-Government.

Three different departments were studied (department A, B and C). Each authority was located at different geographical locations. According to the terminology of Bonham et. al. (2003) main work activities in the department A could be classified as Government-to-Government (G2G) activities. The department B mainly deals with applications for driving license from citizens. These work activities were mainly Government-to-Citizens (G2C) activities (ibid.). The department C deals with miscellaneous matters and could not be classified in a simple way according to Bonhams' terminology.

Some current e-Government projects were: electronic administration of driving licenses, geographical information systems, electronic administration of official diaries, a new technical platform for communicating with old and new systems, electronic security system, and electronic foundation system.

The second interview study was made in 2007, in the B and C departments. The employees had recently attended a web-based study circle developed by the author (Grundén, 2010) focusing on basic aspects of e-Government implementation both on a societal level and at the studied organization. The electronic security system and the electronic foundation systems were implemented at the C department. The implementation of electronic administration of driving licenses was in progress at the B department. The implementation started with simple matters, and should be followed by implementing more complicated matters.

It was difficult for the researcher to obtain permission from management to perform the interview survey in 2007 due to stressful work situations for the employees working with the implementation of e-government. The employees concerned needed to learn how to use the new systems, and during the implementation of e-government, they often had to work with parallel systems. The stress contributed to increased psycho-social problems for many of the employees concerned, and some were off for sick leave (contributing to further stress for the remaining employees due to increased work-load).

## DISCUSSION OF SOME RESULTS FROM THE STUDY

# Internal Digital Divide: Mainly a Generation Issue?

Most of the respondents in both studies showed a general positive attitude towards the implementation of e-Government. A common understanding was that "you cannot stop the development, you have to keep up". The respondents in the first study were asked about different positive and negative consequences of e-Government. Spontaneously many mentioned the risk of increased cleavages among different groups of citizens (those who use the Internet and those who do not). They also mentioned a risk of resistance to change among the personnel related to implementation of e-Government. Most of the personnel were over 50 years old, and had worked in the organization for about 30-40 years. Computer literacy was unevenly distributed in the organization. Some respondents commented that it could be more difficult for older people to learn compared with the younger generation:

I think it will be extremely difficult for the older employees to accept e-Government. They also show such attitudes towards smaller changes, and this is a very big change, it will be difficult to engage people. The new generation is more conscious and used to this and has no problems. (Handling officer, department C).

The same aspects were reinforced by the respondents in the second study. They were more close to the implementation of e-Government, compared with the respondents in the first study. More respondents in the second study commented on aspects of the internal digital divide compared with the first study:

Here we are very old (no younger employees) and have been employed for a very long time. I think it is more difficult for us to learn. New, younger employees have a very different perspective compared with the older employees, and can look forward to changes instead. We older employees are satisfied to work with the old routines that we have relevant competencies for. (Handling officer, department B).

The employees at this authority are mainly born in the 40's and 50's, and they will soon leave the organization due to retirement. It is more difficult for the old generation to renew their competencies. (Decision maker, department C).

Many employees will soon retire. They are hesitant to engage in changing their routines. They will no longer be in the organisation when e-Government is implemented. Therefore they are not motivated enough to put the required effort into changing their routines. (Decision maker, department B).

I have heard that many older employees at this authority don't want to learn a new system. I think

#### they are afraid. Such aspects are difficult to handle when you implement e-Government. (Handling officer, department C).

There could also be problems for some other employees who deal with manual, routine work tasks, if they do not have the capabilities to renew their competencies when their work tasks are changed related to the implementation. Such problems are also part of the internal digital divide dilemma. Most respondents were satisfied with the internal competence development possibilities. The personnel were used to being well informed and having access to good internal competence development possibilities.

The respondents seemed to understand the digital divide mainly as a generational issue (both according to internal and external aspects mentioned), and that the problems would diminish over time. This understanding of the problem both agrees and disagrees with statistical surveys. According to the survey by Eurostat (2005) the digital divide mainly depends on age and education. Education was not mentioned as an important aspect by the respondents of the organization. Neither were aspects such as geographical area for citizens, the number of children in the house-hold or immigrants. According to the surveys of Eurostat (ibid.) the gap among groups tends to remain stable over time in terms of percentage points, and for some groups, for example the disadvantaged groups, the relative divide was actually widening compared with young and highly educated persons living in prosperous regions.

## Increased Coping and Sense-Making Strategies

The respondents from the second study showed more coping strategies (Lazarus and Folkman 1984; Josefsson, 2007; Angelöw, 1991) and sense making strategies (Weick 1995; Henfridson, 1999) related to the implementation. They were closer to the actual changes of the work routines related to the implementation, and their work situations were more stressful.

Management had increased their focus on efficiency aspects related to e-Government according to the respondents from the second study, a fact that could have contributed to the increased stress and coping strategies among the employees. A lot of the older employees would soon retire, and many of them would not be replaced, due to expected efficiency gains. However, the remaining employees would receive increased workloads instead, at least in the short term.

People do not always articulate their feelings of stress. Instead they could react with increased coping and sense making strategies in order to handle a stressful work situation. Some of the older respondents of the second study thought that they would probably manage to deal with implementation of e-Government, because they managed to deal with the computerization in the early 80's, when manual routines were computerized. Many of the older employees were "uninterested" in taking an active part in the implementation of e-Government. Most likely, they hoped that they could continue to work with the existing routines as a consequence of their attitudes. Although process mapping of more complex tasks had begun in the organization, many handling officers from the second study denied the possibility that their own work could be automated, because of the complexity. They usually saw the coming change of their own work as very long term change, and something that they not yet had to worry about:

For the moment I am working with work tasks that not will be changed at this time. It is something that comes later. I might be retired at that time. So that is nothing I am worrying about for the moment. (Handling officer, department B).

It will not be possible with automatic dealing of matters other than for very simple cases....It must be human beings who deal with more complex matters. (Decision maker, department B). Some jobs will be eliminated but can be offset by the large number of retirements, a fact that could contribute to a reduction of fear:

If there were not so many employees who will soon retire, I would have probably reacted more strongly, because of the reduction of jobs. (Administrator, department B)

# Management Strategies and Professionalization Aspects

Several respondents commented that the implementation of e-government will take a long time because the elderly have more difficulties to assimilate the new skills required for working with e-government. Hence, there could be a need to work with old and new systems in parallel, as long as there are older employees that are not motivated to renew their competencies and work with the new systems:

The younger employees...they are more or less born with a computer in their hands. The older employees are not...then we have to work in two different ways; with the traditional paper routines as well as with the digital system. (Handling officer, department B).

Traditionally, the management seems to have had a permissive attitude towards handling officers who were not motivated to change their work routines. According to an earlier interview study made by the author (Grundén, 2004a), many handling officers in the organization did not want to work with too much administrative work tasks, because of their academic back-ground. Instead they wanted to focus on their special expert competence fields. According to the interviews most handling officers did not make registrations in the electronic diary system when they were dealing with client matters. Instead they left such work tasks to the registrars. The registrars initiated

and terminated each matter and most often they also made the registration of the measures of the matter. According to the results from this initial survey, both the handling officers and the registrars were satisfied with the prevailing work division. They referred to increased workload, their special competence and to the fact that more and more administrative tasks were transferred from the administrative staff to the specialists, when they argued for no change in the existing division of labour. The existing work division had a long tradition in the organization and strengthened the professional aspects of the handling officers' work (Grundén, 2004b). Management thought however, that the organization would be more efficient if the handling officers started to make their own registrations in the diary. They thought that education in how to use the diaries, could affect the handling officers to start to register their own matters and change the work division. Management initiated the development and implementation of a web-based course, in order to educate the handling officers to make their own registrations. The web-based course was seen by management as an educational tool for changing the existing division of labour in order to meet the professionalization struggles by the handling officers. A more advanced IT system for integrating the handling process with the diary was then developed and should replace the electronic diary system. The new system did not allow the user to separate registration and handling of a matter. During the second interview study the advanced system was implemented at the department C.

## DISCUSSION

## Internal Digital Divide: A Complex Phenomena

The respondents of the interview study referred to internal digital divide problems as mainly a generation problem. But there were also younger employees who had difficulties to renew their competences and they are also part of the internal digital divide problems of the organization. It is however, not obvious to understand, why many of the oldest in the organization resisted changing their skills and participating in the implementation of e-government. The notion that elderly have more difficult to learn than younger ones seem to be somewhat of a myth. Although some functions such as neural, cognition and memory functions generally decline through age, there are big individual variances of the older regarding their capabilities and motivation to learn (Hoare, 2006; Hedden & Gabrieli, 2004). Adults become more heterogeneous as they age due to different experiences, personalities, health status, different work and home contexts. Even normal age-related changes could be reversible through lifestyle changes and choice of learning strategies (Hedden & Gabrieli, 2004).

Adult development and learning are interrelated. Schooler and Mulatu (2001) has showed in their research, based on 20 years of longitudinal data, that complex intellectual activities in work or in leisure activities, could increase intellectual functioning in the later years of life. Meaningfulness of new work tasks to be learned, seem to be more important for the learning of older compared of younger. According to a study of Artistico, Cervone and Pezzuti (2003) younger subjects (20-29 years) routinely performed better compared with the older subjects (65-75 years) when tasks were common to both groups. When the researchers posed daily problems that were highly relevant to the older adults, they routinely outperformed the younger group.

Difficulties to adapt quickly to new technology demands for some older adults do not have to be related to learning or cognition capabilities. Instead difficulties could be related to the fact that they have not grown up with computers in the same way as the younger generation, and therefore the use of computers are more natural and meaningful for the younger (Hoare, 2006). Computers are more a part of the younger culture compared with the older. Implementation of e-government is a culture change that requires both new skills and communication patterns. It is not just about learning to manage new e-services and IT systems, but also to interact in a more process-oriented organization and to communicate with customers in new ways. Implementation of e-government also means increased stress at work, when you have to work with parallel systems, for example. For older people in the organization, this means major changes compared with the situation for the younger generation, who grew up in the IT community.

### Implementation of E-Government: A Social and Political Process

The respondents of both studies emphasized the implementation process of e-Government as a social process. Social aspects such as negotiating archiving rules delayed the implementation process. E-Government means a cultural change for organizations, and work routines and competencies need to change as well. Change work often becomes a political process with power struggles among the different interest groups, as Pettigrew (1973) has already pointed out. He argued that different communities develop different interests, based on the distribution of resources and liabilities in the organization. Such power struggles are especially common in big changes in an organization, when the existing distribution of resources and liabilities are changed. Knowledge is used by professionals as a social capital, not only for problem solving, but also for power, prestige and status reasons (Torstendahl & Burrage, 1990).

Traditional professionals often hold wellestablished and respected positions in society due to their knowledge monopoly, excluding others with no relevant educational background. Professionalization processes could also involve power struggles and refer to the permanent process of establishing and strengthening professional position

and status, including aspects such as improvement of the quality of the service provided, establishing a self-governing body and increasing credential requirements (Hoyle & John 1995). Established professions protect and preserve the attained positions, while un-established professions try to establish their professional knowledge and to acquire professional status. The first theories about professionals were developed during the nineteenth and twentieth century's, first of all focusing on the traditional professions such as doctors and lawyers. Professionals were associated with knowledge monopoly, status, responsibility and autonomy (ibid.). According to Giddens (1998) different actors exercise power and legitimate their own behavior in use of their own knowledge and experiences, resources and norms. In such a dialectic context different human activities could be both reinforced an inhibited. The unwillingness of the handling officers to register their matters in the electronic diary system was probably not primarily an educational problem. Instead, the handling officers were reluctant to learn the handling of the diary system because of lack of motivation. They used their academic professional competence in the professionalization process, to uphold their duties and maintain their professional status in the organization.

According to the interviews age was the main aspect of the employees not motivated to take part of the competence development needed for e-government. There could also be aspects of professionalization affecting the motivation to change established work routines and renew competencies. The digital divide community at the organization was not forced by management to change their competencies and work with new work routines, if there were other work tasks they could continue to manage. Such management culture could in a sense legitimize some resistance to change skills and work practices by the employees. But it could also be seen as a human management culture, not forcing employees with big problems to renew their competences in order to participate in the implementation of e-government. There is probably no single management strategy that is the ultimate solution to the complex phenomenon of internal digital divide. Instead, problems with internal digital divide and strategies to address this dilemma seem to be strongly context-dependent, and require appropriate responses adapted to the local situations and organizational culture.

### Soft Systems Methodology

Implementation of e-Government could contribute to increased stress in the organization. It is a challenge for the implementation work to identify and handle individuals and groups with problems of internal digital divide problem in a proper way. The reasons behind internal digital divide could be different. There are a number of possible reasons such as lack of ability to renew skills and competences, fear of the change, lack of self confidence, hard to see the change as sensible, experienced threats to professional status and knowledge. Different problems behind negative reactions need to be treated in relevant ways. Strategies for solving the problems need to be based on a solid problem analysis, in order to be relevant. Different organizations have different cultures and working conditions that affect the social shaping of technology, work routines and competencies.

There is a need for focusing more on social and organizational aspects (such as internal digital divide aspects) in the problem analysis and the implementation process of e-Government. The respondents of the case studies mainly had a user perspective and stressed the importance of social and organizational aspects. Systems developers generally have a more technical oriented perspective (Senyucel, 2005). Implementation of e-Government has been criticized for focusing too much on technical aspects (Grönlund, 2001; Schedler & Summermatter 2003). There is a need for further competence development of systems developers of analytical tools for identifying and solving social problems in the organization in addition to traditional tools for solving technical problems.

The soft systems methodology (SSM) developed by Checkland (1981) and Checkland and Schores (1991) could be taken as a starting point for analysis of problems related to the internal digital divide. SSM is described in the form of an "ideal type", inspired by Weber's (1904/1949) use of the intellectual construction for the description of "bureaucracy". The point of describing SSM as an ideal type is that it allows the user to mold the methodology in a particular situation.

SSM is a methodology for the analysis and change of human activity systems, for example during the implementation process of information systems. Checkland stresses that human activity systems are crucially different from natural and designed systems as they "are never a single and testable account of a human activity systems, only a set of possible accounts of all valid ones according to a particular Weltanschaung" (Checkland, 1981, p. 14). SSM could be used as an analytical tool focusing on human activity systems, but the systems will always be richer and messier than the ideal type used. The output of the SSM methodology is however very different from the output of hard systems engineering. The challenge is not to solve the problem; instead the challenge is to learn more about the problem in order to take certain actions, which will lead to a changed situation and new learning.

Checkland and Scholes (1991) stress the importance of identifying "the root problem" of a problem situation, in order to describe the character of the problem and articulate the *Weltanschaung* that makes the definition meaningful to the actors. Several such conceptual models could be made in order to articulate the root problem in different ways. The conceptual models could then be tools for the communication between the system analysts and the concerned actors in order to propose and agree upon meaningful changes of the problem situation. Such participation of the actors concerned could itself contribute to competence development and affect attitudes and motivational aspects towards e-Government in a positive way. Angelöw (1991) argues that participation in implementation work could increase motivation aspects and reduce resistance towards change. If the analysis work of the implementation process also focuses on organisational and competence issues for different human activity systems such as the internal digital divide dilemma, the mutual understanding of the different responsibility fields and changed work roles could increase during the implementation process.

#### FUTURE RESEARCH DIRECTIONS

There is a need for further research focusing on learning capabilities for older people, e.g. the importance of different learning and lifestyle choices in response to decline in cognition or neural deficits (Hedden & Gabrieli, 2004). Internal digital divide is however a complex phenomenon and need mainly to be understood within the local context of an organization. According to a study of Accenture (2006) the most successful leaders in top 48 of the countries in their previous ranking study on e-government, argued that it was important to be inspired by others, but to rely on own merits and not imitate others' solutions. It may be important to learn from good examples, without copying them. It is therefore a need for further longitudinal case studies identifying problems of internal digital divide and strategies for solving the problems. There is also a need for developing more analysis tools and good practices for identifying and integrating employees with problems related to the digital divide dilemma, into the implementation process of e-Government.

#### CONCLUSION

In this chapter, the traditional definitions of digital divide have been extended to also include internal digital divide in organizations. A longitudinal study of implementation of e-Government in a public administration of Sweden was taken as a starting-point for the identification and discussion of internal digital divide aspects. Most respondents of the study emphasized social aspects as important for the implementation process of e-Government. The respondents from the second study showed more coping strategies and sense making strategies related to the implementation. They were closer to the actual changes of the work routines related to the implementation, and their work situations were more stressful.

The respondents mainly identified the internal digital divide as a generational issue. They mentioned a risk of resistance to change among the older personnel related to implementation of e-Government. Some respondents commented that it could be more difficult for older people to learn compared with the younger generation. There could also be problems for some employees who deal with manual, routine work tasks, if they do not have the capabilities to renew their competencies when their work tasks are changed related to the implementation.

Internal digital divide is a complex phenomenon. Difficulties to adapt quickly to new technology demands for some older adults do not have to be related to learning or cognition capabilities. Instead difficulties could be related to the fact that computers are more a part of the younger culture compared with the older. The notion that elderly have more difficult to learn than younger ones seem however to be somewhat of a myth. Adults become more heterogeneous as they age and even normal age-related changes could be reversible through lifestyle changes and choice of learning strategies. The resistance to change could also be related to professionalization processes and management strategies. In order to handle internal digital divide in a relevant way a solid problem analysis is needed. Soft systems methodology could be a basis for the analysis and change of internal digital divide aspects. The conceptual models constructed according to the methodology described could be tools for the communication between the system analysts and the concerned actors in order to propose and agree upon meaningful changes of the problem situation. Such participation of the actors concerned could itself contribute to competence development and affect attitudes and motivational aspects towards e-Government in a positive way.

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#### **KEY TERMS AND DEFINITIONS**

Coping and Sense-Making Strategies: The concepts "coping" and "sense making" are interrelated, but have evolved from different traditions. "Sense making" resides in the tradition of organisational thinking and IT adaption while "coping" has evolved from behavioural research focussing on stress. The source of sense-making could be the ambiguity people feel when they try to understand and IT artefact that is new to their work practice. Ambiguous situations could be very stressful for the involved employees. Sense making could reduce this feeling of stress. Coping are defence mechanisms towards stressful changes in organizations. Thus, both "sense making" and "coping" are related to stress reduction for the individual, but from different research angles.

**Internal Digital Divide:** Internal digital divide in organizations refers to the gap among employees between those who are reluctant and not motivated to engage in the implementation process of e-government, and those who are interested and motivated. There could be different reasons for being reluctant and not motivated to learn and work with new IT-related work routines. The implementation of e-Government requires new competencies and new work routines for example related to new IT systems, new e-services, and changes of the work organization.

**Professionalization Processes:** Refers to a process where established professions protect and preserve the attained positions, while un-established professions try to establish their professional knowledge and to acquire professional status.

**Soft Systems Methodology:** SSM is a methodology developed of Checkland (1981) and Checkland and Scholes (1991) for the analysis and change of human activity systems, for example during the implementation process of information systems. SSM stress the importance of identifying "the root problem" of a problem situation, in order to describe the character of the problem and articulate the *Weltanschaung* that makes the definition meaningful to the actors. Several such conceptual models could be made in order to articulate the root problem in different ways. The conceptual models could then be tools for the communication between the system analysts and the concerned actors in order to propose and agree upon meaningful changes of the problem situation. Section 4 Local Government Civic Engagement

## Chapter 13 Municipal Government and the Interactive Web: Trends and Issues for Civic Engagement

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#### ABSTRACT

What opportunities do citizens have to interact with government online at the local level? This study uses content analysis of the websites of the 75 largest U.S. cities to identify the extent to which they integrate features that allow online information customization and online citizen participation. Completed from March-May 2009, the coding includes analysis of Web 2.0 applications and older web-based tools such as citizen surveys, online town meetings, and other features relevant to citizen engagement. The study finds that municipal governments have steadily developed their online capacity to provide information to local residents, but new media such as Facebook, Twitter, and YouTube remain underutilized. Local e-government has yet to evolve as a tool to advance deliberative democracy, but some opportunities for input have increased. An initial analysis indicates that cities with large African-American and Latino populations have less interactive websites, and that larger cities are likely to have more participatory opportunities online.

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## INTRODUCTION

Web-based technologies continue to change the way citizens receive information from and communicate with government (Chadwick 2009a). One important set of digital tools that has received increasing attention is Web 2.0. The Pew Internet and American Life Project defines Web 2.0 as "Web-enabled applications that are built around user-generated or user-manipulated content, such as wikis, blogs, podcasts, and social networking sites."1 In December 2009, 31 percent of internet users reported using such interactive tools to obtain government information, according to Pew (Smith, 2010).<sup>2</sup> Approximately three-quarters of Americans believed that such tools help citizens to be more informed and make government more open (Smith, 2010). In addition to Web 2.0 innovations, such as Facebook and Twitter, citizens use older applications to sign up for email and newsletters, send comments, fill out surveys, or participate in online discussions of issues.

To what extent are cities using Web 2.0 applications and other older web-based technologies to provide information as well as facilitate communication between citizens and government? What explains the variation in city performance in online information customization and online citizen participation?

This study uses content analysis of the websites of the 75 largest U.S. cities to identify the extent to which they integrate features which allow online information customization and online citizen participation. The coding was completed from March to May 2009, and includes Web 2.0 applications as well as citizen surveys, online town meetings, and other features relevant to citizen engagement.

It is at the local level where citizen participation has perhaps the greatest promise for influencing government (Oates, 1972; Berry, Portney and Thomson, 1993; Peters, 1996; Oakerson, 1999), and so it is important to examine trends at the local level, especially in larger cities, which are most likely to be early adopters of new technologies (Ho, 2002; Moon, 2002).

## BACKGROUND

## Potential Benefits of Interactive Digital Government

One mechanism through which local governments can connect with local residents is e-government, or "the delivery of [government] information and services online via the Internet or other digital means" (West, 2000, 2). For many municipalities in the U.S., the internet has become an indispensable tool for undertaking important functions of government, specifically the provision of services to citizens.

E-government also can be an important tool to empower citizens and engage them in the policymaking process, thus promoting a more transparent and accountable government (OECD, 2003). The information capacity of the web may encourage civic engagement–greater knowledge and interest in public affairs, as well as discussion and participation (Mossberger, Tolbert and McNeal, 2008).<sup>3</sup>

First, government online can provide information about policies, and administrative and political processes that contributes to civic knowledge and interest, including knowledge about how to participate both online and offline. Second, e-government provides a possible means of discussion and participation - whether that is by contacting officials through email, filling out surveys or comment forms, or contributing to online discussions or blogs. Interactive tools on the web bridge these two functions of e-government, by allowing users to request or customize information to fit their needs, to communicate with government agencies in new ways, or to discuss and deliberate more broadly with other citizens as well as with government officials.

Customization of information might contribute to knowledge and facilitate participation. E-mail alerts, social networking sites such as Facebook, RSS feeds or Twitter messages reduce information costs as well as increase the timeliness and perhaps the value of information for the user. Additionally, these tools promote further sharing of information, and may be reaching some users in a format that they prefer. This may convey the message that government wants to reach out to citizens in a variety of venues (Chadwick, 2009b). Online videos created by local governments present information in new ways, taking advantage of the multi-media capacity of the web to convey both in-depth written information and visual content.

The internet has also become an important platform for citizens to express their views about politics, policy, and community (Eggers, 2005; Bimber, 2003; Jensen, Danziger, and Venkatesh, 2007). For instance, local governments can use online surveys to gather information on citizen perceptions of local government performance, quality of services, and even citizens' fiscal policy preferences (Robbins, Simonsen, and Feldman, 2008). Websites can also facilitate two-way communication among citizens, and between citizens and public officials, through discussion boards and virtual town hall meetings (Thomas and Streib, 2003). Blogs by government officials may or may not allow citizens to post comments.

Has web 2.0 opened a new era of civic engagement online? Clearly, sites such as Facebook and YouTube provided new venues for participation in the 2008 U.S. presidential election. The evidence so far is mixed. Baumgartner and Morris (2009) found no difference between social networking site account holders and users of other media in terms of political engagement. Zhang et al. (2009), on the other hand, provided empirical evidence that use of social networking sites increased participation in non-electoral and voluntary activities, but not political engagement in the policy process or elections. In the environment of digital government, Web 2.0 features may communicate the message that government is more responsive, open, and democratic by allowing users to choose the information they need, or different forms for obtaining information or providing feedback. The positive attitudes expressed in the recent Pew survey toward the use of social media are likely a reflection of this belief among many (see Smith, 2010).

West (2008) recently criticized state and federal agencies for being slow to adopt interactive Web 2.0 applications. Yet, examples at the federal level are increasing. The White House maintains the Open Government Blog. Individuals following the development of the National Broadband Plan could receive updates on policy discussions and decisions via Twitter. For the few public agencies that have integrated social media and other Web 2.0 features on their websites, a December 2009 Pew Research Center survey provided evidence that such effort was paying dividends, at least in terms of information dissemination. Use of social media on government websites was primarily for information rather than participation. The survey found that almost a third of internet users: 1) watched a video on a government website; 2) signed up to receive email alerts or text messages from a government agency or official; 3) read the blog of a government agency or official; 4) became a fan of a government agency or official on a social networking site; and, 5) followed a government agency or official on Twitter.

A very small minority of internet users, however, have relied on government-sponsored social media to interact directly with public agencies or participate in online policy debates. The Pew survey found that only 2 percent of all internet users have commented on the blog of a government official or agency, around 1 percent posted comments on the agency's fan page, and less than 1 percent used Twitter to follow a government agency or official.

This indicates that the impact of Web 2.0 is currently greater for lowering information costs than for facilitating participation. In part, this is influenced by the supply side or the opportunities that governments offer on their websites, as well as the demand side or the choices that e-government users make. Before examining interactive and participatory opportunities online for the 75 largest cities, we review prior research on local e-government and civic engagement.

## Local E-Government and Online Engagement

It is at the local level where the internet may have the greatest possibility of promoting citizen involvement. Compared to state governments or federal agencies, the proximity of local governments and the scale of their operations make them more accessible to ordinary citizens (Oates, 1972; Oakerson, 1999). Peters (1996) argues that local governments tend to use more mechanisms that permit direct citizen involvement. Local governments, for example, have engaged their residents through participatory budgeting (Ebdon and Franklin, 2004a, 2004b). Experiments with civic engagement in community policing and school reform have emphasized neighborhood involvement in Chicago and many other cities across the country (Fung, 2004; Briggs, 2008). Likewise, the City of Seattle has promoted inclusive and participatory neighborhood planning with technical support and grants (Sirianni, 2009).

While e-government has the potential to improve democratic outcomes, previous studies of e-government implementation at the local level have found that it has been used more to improve service delivery rather than to increase citizen participation in government decision-making. Musso, Weare and Hale (2000), for example, analyzed 270 municipal websites in California, and found that few had a participatory orientation, but were more likely to be focused on service improvement or to lack a clear orientation of any kind. Ho (2002) found that the websites of the 55 most populous cities in the U.S. focused more on customer services than citizen empowerment. Moon (2002) arrived at a similar conclusion, using data from the International City/County Management Association's 2000 e-government survey covering 1,881 local governments in the U.S.. West (2004a) looked at the web pages of city mayors or managers, city councils, municipal courts, and major government departments for the 70 largest U.S. cities. In terms of public outreach, West found that 78 percent of the web pages displayed email contact information but only 10 percent allowed residents to register online to receive email updates about specific issues. In four-fifths of the web pages, citizens' ability to provide feedback to government officials was also constrained by the absence of online comment areas.

A more recent study by Holzer et al. (2008a) gave municipal governments a poor grade for e-government use to advance online citizen participation. Their research focused on the two largest cities in each of the 50 states in the U.S. plus Washington D.C. Out of a possible 20 points, the average score for citizen participation among municipal websites was only 3.6. Approximately 11 percent of municipalities had mechanisms for comments and feedback through online forms, 5 percent had bulletin boards, and 10 percent had online policy forums.

A number of observers have argued that egovernment develops in distinct stages (Layne and Lee, 2001), and that opportunities for democratic participation online represent the most mature stage of development for local governments (Moon, 2002; Ho, 2002). West (2004b) has developed a version of this stages argument that seems particularly appropriate for examining the adoption of interactive and participatory features. In the most advanced stage of development, government websites are able to facilitate interactive and two-way communication through tools such as e-mail, comment boards, and electronic updates. According to West, only time can tell if e-government will progress to this stage. Different factors - from institutional rules, to budgetary resources, and culture, among others – will determine the extent to which digital technology can contribute to democratic revitalization.

There has been some development of egovernment over the course of time. Early forms of e-government often followed a "phone book" approach, simply publishing information on the web. Online transactions have increased over time (West, 2005), but many of these involve service delivery rather than citizen input. More generally, local e-government has a service orientation (Musso, Weare and Hale, 2000; Ho, 2002; Moon, 2002; West, 2004a; Holzer and Kim, 2007; Holzer et al., 2008a).<sup>4</sup> Some modest forms of interactivity and customization of information may be less challenging to implement than deliberation online. Local governments as a whole tend to be less technically sophisticated than federal agencies or state governments (Norris and Moon, 2005; West, 2005), however, which would suggest that new applications such as Web 2.0 may be slow to be implemented.

With the exception of Holzer et al. (2008a), many of these studies are now several years old, and the 2008 research did not include any measures for new social media. This study evaluates local government websites to determine whether they have integrated features that allow online information customization and online citizen participation. In addition to Web 2.0 innovations such as social media (e.g. Facebook, YouTube, and Twitter), the study also assesses local government use of older online tools such as email, newsletters, comment boxes, citizen surveys, and discussions forums, among others.

## ANALYSIS OF LOCAL GOVERNMENT WEBSITES

#### **Methods for Content Analysis**

This study used content analysis of the official websites of the 75 largest U.S. cities (as measured

by population) to explore trends in information customization and online citizen participation. The focus on the most populous cities is consistent with prior studies such as that of Moon (2002), West (2004a), Holzer and Kim (2007), and Holzer et al. (2008a). Large cities have been previously identified as leaders in local e-government, so an assessment of their websites is likely to reveal cutting-edge practices in digital government.

The data we present here are part of a larger project that evaluated the potential of city government websites to promote local civic engagement. The data were gathered through content analysis that was conducted from late March through May 2009, assessing city websites on 74 to 78 different variables, depending on whether or not they had a city manager. All items were scored as dichotomous measures with 1 indicating the presence of a feature, and 0 for absence. The instrument was developed based on an extensive review of the literature, including analysis of different measures that were used in previous studies that assessed government websites in the U.S. (e.g. Musso, Weare, and Hale 2001; Holzer et al., 2008a; West 2004a; see also Website Attribute Evaluation System of the Cyberspace Policy Research Group, http://www.cyprg.arizona.edu/).5

To improve reliability and consistency of results, the five coders involved in the project were trained and provided with a detailed coding manual with picture examples indicating what to look for when scoring for a specific item. The instruments were then pre-tested to identify items that were confusing, which were reworded to improve clarity. Each website was coded carefully and independently by at least two coders. The intercoder reliability ranged between 66 and 75 percent, which is similar to results of previous studies of local government websites (see Musso, Weare and Hale, 2000). Differences in the scores between two evaluators were reconciled by a third coder.

Because local governments may have numerous departments, defining what constitutes "the

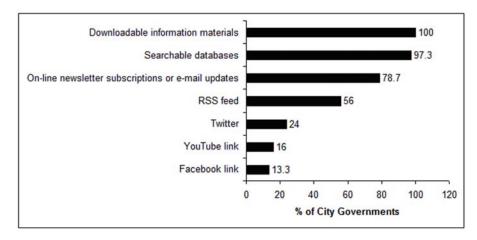


Figure 1. Percentage of city governments which allow customization of information in their websites

government website" can be problematic (Weare and Lin, 2000). West (2004a), for example, examined more than 1800 web pages related to the 70 largest cities. Other researchers concentrated on the main website for the local governments they studied (see Musso, Weare, and Hale, 2000; Holzer and Kim, 2007; Holzer et al., 2008a). This study follows the latter approach and only examines the main city web page and not individual departments. The main webpage contained information about the city leadership: specifically, the mayor, city manager, and city council.

For this study, we only present the results for online information customization and online citizen participation. Online customization allows citizens to obtain the information that matters to them in ways that are convenient. Online features that allow information customization include downloadable information materials, searchable databases, on-line newsletter subscriptions or email updates, RSS feed, Twitter, YouTube link, and Facebook link<sup>6</sup>. We constructed an index for information customization, which is simply the sum of the dichotomous scores of cities for each of the online features identified above taken as a percentage of the total possible number of information customization tools (which is seven). The index ranges from 0-100, with the perfect score

meaning that a city website employs all seven online information customization tools.

While citizens are more likely to visit city websites to access information or use online services (Thomas and Streib 2003, 2005), websites themselves can be a venue for participation (Eggers 2005; Bimber 2003; Jensen, Danziger, and Venkatesh 2007). Online features that allow citizens to express their views to government include comment or message box, online citizen surveys, discussion boards, and virtual town hall meetings. We also created an online citizen participation index which is the sum of the dichotomous scores for the above online features taken as a percentage of the total possible number of citizen participation tools (which is four). A score of 100 means that a city uses all four online citizen participation tools in its official website.

#### Trends

#### Information Customization

Figure 1 shows that city governments continue to rely heavily on older digital tools such as e-mail subscriptions, downloadable information materials, and searchable databases to provide information to local residents. Between 79 to 100 percent of city governments employed these features in their websites. A number of governments are using newer applications such as RSS feeds and Twitter to customize information access. More than half of the cities had RSS feeds, while a quarter employed Twitter. Use of other social media tools such as Facebook and YouTube is still relatively modest at 13 and 16 percent respectively.

The value of tools such as Facebook or Twitter may not be as clear for digital government as for campaigning and other forms of online mobilization. Their integration may require more experience and experimentation with these new media, and the diffusion of practices that are perceived as useful and successful across governments. Twitter fares somewhat better than either Facebook or YouTube. Perhaps it is relatively easy to implement, and also mimics the function ofe-mail alerts, which are more common. YouTube seems to hold special promise for publicizing events, meetings, and statements from officials, and might be expected to grow in the future.

An interesting trend to watch will be the extent to which local governments employ social networking in the future, and how they will use it. The City (and County) of San Francisco, for example, uses its Facebook account to provide different kinds of information (in both text and video formats) to its residents – from police and commuter alerts, special events, local and statewide elections schedule and results, agenda and proceedings of meetings of the Board of Supervisors, to city budget plans, among others.

Among the 75 cities, Seattle (Washington), Phoenix (Arizona), Boston (Massachusetts), Oklahoma City (Oklahoma), Long Beach (California), and Mesa (Arizona) led the way in online information customization, achieving the highest possible score of 100 (see Table 1). They were closely followed by San Francisco (California), Plano (Texas), Louisville (Kentucky), and Honolulu (Hawaii).

## **Online Participation**

Most city websites include features that facilitate one-way communication. A prominent feedback mechanism is the online comment or message box with some 80 percent of cities employing this feature in their websites. Approximately 60 percent of cities display information about a citizen survey taken online or offline in the last three years (see Figure 2). One advantage of surveys over the comment boxes, even if they are not based on scientific samples, is that they reach a greater number of people, giving government officials some sense of collective opinion.

Features that allow two-way communication are almost non-existent in city government websites. None of the 75 city governments included in this study used their websites to hold virtual town hall meetings. Only one municipal government, the City of Seattle, had a discussion board.

Indeed, the City of Seattle stands out among cities included in this study in encouraging online citizen participation. Seattle is the highest ranked city in the category of online participation. One reason is the Seattle Channel, which is both a government television channel and a website operated by the City's Department of Information Technology. The TV Channel and its website are the core components of the City's electronic democracy program. Among the objectives of the Seattle Channel is "to create two-way communication between city government and its citizens."7 The channel-cum-website does this, for instance, by hosting neighborhood blogs in which residents create a free wikidot account to start a new topic or participate in an on-going online discussion. The channel also hosts the monthly "Ask the Mayor" program in which residents can either call in or email questions to the mayor regarding issues ranging from youth violence, pedestrian safety, and the budget, among others.

Why is it that there is so little that resembles online deliberation? One reason may be that the deliberative democracy model is a demanding

City	State	Population	Score	City	State	Population	Score
Mesa	AZ	452,933	100	Arlington	TX	371,038	57
Phoenix	AZ	1,552,259	100	Virginia Beach	VA	434,743	57
Long Beach	CA	466,520	100	Milwaukee	WI	602,191	57
Boston	MA	608,352	100	Bakersfield	CA	315,837	43
Oklahoma City	OK	547,274	100	Fresno	CA	470,508	43
Seattle	WA	594,210	100	Sacramento	CA	460,242	43
San Francisco	CA	799,183	86	San Diego	CA	1,266,731	43
Honolulu	HI	375,571	86	Stockton	CA	287,245	43
Louisville	KY	557,789	86	Jacksonville	FL	805,605	43
Plano	TX	260,796	86	Detroit	MI	916,952	43
Glendale	AZ	253,152	71	Kansas City	МО	450,375	43
Denver	СО	588,349	71	Washington DC	N/A	588,292	43
Chicago	IL	2,836,658	71	Charlotte	NC	671,588	43
St Louis	МО	350,759	71	Newark	NJ	280,135	43
Greensboro	NC	247,183	71	Henderson	NV	249,386	43
New York	NY	8,274,527	71	Buffalo	NY	272,632	43
Columbus	ОН	747,755	71	Cleveland	ОН	438,042	43
Tulsa	ОК	384,037	71	Memphis	TN	674,028	43
Portland	OR	550,396	71	Nashville	TN	590,807	43
Corpus Christi	TX	285,507	71	Austin	TX	743,074	43
Tucson	AZ	525,529	57	El Paso	TX	606,913	43
Anaheim	СА	333,249	57	Fort Worth	TX	681,818	43
Los Angeles	CA	3,834,340	57	Houston	TX	2,208,180	43
San Jose	СА	939,899	57	San Antonio	TX	1,328,984	43
Aurora	СО	311,794	57	Anchorage	AK	279,671	29
Colorado Springs	СО	376,427	57	Oakland	СА	401,489	29
St Petersburg	FL	246,407	57	Riverside	СА	294,437	29
Tampa	FL	336,823	57	Santa Ana	CA	339,555	29
Fort Wayne	IN	251,247	57	Miami	FL	409,719	29
Indianapolis	IN	795,458	57	Atlanta	GA	519,145	29
Wichita	KS	361,420	57	Raleigh	NC	375,806	29
Lexington	KY	279,044	57	Lincoln	NE	248,744	29
Baltimore	MD	637,455	57	Cincinnati	ОН	332,458	29
Minneapolis	MN	377,392	57	Toledo	ОН	295,029	29
St Paul	MN	277,251	57	Philadelphia	PA	1,449,634	29
Omaha	NE	424,482	57	Pittsburgh	PA	311,218	29
Albuquerque	NM	518,271	57	Dallas	ТХ	1,240,499	29
Las Vegas	NV	558,880	57				

*Table 1. Online information customization index*<sup>(a)</sup>

(a)– Includes features such as downloadable information materials, searchable databases, on-line newsletter subscriptions or e-mail updates, RSS feed, Twitter, YouTube link, and Facebook link. Score ranges from 0-100.

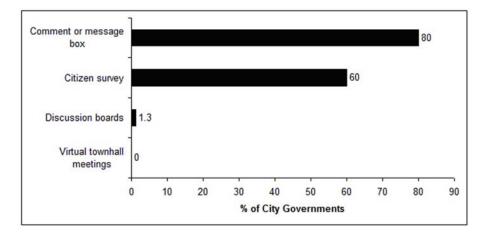


Figure 2. Percentage of city governments which have online citizen participation features in their websites

one for both citizens and governments (Chadwick, 2009b). Still, there are other models that are less challenging. Public comments on blogs and the rating of such comments by readers are commonplace for newspapers and many other organizations. But, these are not public organizations with the same responsibilities and duties as governments. The underdevelopment of online participation is less a matter of technical expertise (as implied by the stages metaphor) than the political, administrative, and legal issues to which West (2004b) refers.

Politically, a traditional problem associated with citizen participation in government decisionmaking, whether online or offline, is that the participants may not necessarily be representative of the larger community. Online participation may exacerbate this problem because of the issue of digital divide. National surveys have shown that e-government users, overall, are more likely to be white, male, young, and better-educated (Larsen and Rainie, 2002; Hart-Teeter, 2003). State level surveys have arrived at a similar conclusion (Thomas and Streib, 2005). The digital divide is likely to compound the existing "democratic divide" (Norris, 2001). Considering the problem of digital inequality, local government officials may be putting more emphasis on offline, rather than online, forms of citizen participation.

Participation also requires setting up necessary administrative arrangements and processes. Welch and Fulla (2005) pointed out that even simple online tools that facilitate bureaucrat-citizen interaction such as e-mail create new demands on public organizations in terms of resources and expertise. Public inputs need to be analyzed and feedback provided to citizens on how their comments or suggestions have been integrated in the decision-making process.

More advanced online participatory tools will likely tax government's capacity to manage the entire process in other ways. For example, because information contained in blogs or social networking accounts embedded within government websites lies in the public realm, they may be subject to the Freedom of Information Act (FOIA) requirements. Local governments will be required to invest more in better archival and search technologies in order to manage the likely voluminous material generated by online technologies (Schrier, 2008). Mainstreaming online citizen participation can also create some legal problems for municipal governments. Even local governments with participatory traditions still worry about the extent to which they constitutionally can or should monitor and censor online discussions because of libel, hate speech or incivility (Mossberger, Tolbert and Stansbury, 2003;

City	State	Population	Score	City	State	Population	Score
Seattle	WA	594,210	75	Virginia Beach	VA	434,743	50
Glendale	AZ	253,152	50	Anchorage	AK	279,671	25
Mesa	AZ	452,933	50	Tucson	AZ	525,529	25
Phoenix	AZ	1,552,259	50	Oakland	CA	401,489	25
Anaheim	CA	333,249	50	San Diego	CA	1,266,731	25
Fresno	CA	470,508	50	San Francisco	CA	799,183	25
Los Angeles	CA	3,834,340	50	Colorado Springs	СО	376,427	25
Riverside	CA	294,437	50	Jacksonville	FL	805,605	25
Sacramento	CA	460,242	50	Miami	FL	409,719	25
San Jose	CA	939,899	50	St Petersburg	FL	246,407	25
Stockton	CA	287,245	50	Tampa	FL	336,823	25
Aurora	СО	311,794	50	Honolulu	HI	375,571	25
Denver	СО	588,349	50	Fort Wayne	IN	251,247	25
Chicago	IL	2,836,658	50	Indianapolis	IN	795,458	25
Lexington	KY	279,044	50	Wichita	KS	361,420	25
Louisville	KY	557,789	50	Boston	MA	608,352	25
Baltimore	MD	637,455	50	Charlotte	NC	671,588	25
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Kansas City	МО	450,375	50	Cincinnati	ОН	332,458	25
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Las Vegas	NV	558,880	50	Arlington	TX	371,038	25
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Columbus	ОН	747,755	50	Milwaukee	WI	602,191	25
Oklahoma City	OK	547,274	50	Bakersfield	CA	315,837	0
Tulsa	OK	384,037	50	Long Beach	CA	466,520	0
Portland	OR	550,396	50	Santa Ana	CA	339,555	0
Nashville	TN	590,807	50	Atlanta	GA	519,145	0
Austin	TX	743,074	50	Detroit	MI	916,952	0
Corpus Christi	TX	285,507	50	Raleigh	NC	375,806	0
Dallas	TX	1,240,499	50	Lincoln	NE	248,744	0
Fort Worth	TX	681,818	50	Newark	NJ	280,135	0
Houston	TX	2,208,180	50	San Antonio	TX	1,328,984	0
Plano	TX	260,796	50				1

*Table 2. Online citizen participation index*<sup>(a)</sup>

(a) - Includes features such as comment or message box, online citizen surveys, discussion boards, and virtual town hall meetings. Score ranges from 0-100.

Schrier, 2008). All of these issues may constrain the development of participation online even as technology and experience develop. Next, we examine explanations for variation across cities.

### **EMPIRICAL ANALYSIS**

Why do some municipalities perform better in online information customization and provide greater opportunities for online citizen participation? To answer this question, we model the information customization and online participation scores of cities as a function of a number of factors including fiscal capacity, government professionalization, economic and demographic variables, and political culture. Our goal is not to identify all determinants of e-government innovation, but only to gain a preliminary understanding of the variation in city performance on interactivity and participation.

## Model and Hypotheses

First, the broad literature on innovation suggests that government fiscal resources matter for the adoption of management reforms. Some observers argue that public organizations with more slack resources are in a better position to innovate compared to those undergoing fiscal contraction (Cyert and March, 1963; Schick, 1980; Rogers, 1983). Yet, in terms of e-government adoption and use especially at the state level, extant research suggests that slack resources do not matter (West 2005; Tolbert, Mossberger, and McNeal, 2008).

We examine how fiscal resources influence government innovation at the local level. It is possible that city governments with greater fiscal capacity will be able to invest more in hiring IT personnel who can develop and maintain more sophisticated websites, and other support staff responsible for processing citizen inputs. Alternatively, cities undergoing fiscal retrenchment may look at their websites as a way to involve citizens in tough decisions. Online citizen surveys, for example, can help local government officials assess citizen demand for certain services and target resources to where they are most needed. Fiscal slack, therefore, has unclear effects on the performance of city governments on online information customization and online citizen participation. We measure city government fiscal slack with two variables: revenue and general fund balance per capita.

Second, studies have shown that that government form influences the performance of municipal governments. Moon (2002) provided evidence that cities with council-manager form of government were more aggressive in developing a web presence. We expect municipal governments with city managers or administrators to perform well in online information customization and online citizen participation. In both the information customization and online participation models, we include an indicator variable for the presence of a city manager or administrator.

Third, we measure the effects of a host of economic and demographic factors such as income, population, race, and education. Cities with bigger populations typically have a larger and more specialized administrative apparatus that can maintain a sophisticated website (see Moon 2002), as well as successfully manage online citizen feedback. Additionally, because a larger population is also likely to be more differentiated socially and economically, bigger cities can use websites to reach out to different groups of stakeholders (Moon 2002). We expect larger cities to perform well in online information customization and online citizen participation.

Income, education, and ethnicity, on the other hand, measure citizen demand for e-government. Musso, Weare and Hale's (2002) analysis showed that local jurisdictions in California that were early adopters of e-government had more affluent and educated populations. Considering that education and income are highly correlated with greater civic engagement and political participation (see Verba et al., 1993), we expect cities with a higher median

#### Table 3. Descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Information Customization Index	75	55.24	20.52	28.57	100
Online Participation Index	75	35.33	17.96	0	75
Revenue per capita (average of 2007 and 2008 city general fund revenue divided by average of 2006-2008 city population) <sup>(a)</sup>	75	1.29	1.45	0.21	10.2
Fund balance per capita (average of 2007 and 2008 end-of- year general fund balance divided by average of 2006-2008 city population) <sup>(a)</sup>	75	0.27	0.45	-0.14	2.83
City manager or administrator (1-yes, 0-otherwise)	75	35 <sup>(d)</sup>	40 <sup>(e)</sup>	0	1
Median household income (2006-2008 average) <sup>(b)</sup>	75	47,933	10,899	27,956	84,319
Population (2006-2008 average) <sup>(b)</sup>	75	707,864	1,047,787	235,378	8,308,163
% population Latino (excluding Black Latinos) (2006-2008 average) <sup>(b)</sup>	75	12.85	13.11	0.93	62.81
% population Black (2006-2008 average) <sup>(b)</sup>	75	22.04	17.61	1.33	84.09
% population with at least bachelor's degree (2006-2008 average) <sup>(b)</sup>	75	29.25	9.41	11.27	53.77
2004% vote for Bush, county level <sup>(c)</sup>	75	0.47	0.13	0.09	0.71

(a) - From city governments' Comprehensive Annual Financial Reports

(b)-From the U.S. Census Bureau's American Community Survey

(c) – From David Leip's Atlas of U.S. Presidential Elections

(d) – Number of cities without manager or administrator

(e) - Number of cities with manager or administrator

household income and percentage of population with at least a bachelor's degree to be among the leaders in web information customization and online participation.

Research has also shown that African-Americans and Latinos are less likely to use egovernment (Mossberger, Tolbert, and Stansbury, 2003), although this is not so clear at the local level (Mossberger and Tolbert, 2009). It is likely that governments in cities with sizeable ethic and racial minority groups will not emphasize participatory opportunities through their websites.<sup>8</sup> Specifically, we expect that cities with large African-American and Latino populations have lower scores for online information customization and online citizen participation.

Finally, we assess the effects of political culture. Cities with a more liberal political ideology are likely to have a long tradition of active citizen participation in government decision-making. Online participation is an important extension of this tradition. We use percentage vote for Bush in the 2004 presidential election as a proxy for citizen political ideology at the local level. We use the 2004 election results because the vote was more polarized in 2008 than in 2004. Because the variable is measured at the county level, it is important to point out that it may still not adequately capture city political culture because of the inclusion of suburban and rural communities in the vote count. We expect that cities with more liberal political ideology as measured by lower percentage vote for Bush in 2004 have higher scores for online information customization and online citizen participation.

Table 3 shows how the control variables were operationalized, the data sources, and descriptive statistics.

#### Results

We use ordinary least squares regression to estimate the different models. Table 4 shows the results of the empirical analysis. We use two different estimation techniques. Models 1 and 3 use Huber-White Sandwhich estimators to address the issue of heteroskedastic error distribution. Models 2 and 4, which also use heteroskedasticty-robust standard errors, include regional dummies to control for region-specific unobserved variables which may affect city government performance in e-government<sup>9</sup>. We use the Census Bureau definition of regions to group the cities.<sup>10</sup>

Models 1 and 2 estimate the effects of different variables on online information customization.<sup>11</sup> The results confirm the hypothesis that cities with bigger minority populations, specifically Blacks and Latinos, tend to have lower scores for information customization. Consistent with the previous literature, this indicates that such cities may perceive less demand for developing their online capacity more generally. Contrary to our expectations, however, the results show that the fiscal capacity variables, the measure of government professionalization, population, income, education, and city political ideology have no statistically significant effects on information customization scores.

In the online participation models (models 3 and 4), population has a consistent significant effect. As expected, larger cities invest more in creating citizen participation opportunities through their websites. This may indicate that such cities have greater administrative capacity, or that their size makes the web an attractive way to gather input than face-to-face activities. The results also show that fund balance has a positive and systematic effect on online participation scores. The estimates for other control variables fail to reach conventional levels of statistical significance. Overall, there is little that systematically predicts the variation in local e-government interactivity or participation. We discuss this further in the conclusion below.

#### CONCLUSION AND FUTURE RESEARCH DIRECTIONS

City government websites continue to evolve, and as this study shows, some aspects of local e-government have improved in comparison to findings from earlier studies (Musso, Weare and Hale, 2000; Moon, 2002; Ho, 2002). In particular, many municipal governments have steadily developed their online capacity to provide information to local residents. Features such as downloadable information materials and searchable databases are now almost universally found in the city websites analyzed in this study. Other features which allow information customization such as e-mail alerts and RSS feeds are also becoming increasingly common. City governments, however, have been slow to adopt social media as a tool for information dissemination. Less than a quarter of the cities used new media such as Facebook, Twitter, and YouTube in spring 2009.

As city governments become aware of how social media may be used to improve local governance, they are likely to adopt more widely at least some of these digital tools. YouTube seems a likely candidate for enhancing the multi-media capacity of government websites. Communicating with citizens in new ways may also promote the openness and responsiveness of government. A December 2009 Pew Research Center survey found that minorities such as African Americans and Latinos, even more than Whites, considered government use of Web 2.0 applications, such as Twitter and Facebook, an important means to inform citizens, and make agencies and public officials more accessible (Smith, 2010). Even at this early stage of the diffusion of Web 2.0, about a third of internet users report some experience with such applications for digital government (Smith, 2010).

### Table 4. Linear regression models

	INFORMATIC	ON MODELS	PARTICIPATION MODELS			
	(1)	(2)	(3)	(4)		
	Robust S.E. only	W/ Regional Dummies	Robust S.E. only	W/ Regional Dummies.		
	Coef. (S.E.)	Coef. (S.E.)	Coef. (S.E.)	Coef. (S.E.)		
Fiscal Capacity Variables						
Dovonuo non conito	0.734	1.113	-0.942	-0.029		
Revenue per capita	(2.499)	(2.806)	(1.963)	(1.747)		
Fund halance non-conita	-1.451	-1.121	5.927*	6.059**		
Fund balance per capita	(8.746)	(9.223)	(3.210)	(2.617)		
Professional Government						
City manager or admin-	0.273	-0.264	-1.412	-2.794		
istrator	(5.874)	(5.563)	(5.462)	(5.295)		
Economic and Demo- graphic Factors						
Median household income	-0.539	-0.815	-0.432	-1.969		
(in \$10,000)	(3.278)	(3.584)	(2.544)	(2.830)		
D-mulation (in 100.000)	0.135	0.146	0.352**	0.417***		
Population (in 100,000)	(0.213)	(0.241)	(0.161)	(0.135)		
% population Latino (ex-	-0.341*	-0.444	-0.072	-0.251		
cluding black Latinos)	(0.204)	(0.270)	(0.185)	(0.205)		
0/ manufation Dlash	-0.494**	-0.582**	-0.251	-0.354		
% population Black	(0.206)	(0.273)	(0.208)	(0.243)		
% population with at least	0.190	0.041	0.279	0.094		
bachelor's degree	(0.334)	(0.408)	(0.353)	(0.376)		
Political Culture						
2004% vote for Bush,	-18.108	-28.650	2.746	-10.028		
county level	(26.588)	(31.664)	(20.132)	(24.229)		
Regional Dummies						
Census Region 1 (North-		-6.490		-19.797***		
east)		(14.086)		(6.333)		
Census Region 2 (Mid-		-1.051		-5.609		
west)		(8.033)		(7.829)		
		3.565		1.763		
Census Region 3 (South)		(8.086)		(6.561)		
	74.325***	87.333**	32.271*	56.830**		
Constant	(25.259)	(33.898)	(18.963)	(23.942)		
N	75	75	75	75		
Prob > F	0.007	0.016	0.027	0.000		
R-squared	0.161	0.171	0.125	0.185		

Note: \*\*\* significant at 1%, \*\* at 5%, \* at 10%. Standard errors in parentheses are heteroskedasticity-robust. Base region is Census Region 4 (West).

In some ways, government websites today are more participatory as well. The great majority of city governments allow citizens to provide inputs online, and this is much more common than a decade ago. Even in 2003, only about 20 percent of major city websites offered comment forms, compared to 80 percent today (see West 2004a). The majority of cities – 60 percent – either conduct surveys online or publicize the results of online or offline citizen surveys. Both of these trends indicate steps toward more open government, but this is essentially a one-way form of communication.

There is very weak evidence, however, that local e-government has evolved as a tool to advance deliberative democracy. Features that allow interactive dialogue among citizens and public officials (or among citizens) are almost non-existent in the municipal websites. There are a number of explanations for why governments have not fully integrated deliberative tools in their websites. In part, this may be because efforts at promoting online participation may give rise to a number of complicated political, administrative, and legal issues.

Some of these challenges may be less daunting in the future. Legal issues may be decided in the courts, providing more guidance for cities and other governments. In the meantime, however, local governments face uncertainty in this regard. Time may allow governments to experiment with effective ways of responding to and considering online input. Local government efforts to promote digital inclusion will benefit the development of e-government in terms of equal opportunities for participation as well as for equal access to government services. While experience may matter, this is less a matter of stages through which e-government will pass than more general developments in government and society.

Finally, a few of the factors that have traditionally explained either early adoption or more sophisticated implementation of local e-government are related to greater use of interactive or participatory features online. Cities with higher populations of African-Americans and Latinos have less customization of information, and cities that are larger or more financially stable are more likely to have some participation online. Yet, they explain little of the variation between cities. It is likely that differences are driven also by variables that are not well-captured by what we can measure systematically. These include leadership within city IT departments, council or mayoral offices, and the history of civic engagement in cities (like Seattle or San Francisco). Political culture and traditional forms of participation such as voter turnout may be an important influence for online participation in particular, but many such measures are readily available only at the state or county level.

There are many avenues for further study suggested by this research. One is that more indepth study is needed on how Web 2.0 features are being used, and how these affect outcomes such as citizen satisfaction or expanded use of egovernment. Are such tools particularly effective for gathering input or solving problems faced by local government? More qualitative study may better reveal the quality of participatory opportunities on local websites, and how (or whether) they influence policy. Both scholarship and practice would benefit from further understanding of the processes and experiences behind these trends.

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## **KEY TERMS AND DEFINITIONS**

**E-Government:** The delivery of government information and services online via the Internet or other digital means (West 2000).

**E-Civic Engagement:** The use of electronic means to identify and address issues of public concern.

Web 2.0: Web-enabled applications that are built around user-generated or user-manipulated content, such as wikis, blogs, podcasts, and social networking sites (Pew Internet and American Life Project available at http://pewinternet.org/topics/ Web-20.aspx.).

**Social Media:** Internet-based tools (e.g. Facebook, YouTube, and Twitter) for sharing and discussing information among individuals and organizations.

**Blog:** A type of website, usually maintained by an individual or an organization, with regular entries of commentary, descriptions of events, or other materials.

**Twitter:** A micro-blogging service that allows people to type in short messages or status updates that can be read by people following them.

**Interactivity:** Reciprocal process of information exchange between two or more individuals and organizations in communication.

## **ENDNOTES**

Retrieved May 31, 2010 from http://pewinternet.org/topics/Web-20.aspx.

- <sup>2</sup> There are varied definitions of what counts as social media or Web 2.0. The Pew Internet and American Life Project defined social media in their survey as social networking, blogs, online video, email, and text alerts.
   <sup>3</sup> Farly critics of the internet warned that
  - Early critics of the internet warned that it would have a chilling effect on civic engagement (Putnam 1995, 2000; Nie and Erbring 2000; Sunstein, 2001), yet a recent meta-analysis of 38 empirical studies finds that internet use has a small, but nevertheless positive, effect on civic and political engagement (Boulliane, 2009). We are more narrowly concerned with e-government here, rather than the broader research regarding online engagement and participation.

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- The finding that e-government has continued to focus on service delivery rather than online participation is not unique to municipal governments. At both the national and state levels, a number of studies have pointed out the unrealized promise of e-government as a tool for democracy over the years (Chadwick and May, 2003). West's (2004b) study of U.S. state and federal agencies found that majority of the websites functioned as billboards that only display information, and very few offered democracy-enhancing features in their websites. A 2008 study by Holzer et al. (2008b) found limited evidence of widespread adoption of citizen participation tools in state government websites.
- <sup>5</sup> The entire report and website assessment instrument are available from the authors.
- <sup>6</sup> Citizens can of course upload videos in YouTube or create Facebook accounts to express their views about government. However, citizens do not have control over official city YouTube channel or Facebook account. In the municipalities covered in this study, official city YouTube channels or Facebook accounts were used exclusively by municipal governments to provide informa-

tion to citizens, rather than to allow citizens to communicate with public officials.

- <sup>7</sup> Retrieved June 10, 2010 from http://www. seattlechannel.org/aboutus/policy.htm
- 8 We experimented with other variables such as per capita income, percentage employed in professional/ managerial occupations, and percentage employed in information technology-related industries. Because all three were highly correlated with the education variable (with Pearson's r ranging from .69 to .95), they were excluded from the models. We also assessed if the designation of a city as the state capital had an effect on its performance in online information customization and citizen participation. As one of the reviewers of this study argued, "co-location with state government might provide easy access to technical expertise or shared resources that may influence one or more of these factors." The effects of state capital designation, however, were statistically insignificant, and the signs were inconsistent in the two models.
- <sup>9</sup> Holzer et al. (2008b), for example, found substantial regional variation in city performance on online citizen participation. Cities in the Midwest received the highest score for online citizen participation, followed by municipal governments in the West and South, with Northeast cities performing poorly.

- <sup>10</sup> We could not include state dummies in the models because this would consume more degrees of freedom and weaken the statistical power of the models. Instead, we used clustering by state to address the issue of possible intra-state error correlation. Since cities are nested within states, their scores on online information customization (and online citizen participation) may be similar because of some unmeasured state-specific factors (see Wooldridge 2002). However, these models yielded no new information and are not included here. These results are available from the authors.
- <sup>11</sup> We also estimated models explaining the adoption of each digital tool, specifically for those tools in which there was enough variation in city performance to allow valid statistical analysis (e.g. Twitter, Facebook link, YouTube, comment box, and RSS feed). In most of the logistic regression models (dichotomous dependent variable e.g. either a city had a FaceBook account or not), the results were insignificant. Where relationships existed, the results were similar to the findings from the information customization and online citizen participation models. These results are available from the authors.

## Chapter 14 Small Communities and the Limits of E-Government Engagement: A Northeast Ohio Case Study

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#### ABSTRACT

Existing research suggests that progress toward a "virtual state" is inconsistent – at least at the local level of government. Coursey and Norris (2008) argue that few governments have moved beyond an informational presence on the internet and Cassell and Hoornbeek (2010) suggest that populist engagements (Kakabadse et al., 2003) between citizens and local governments remain the exception rather than the rule. This chapter examines two questions regarding e-government engagement among small communities in northeast Ohio. First, it assesses the extent to which small communities in northeast Ohio viewebsites to engage their citizens. And second, it analyzes factors that lead these governments to create websites and develop them to enable citizen engagement. We find that limited capacities and uncertain demand both limit small community website operations. We also suggest that these findings can help us understand constraints to E-government transformations and perhaps also the inconsistent nature of e-government citizen engagements.

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#### INTRODUCTION

A decade ago, scholars and practitioners began envisioning a new world of governance, a world in which citizens and governments would interact twenty-four hours a day and seven days a week to achieve more interactive and efficient government (Fountain, 2001). A progression of e-government development was envisioned in which governments would move in step-wise fashion toward providing more information, services, and engagement opportunities on the worldwide web (Layne & Lee, 2001). The end result, it was believed, would be a transformation of government-citizen engagement toward a "Virtual State" which would become more responsive and efficient over time.

To some degree, this kind of transformation is occurring in both the United States (US) and elsewhere. Nations throughout the world -- along with international entities like the European Union (EU) and the World Trade Organization (WTO) - now routinely convey information through worldwide web sites. In the United States (US), federal government agencies rely on the internet to provide information and, increasingly, to provide services for citizens as well. All fifty state governments in the US now have web sites through which they provide information and services (Holzer et al., 2009). Moreover, larger cities in the U.S. and elsewhere have developed substantial online presences, as cities provide information and services for citizens through their web sites (Holzer and Kim, 2007; Melitski, et al., 2005).

Local governments generally have also made use of web sites in efforts to convey information and conduct business more efficiently and effectively, although their progress in this area has not been uniform (Coursey & Norris, 2008; Cassell & Hoornbeek, 2010). This chapter addresses egovernment engagement among a particular group of communities in the US – small communities with fewer than 5,000 residents. It addresses two questions. The first question relates to the extent to which these very small local governments use web sites to engage with citizens. More specifically, we assess whether or not small local governments in northeast Ohio maintain a presence on the web. We also characterize the extent to which the websites developed by these governments pursue multiple forms of citizen engagement.

The second question addressed in this chapter relates to the factors that lead small local governments to create websites and develop them with multiple attributes to enable citizen engagement. To address this question, the analyses presented assess the influence of factors that impact decisions relating to e-government-citizen engagement in small communities. By understanding e-governance among small local governments and the factors that influence it, we can begin to understand constraints to E-government transformations and perhaps also the inconsistent nature of the web based citizen-government engagements that are now occurring.

#### BACKGROUND

In spite of notable progress toward greater internet use by governments, existing research suggests that progress toward a "virtual state" is inconsistent - at least at the local level of government. Brown (2007) argues that the slow progress achieved to date among local governments is attributable to an understandably slow process of local government (website) maturation. Others are more pessimistic regarding the prospects for E-government. Bolgherini (2007) suggests that a high proportion of e-government initiatives fail and Coursey and Norris (2008) point out that few governments have moved beyond an informational presence on the worldwide web. Cassell and Hoornbeek (2010) present data that re-enforces this latter point, and suggest that populist engagements (Kakabadse et al., 2003) among citizens and their local governments are still the exception rather than the rule. They also argue that some of this lack of progress is political, as local governments

determine the nature of their presence on the web in the context of the political environments within which they operate.

It has been noted that "electronic government (e-government) has been embraced by American local governments as quickly as or more quickly than any governmental technology in history" (Holden et al., 2003). Much of the promise of benefits from e-government in terms of information access and community involvement, it seems, arises in combination with technical advances, thus making more interactive interfaces between governments and their citizens possible (Moon and Norris, 2005).

Several models have been developed to explain the emergence and adoption of e-government initiatives. Moon (2002) identifies four internal and external aspects associated with adoption while Reddick (2004) relies on two stages. However, Ho (2002) points out that conceptual models of adoption should not be construed to mean that e-government always proceeds in a purely linear manner. In fact, supply and demand functions relating to specific governments and their constituencies are a necessary consideration (Norris and Curtice, 2004).

Additionally, while factors that affect the decision to launch e-government and the adoption of additional interactive features can be different, resistance, apathy and staff workload can affect both of these phenomena. This suggests that egovernment progress is not purely a rationally economic decision (Ho & Ni, 2004).

A significant determinant of adoption and implementation of e-government initiatives is resident population thresholds and this "raises concerns about a digital divide between urban and rural jurisdictions" (Ho & Ni, 2004, p. 176). Thus, in spite of the potential of e-government to deliver better services to citizens, some suggest that "problems of access and use diminish this potential" (Garson, 2004, p. 95). Parallels between e-government adoption and issues of unequal access and resources "may be useful in understanding E-Government projects and policies in a more comprehensive way and, consequently, for developing effective digital strategies (Helbig et al., 2009, p. 89). Even though adoption has been described as relatively rapid, "extensive, sophisticated e-government remains out of the reach of most local governmental units in the United States" (Holden et al, 2003, p. 329). E-government adoption also appears to be associated with an individual government's "willingness to take a certain level of risk" regarding effort, exposure and expenditure (Moon and Norris, 2005, p. 47).

Norris and Moon (2005) suggest that the periodic examination of e-government capabilities at the local level is important because this level of government is the closest to its citizens and provides the greatest number of services directly to its people. In fact, local government web sites can be thought of as "a recent, underdeveloped, and understudied phenomenon" (Scott, 2006, p. 342).

Not surprisingly, therefore, the vast majority of recent e-government studies focus on either large cities or a broad range of governments. Very few studies focus on small communities. This is an important oversight for understanding e-governance in the U.S. because small local governments are common and they are key institutions in the American system of government. In addition, small local governments are particularly important because their size makes them amenable to traditional, person-to-person, forms of citizen engagement and they might therefore be expected to be resistant to e-government transformations. This resistance, in turn, makes them appropriate units of government to investigate factors that constrain the development of e-government-citizen engagements. Resistance here may take the form of outright avoidance, hindrance, or simple apathy toward e-government initiatives.

In the state of Ohio, there are four generalpurpose sub-state government units: counties, townships, cities, and villages. Counties are subdivided into townships. There are also two types of municipal corporations, cities and vil-

lages, which are classified by population level. Those municipalities with a population of 5,000 or greater are defined as cities, while incorporated entities with fewer than 5,000 people are classified as villages. These government structures have the "authority to exercise all powers of local self-government and to adopt and enforce within their limits such local police, sanitary and other similar regulations, as are not in conflict with general laws" (Article 18 - Municipal Corporations, The Ohio Constitution). The Ohio Revised Code specifies that a "civil township is a body politic and corporate, for the purpose of enjoying and exercising the rights and privileges conferred upon it by law" (Chapter 503, Ohio Revised Code). Townships offer far fewer services for the most part as compared to villages, cities, and counties. Most villages offer police, fire, water, sewer, and other services not typically offered by townships. In addition, a majority of townships in Ohio and our study area are rural where there may be limited internet access and/or a lack of broadband access. We thus anticipate that the scope of services offered by a local government, as well as capacity for their delivery, may affect IT-related adoption and implementation.

The 5,000 resident population level used in this analysis is thus justified in part by an examination of government structure and population. According to the 2009 U.S. Census Bureau population estimates data, 1,816 of the 2,533 incorporated and unincorporated places in Ohio (just shy of 72 percent) were identified as having fewer than 5,000 residents. By contrast, 2007 Census of Governments data indicates that 56 percent of the general-purpose districts in Ohio are towns or townships. In both cases, however, these smaller entities are likely to have both more limited capacities and perhaps also more limited demand for e-government services than larger local governments.

To identify factors that influence the development of e-governance processes in small communities, we investigate variables identified by two broad theories of policy variation relating to both E-government and sub-national policymaking. One of these theories focuses on "supply side" variables that reflect the capacities of the governmental units in question, while the other focuses on "demand side" variables which measure citizen characteristics and the kinds of demands that they are likely to place on the local governments (Norris and Curtice, 2004).

The data and analyses presented in the sections that follow yield insights regarding the influence of e-government among very small local governments. They also enable us to improve our understanding of the dynamics of both website creation and the extent of website engagement. If demand side variables are of central importance in these cases, it becomes more likely that influential citizens may be able to steer small local governments toward greater use of e-government strategies for citizen engagement. Conversely, however, if supply side variables dominate analyses of egovernment progress, then capacity development based strategies for building local governmentcitizen engagements become more important.

The next section of this chapter provides an overview of the data and methods used to assess website presence and levels of e-government engagement. In the section that follows, we present our findings. More specifically, we present findings regarding website presence and engagement among approximately 250 villages and small townships in northeast Ohio. We then offer analyses that seek to explain both website presence and engagement levels among these small local governments using variables drawn from the two competing theories of e-government and sub-national policy variation described above. We also present targeted evidence from a survey of local government officials in northeast Ohio. Then finally, we summarize our findings and discuss their implications for small local governments, e-governance, and future research.

## DATA AND METHODS

We focus our study on northeast Ohio because it provides a useful microcosm through which to view e-governance among small communities in the US. Northeast Ohio includes a large number of small local governments with varying socioeconomic and demographic characteristics. It is also based in a Midwestern state that is often viewed as a bell-weather for political trends throughout the country. In fact, it would be hard to find another area of the country that is as "typical" of America as a whole, while also possessing a large number and variety of small general-purpose local governments with varying socioeconomic and demographic characteristics.

The data we compile on e-governance in northeast Ohio come from several sources. We draw much of the data used from a direct evaluation of the website presences of 428 local governments in northeast Ohio that was conducted by Kent State University's Center for Public Administration and Public Policy (the KSU Center) in 2008 and 2009. We supplement these data with information from a survey of local government officials representing these same 428 local governments, which was conducted in the latter part of 2009. Finally, data from these two sources are supplemented by census information on the local governments in our sample.

Our evaluation of local government website presence and characteristics was conducted in the fall of 2008 and the winter of 2009. We identified these 428 local governments from a regular publication listing local governments, which is released by the Ohio Secretary of State's office (Brunner, 2006-2007). The local governments identified included 13 counties, 102 cities, 112 villages, and 201 townships. An overview of these data can be found in Cassell and Hoornbeek, 2010.

By cross-referencing the local governments included in this sample with population data from the census, we learned that 252 of the local governments in the sample were villages or townships with fewer than 5,000 residents. This set of small local governments is the universe of small local governments used in our analysis. Because one of the villages in the sample did not have complete data, we omitted it from our sample for some of the analyses that were conducted. As a result, the sample size for these analyses was 251.

To assess whether the local governments in this sample operated websites, we used information in the Ohio Secretary of State's publication (Brunner, 2006-2007), numerous website searches, and county website links to identify whether each of the local governments in our sample operated a website. These searches were carried out by a team of Graduate Research Assistants from the KSU Center and their work was reviewed and verified for accuracy by another member of the project team. As a result of these efforts, we believe that our data reflects accurate information on website status during the period in 2008 – 2009 when the assessments were conducted.

After identifying local government websites in our sample, we then assessed those websites in an effort to determine the depth and nature of the information and services they provided for their citizens. These website assessments were conducted by a team of Graduate Research Assistants and staff from the KSU Center based on training provided for them in October of 2008. Each of the 285 websites in the overall sample of local governments (n=428) was evaluated independently by two separate reviewers. Any discrepancies identified through these two independent reviews were resolved by an independent third review. The results from this final review were then spot-checked by a professional member of the research team to verify their accuracy.

We conducted the assessments of website engagement forms using a list of thirty-three website attributes that had been used by Rutgers University in their past work with local governments (Holzer, et al., 2008). Readers can review this listing of attributes by looking at the "attribute" column in Table 3 below. Drawing from the work of Cassell and Hoornbeek (2010), these website attributes were classified into three categories, based on Kakabadse, et al.'s (2003) models of e-government. In general, Kakabadse's et al.'s (2003) characterization suggests that information management attributes provide information to citizens, while electronic bureaucracy attributes enable electronically based government services. In addition, attributes based on Kakabadse et al.'s (2003) populist model, such as allowing citizens to "register their views on current issues" (Kakabadse et al., 2003, p. 47) focus on engagements among citizens regarding government issues and services. Please refer to Table 3 for a full listing of variables across the three models.

To identify factors that are important in enabling small local governments to establish websites, we conducted a binary logistic regression analysis to identify variables drawn from existing theories of sub-national policy variation that do a good job of predicting the presence of a worldwide web site. For this analysis, small local governments with websites were coded with a "1" and small local governments without a website were coded "0". The logistic regression analysis conducted then seeks to predict website presence as a function of "supply side" variables relating to local government capacity and "demand side" variables relating to citizen characteristics.

Supply side theories assess the capacities of governments in both administrative (Bowman & Kearney, 1988) and economic terms (Dye, 1967). Based on these theories, we would expect incorporated municipalities to have enhanced capacities in comparison to unincorporated townships, and these capacities – in turn – would enable them to develop websites more frequently and more fully than unincorporated townships. We would also expect local governments with larger populations and the economics of scale that flow from them to develop websites more frequently and more fully than local governments with smaller populations. Finally, following Dye (1967), we would expect wealthier communities to develop

websites more frequently and more fully than poorer communities.

Demand side theories of E-government policy variation suggest that website development and engagement relate to the demands of citizens, rather than the capabilities of the local governments. According to this line of thinking, socioeconomic factors such as racial diversity (Tolbert & McNeal, 2003) and education (Gray, 1996) become potential determinants of E-government presence and the extent of web based citizen engagement. Based on these theories, we would expect small communities with less diversity and small communities with more educated citizenries to develop websites more frequently and more fully than their more diverse and less educated counter-parts.

We use these same explanatory variables to analyze factors affecting the extent of website engagement among small local governments. Here, we measure the extent of website engagement based on the total number of website attributes that were present on small community websites in late 2008 and early 2009. This number of attributes thus becomes the dependent variable for this analysis. To identify factors affecting the number of website attributes identified, we conduct an ordinary least squares (OLS) regression analysis to explain the extent of website engagement for the small local government websites in our sample (n=120). Here we use the same explanatory variables as we did to explain website presence, as we seek to ascertain whether there are any differences between the factors driving website presence on the one hand and depth of citizen engagement efforts made by those websites on the other hand.

We supplement the analyses from our website evaluations with information from the survey of local government officials mentioned above. The survey questioned 428 local governments from our larger sample, as well as 252 local governments with fewer than 5,000 residents. The officials questioned were either chief executive officers of the local governments involved, such as the Mayor or village Administrator, or they were Chairpersons of the Township Boards of Trustees. The surveys were distributed by email in cases where email addresses could be identified and by postal mail in cases where email addresses were not available. The survey characterized the local governments served by these officials, while also collecting information on e-government interests and practices. The survey also included questions about web presence and the advantages and disadvantages of e-government presence and engagement for the respondents' communities.

A total of 65 responses were received from the local government officials surveyed, a response rate of just over 15%. While this response rate was not as high as we would have liked, our analysis of the respondents providing information suggests that they are similar to the larger universe of local governments in the thirteen counties in our study in a number of important respects. The survey respondents were similar in the proportions of different kinds of local governments represented (villages and townships, for example), education levels represented, wealth distributions, and other pertinent characteristics. The major exception in this regard, however, was racial diversity, as the responding communities tended to be less diverse racially than the universe as a whole.

With respect to community size, just under fifty percent of the survey respondents (31 of 65) had populations of less than 5,000, while almost two thirds (252/428) of the overall universe of local governments had populations of this magnitude. However, because we are able to distinguish small local governments from large ones, we are able to draw specifically on this small community information to supplement the quantitative information provided through our website evaluations. Based on this information, we offer additional insights from local government officials representing small communities that are relevant to their choices regarding both website presence and the nature and extent of their engagement of citizens on the web.

#### FINDINGS

The findings presented below are divided into three categories. We begin by presenting descriptive information on website presence and engagement among small local governments in northeast Ohio. Second, we present results from regression analyses, which seek to estimate the influence of supply and demand side variables on e-governance among small local governments in northeast Ohio. Finally, we share insights provided by local government officials in their responses to the survey we administered in the latter part of 2009. As is noted above, these findings are followed by a brief summary and discussion of their implications for local government, e-governance, and future research.

#### Small Communities on the Web

While some early advocates of a "virtual state" appear to have assumed that governments will develop websites and deliver services through them, this does not always appear to be the case. In northeast Ohio, for example, one-third of local governments assessed do not maintain a presence on the worldwide web (Cassell and Hoornbeek, 2010).

For small local governments with fewer than 5,000 residents, however, the data presented here suggest that proportion of local governments with websites is even smaller. Table 1 below displays the numbers of small local governments in northeast Ohio that operate worldwide websites and the numbers that do not. As is evident from Table 1, 48% of small local governments in northeast Ohio operate worldwide web sites, a figure that is well below the 67% of local governments generally that operate websites in northeast Ohio.

Table 1 also suggests that website presence is more common among small villages than small townships. More than half of the websites for small communities in northeast Ohio are operated by villages, even though there are more small

Local Government Type	Total Number	With Website	Without Website	Percentage with Website
Small Townships, less than 5,000 population	141*	50*	91*	35%*
Small villages, less than 5,000 population	111**	70**	41**	63%**
Total Small Local Gov- ernments, less than 5,000 population	252	120	132	48%
All NE Ohio Local Gov- ernments in NE Ohio	428***	285***	143***	67%***

*Table 1. Local government website presence, by local government type: Small villages and townships with fewer than 5,000 in population* 

Source: Authors' analyses of community websites in northeast Ohio and Cassell & Hoornbeek, 2010.

Notes:

\* These figures exclude townships with 5,000 or more residents, as well as cities and counties.

\*\*These figures exclude one village in the sample, which has apparently grown to a population of 5,000 or more residents.

\*\*\* These figures are drawn from Cassell and Hoornbeek, 2010. They include counties and cities, all of which maintain some form of website presence.

*Table 2. Average numbers of website attributes for villages and small townships in Northeast Ohio: villages and townships with fewer than 5,000 persons* 

Small Local Government Type	Information Management Attributes Mean (Standard Deviation)	Electronic Bureaucracy Attributes Mean (Standard Deviation)	Populist Attributes Mean (Standard Deviation)	All Attributes Mean (Standard Deviation)
Village	3.11 (3.232)	1.31 (1.577)	.56 (.628)	3.77 (3.844)
Township	1.43 (2.230)	.38 (.851)	.30 (.582)	1.62 (2.520)
Total NE Ohio Small Lo- cal Governments	2.17 (2.835)	.79 (1.306)	.41 (.615)	2.57 (3.342)

Source: Authors' analyses of small local government websites (n = 252)

townships than small villages. Overall, almost two-thirds of villages (63%) have created websites to engage their citizenries. Townships with fewer than 5,000 residents, by contrast, have created websites in only 35% of all cases.

Table 2 below displays information on the numbers of website attributes found on websites of small local governments in northeast Ohio. Perhaps not surprisingly, when small local governments do choose to develop a web presence, their websites tend to be more modest than the websites that are developed and operated by larger local governments. The mean value of website attributes across all local governments in northeast Ohio is 5.04 (Cassell and Hoornbeek, 2010), while the mean number of attributes for small local governments is almost half that amount -2.57.

Small villages with websites also appear to have more extensive features than small townships. Overall, small villages average almost 4 website attributes (3.77), while small township websites average less than 2 attributes (1.62). This pattern of website development is similar across all three kinds of website attributes discussed above. Municipalities incorporated as villages average more than twice as many Information Management and Electronic Bureaucracy attributes as small townships, and they also average more populist attributes than appear on websites of small townships.

The numbers of attributes present on the websites of small local governments also vary considerably. For all categories of website attributes shown in Table 2, the standard deviations exceed the mean, indicating significant variability among local governments in each respective category. Overall, the maximum number of attributes is 14 for villages and 10 for small townships. The maximum number of small community egovernment attributes across Kakabadse et al.'s (2003) model types also varies. For Information Management attributes, the maximum is 13, while the maximum number of Electronic Bureaucracy attributes is seven. The maximum number of populist attributes is two.

The figures in Table 2 also reveal that the distribution of website attributes in very small communities (those with fewer than 5,000 residents) across the Information Management, Electronic Bureaucracy and Populist models advanced by Kakabadse and his colleagues (2003) also mirrors local governments as a whole in northeast Ohio. For small local governments, like local governments in northeast Ohio more generally, information management attributes are most common (2.17 attributes mean), followed by electronic bureaucracy based attributes (.79 attribute mean), and populist attributes (.41 attribute mean), respectively. In addition, of the five attributes which were identified on more than 50% of the (120) small government websites identified, four are consistent with the information management model advanced by Kakabadse et al. (2003). Moreover, 13 of the 15 most common attributes are consistent with the information management model. By contrast, only four of the fifteen most frequently used attributes are consistent with the electronic bureaucracy model of e-governance and only one of these fifteen attributes - email contact addresses -- is consistent with the populist model.

Table 3 displays these latter data and the distribution of attributes identified among the small local governments studied more generally. At least two additional points are worth noting concerning the data in this table. First, 5 of the 33 attributes investigated are particularly common, as they were identified in more than half of small local government websites investigated. These attributes -- phone directories, email contact addresses, calendars, meeting minutes, and downloadable forms – account for a very high percentage of the total numbers of attributes that are present on small community websites in northeast Ohio. Other attributes appear to be used much less frequently. However, a word of caution is due here, as some of these latter attributes may not be applicable to very small local governments.

Second, villages (which have the tendency to provide more diverse services than townships) are more likely to possess almost all of the thirtythree attributes that were investigated than are small townships. The pattern of greater website engagement among villages than small townships appears to apply almost across the board, as there are only 3 cases where attributes are found more frequently on small township websites than on village websites. All three of these cases relate to attributes that are rarely used, as they include blogs (2 townships and no villages), road closure information (2 townships and no villages), and public records (1 township and no villages). Even in these cases, the small townships utilizing these attributes are the exception rather than the rule. For the vast majority of attributes investigated, villages are more likely than small townships to engage citizens via their websites.

While these descriptive data suggest that villages are more likely to engage citizens on the web than small townships, they do not account for other potential influences on e-government based citizen engagement. The following subsection presents regression results that allow us to estimate the influence of supply and demand side variables, holding other relevant variables constant. These analyses, in turn, enable us to reach preliminary conclusions regarding the influence of supply

Website Attribute	% of Villages with Website Attribute – number (% of 111)	% of Townships with Website Attribute – number (% of 141)	Small Local Governments with Attribute (% of 252)	SmallLocalGovernment Websites with Attribute (% of 120)
Phone Directory	55/111 (49.5%)	40/141 (28.4%)	37.7%	79.17%
Email Contact Info.	53/111 (47.7%)	34/141 (24.1%)	34.5%	72.5%
Calendar	47/111 (42.3%)	31/141 (22%)	31%	65%
Meeting Minutes	41/111 (36.9%)	30/141 (21.3%)	28.2%	59.17%
Download Forms	45/111 (40.5%)	22/141 (15.6%)	26.6%	55.83%
Contact Us Forms	23/111 (20.7%)	9/141 (6.4%)	12.7%	26.67%
Special Links – Visi- tors, etc.	24/111 (21.6%)	7/141	12.3%	25.83%
Citizen Complaints	20/111 (18%)	10/141 (7.1%)	11.9%	25%
Search Engine	12/111 (10.8%)	6/141 (4.3%)	7.1%	15%
<u>Citizen Feedback</u> <u>Request</u>	9/111 (8.1%)	6/141 (4.3%)	6%	12.5%
Email Updates	13/111 (11.7%)	2/141 (1.4%)	6%	12.5%
Update Date	5/111 (4.5%)	10/141 (7.1%)	6%	12.5%
Job Postings	12/111 (10.8%)	1/141 (.7%)	5.2%	10.83%
Emergency Notifica- tions	9/111 (8.1%)	2/141 (1.4%)	4.4%	9.17%
Search Records	10/111 (9%)	0/141 (0%)	4%	8.33%
Privacy Statement	5/111 (4.5%)	5/141 (3.5%)	4%	8.33%
Utility Bill Payments	6/111 (5.4%)	2/141 (1.4%)	3.2%	6.67%
Tax Payments	5/111 (4.5%)	1/141 (.7%)	2.4%	5%
Audio Files	4/111 (3.6%)	2/141 (1.4%)	2.4%	5%
Text Only Versions	4/111 (3.6%)	1/141 (.7%)	2%	4.17%
RSS Feeds	5/111 (4.5%)	0/141 (0%)	2%	4.17%
Procurement	4/111 (3.6%)	1/141 (.7%)	2%	4.17%
Building Permit	4/111 (3.6%)	0/141 (0%)	1.6%	3.33%
<u>Blog</u>	0/111 (0%)	2/141 (1.4%)	.8%	1.67%
Request Records	1/111 (.9%)	1/141 (.7%)	.8%	1.67%
Road Closure Info.	0/111 (0%)	2/141 (1.4%)	.8%	1.67%
Form Submission	1/111 (.9%)	0/141 (.7%)	.4%	0.83%
Parking payments	1/111 (.9%)	0/141 (0%)	.4%	0.83%
Obtain License	1/111 (.9%)	0/141	.4%	0.83%
Public Records	0/111 (0%)	1/141 (.7%)	.4%	0.83%
Language Translator	0/111 (0%)	0/141 (0%)	0%	0%
Podcast	0/111 (0%)	0/141 (0%)	0%	0%
Video Streaming	0/111 (0%)	0/141 (0%)	0%	0%

*Table 3. Website attribute distributions among small local governments in Northeast Ohio: villages and townships with fewer than 5,000 residents* 

Bold=Information Management; Italics=Electronic Bureaucracy; Underline=Populist.

Variable	Coefficient	Std. Error	WALD	Significance	Odds Ratio
Constant	-1.259	1.522	.684	.408	.284
Is Village?	1.630***	.340	22.970	.000***	5.105
Population	.001***	.000	18.100	.000***	1.001
Income – per capita	.000	.000	.218	.641	1.000
Diversity – propor- tion white	-1.293	1.498	.745	.388	.275
Education - % with BA or equivalent	.060**	.030	3.954	.047**	1.062
Full Model Characteristics and Statistics	N = 251 (1 eligible case excluded be- cause of missing data)	Chi Square = 49.802/ Sig = .000; Overall % Pre- dicted Correctly = 66.9%	Pseudo R2: Cox & Snell = .180 Nagelkerke = .240	Dependent Variable (DV): Website = 1 No Website = 0	DV Distribution Website = 119 No Website = 132

*Table 4. Explaining small community website presence: Results of a binary logistic model for Northeast Ohio communities with fewer than 5,000 residents* 

\*\* - Statistically significant at the .05 level.

\*\*\* - Statistically significant at the .001 level.

side and demand side influences on e-government engagement among small local governments.

## Factors Influencing Small Community E-governance

To assess the influence of supply side and demand side variables on e-government engagement among small communities, we conducted regression analyses seeking to explain both the decision to maintain a website and the extent of website engagement undertaken. These analyses provide useful insights regarding the likely influence of supply and demand side variables on e-government engagement. They also enable us to ascertain whether the variables predicting the presence of a website in a small community are similar to the variables predicting high levels of engagement among small communities that have chosen to maintain a website.

Table 4 presents the results of a binary logistic regression analysis, which seeks to explain decisions by small communities to develop and maintain a web site. The dependent variable (DV) is dichotomous and is coded "1" for communities with websites and "0" for communities without them. The independent variables (IV's) are derived from both supply side and demand side explanations for e-government policy variation, and they include incorporation status (Is village?), population, wealth (income per capita), diversity (% of population who are white), and education (% of population with a BA or equivalent). The model as a whole is significant, with a chi square value of 49.802.

The model results also identify several variables that appear to be strong predictors of small community website presence. Two supply side variables – incorporation as a village and population – are statistically significant, and one demand side variable – education – is statistically significant. Wealth and diversity are not statistically significant predictors of website presence in northeast Ohio according to these analyses.

The odds ratios presented in Table 4 provide a measure of the improvements in predictions of website presence that result from knowledge of the values of the independent variables that are presented. The odds ratio of 5.105 for villages suggests that the presence of a municipal incorporation

Variables	Coefficient	Standard Error	Beta	T-Value	Significance
Constant	.311	2.070		.150	.881
Is Village?	1.449**	.544	.251	2.664	.009
Population	.000	.000	.094	1.005	.317
Income – per capita	-4E-006	.000	022	175	.862
Diversity – propor- tion white	2.801	2.026	.122	1.382	.170
Education - % with BA or equivalent	.089**	.042	.266	2.126	.036
Model Characteris- tics and Statistics	N = 120 Small Communities with Websites	R2 = .146; Adjusted R2 = .109	F = 3.877 /Signifi- cance = .003**	Dependent Variable (DV) = total # of website attributes.	Distribution of the DV (All Attributes): 0-14

*Table 5. Explaining the extent of website engagement: A model of engagement presence in Northeast Ohio communities with fewer than 5,000 residents* 

\*\* - Statistically significant at the .05 level.

increases the odds of a small community website being present by 5.1 times. The 1.001 odds ratio for population suggests that the addition of one person to a small community increases the odds of that community operating a website by .1%. The odds ratio of 1.062 suggests that a one percent increase in the percentage of the population with a BA or equivalent degree increases the odds of the small community maintaining a website by 6.2%. Using the overall model – including the three statistically significant variables – results in correct predictions of 66.9% of the cases, a notable improvement relative to the 50% probability of a correct guess without information provided by the model.

Table 5 below presents results from ordinary least squares (OLS) regression analysis, which seeks to explain variations in the total number of website attributes on small community websites. In contrast to the results displayed above which seek to explain the decision of a small community to employ a website to engage its citizens, this model seeks to explain the extent of engagement effort made by small communities that have already decided to develop and operate a website.

The overall model results suggest that it is statistically significant at the .05 (F= 3.877), and

explains approximately 11% of the variation in website attributes (Adjusted R2 = .109). In this model, two of the five independent variables are statistically significant. Municipal incorporation (Is village) and education both appear to be relatively good predictors of the number of website attributes, while population, wealth, and diversity do not appear to be strong predictors of the extent of citizen engagement pursued through small community websites. The Beta coefficients provide a rough estimate of the relative strength of the predictor variables, and they suggest that education is at least as strong a predictor of the extent of website engagement as municipal incorporation.

## Local Official Insights

The survey of local government officials we conducted during the fall of 2009 included questions relating to website presence, barriers to the development and operation of websites, and interests in e-government training and technical assistance. The responses we received from small community local officials provide additional information relevant to choices made by local governments on website presence and the extent of website engagement.

Respondents to the survey who did not have websites in their community were asked to identify the major reasons for choosing not to operate a website. Among local officials from small communities who responded to this question, the most common response was that they did not believe a website was necessary. In total, 47% (8/17) of the small community local officials without websites provided this response. Among this same group of respondents, 29.4% (5/17) pointed to a lack of resources and 17.6% (3/17) pointed to a lack of expertise.

The respondents echoed similar sentiments in their responses to a question about barriers to implementation of e-government initiatives. Among the responding small community officials, 38.72% (12 of 31 respondents) cited financial obstacles to building e-governance capacities. A lack expertise, technology staff, or information was cited as a barrier by 35.48% (11/31) of the responding officials. This same percentage (35.48%) cited factors relating to a lack of demand for web based services within their communities. More specifically, these respondents pointed to a lack of support from elected officials, resident resistance to change or citizen demand, and difficulty justifying a return on investment as barriers to e-government development.

This lack of interest among small community officials in the development of e-governance capabilities was further re-enforced by responses to a question about desired training and technical assistance. Of the 28 small community officials responding to this question, more than half (53.57% or 15/28) cited no interest in e-government training or technical assistance whatsoever. In this respect, small community officials were different from their counterparts from larger local governments who expressed numerous interests in various forms of educational activities.

Overall, the survey results suggest that traditional factors that are thought to limit e-governance at the local level – insufficient expertise and resources – are supplemented in small communities by fundamental questions about whether e-governance is necessary or beneficial. These are central questions for any governmental body that seeks to expand its activities, and they appear to be particularly important for small communities in relation to e-government engagement.

# Implications: Summary and Discussion

The findings above confirm expectations in a number of respects, and provide supplemental insights that may be used to help guide e-governance initiatives in small communities and elsewhere. These same insights may also be useful in suggesting fruitful directions for future research. The findings presented here on small community e-government should be viewed as preliminary and in need of further research and verification. Nevertheless, the paragraphs that follow summarize key findings and discuss their potential implications for local government in the US, e-governance, and future research.

Our findings confirm that small local governments in northeast Ohio are less likely than large local governments to engage in e-governance activities. As noted above, we find that less than one-half of small local governments in northeast Ohio (48%) operate a worldwide website. We further identify that local governments with websites that serve populations of fewer than 5,000 appear to develop less extensive websites than do larger local governments. More specifically, our findings suggest that small local government websites include an average of slightly more than two and one half measured attributes (2.57), a figure that is approximately one-half the size of the corresponding figure for local governments in northeast Ohio generally (5.04, drawn from

Cassell and Hoornbeek, 2010). While neither of these figures suggests truly active engagements on the part of large numbers of local governments, the difference between smaller and larger local governments is a notable nonetheless.

Our findings also suggest that small community websites follow a pattern of e-government engagement that is similar to patterns for local governments as a whole. Across northeast Ohio, local governments make greater use of information management approaches than approaches relating to electronic bureaucracy and populist engagement (Cassell and Hoornbeek, 2010). We find that this same pattern holds for small governments serving fewer than 5,000 residents. Small local governments in northeast Ohio average 2.17 website attributes which seek to convey information, a figure that exceeds the average numbers of attributes identified for electronic bureaucracy efforts (.79) and populist approaches (.41), respectively. Indeed, if one looks at the top 15 attributes identified on small community websites (see Table 3), one finds that 13 of these attributes reflect information management approaches, while 5 reflect electronic bureaucracy approaches and 2 reflect populist approaches.

The findings here also confirm expectations about the influence of government capacities on egovernment engagement. Our descriptive findings suggest that incorporated municipalities are more likely to operate a website than unincorporated townships. And the logistic regression analysis conducted confirms this expectation, even as it takes account of the influence of other potentially important variables such as wealth, population, education, and racial diversity. The logistic regression analysis also confirms that relatively small changes in population increase the likelihood that a small local government will operate a website. For example, local governments serving populations approaching 5,000 appear more likely to develop a website than very small local governments with populations that are nowhere near 5,000.

Local government capacities also appear to influence the extent of website engagement among small local governments, although their influence here does not appear to be quite as strong as it is for predicting the presence of a website in the first place. The OLS regression results presented in Table 5 show that municipal incorporation is one of two statistically significant predictors of relatively high levels of website engagement among small local governments. Incorporated villages, it appears, are likely to produce websites with greater numbers of engagement attributes than unincorporated townships. Notably, however, while population increases appear to foster an increased number of attributes on small local government websites according to the results of this regression model, it is not a statistically significant predictor of the number of website attributes.

By contrast, the level of education among a community's population - a key demand side variable - is a statistically significant predictor of both the presence of a website and the number of attributes found among websites in the small communities that have chosen to operate them. In fact, while the level of education present in a community appears to be a useful predictor of website presence, it appears to be a relatively important predictor in comparison to to other influences when it is being used to explain the extent of website engagement (e.g. the number of attributes). This suggests that education -ademand-side variable -- may become a particularly important explanation for website engagement after a website has been established.

Finally, our survey results suggest that local government officials representing small communities may not yet be convinced of the need for e-governance in their communities. Almost half (47%) of the responding small community officials suggested that a website was not necessary for their communities, and more than one-third of all of the small community respondents (35.48%) suggested that there was little demand for website services within their communities. These findings are further buttressed by the fact that fewer than one-third of the responding small community officials (32.14%) expressed interest in four categories of training or technical assistance relating to e-government, even though they frequently acknowledged that a lack of expertise – along with insufficient funding – contributed to their lack of e-government engagement. Overall, these survey responses suggest that small community officials may not be convinced of the need for, or value of, e-governance for their communities. The politics of these communities, it appears, may not require e-government engagement.

Overall, the findings here suggest that small local governments represent a significant challenge for efforts to create a "virtual state" in America. For those who believe strongly in the advantages of e-government, the results presented here suggest several potential strategies for fostering e-governance in small communities. One approach would focus on building e-governance capacities. Providing funding support, training, and technical assistance are obvious approaches in this regard. However, the survey results also suggest that the benefits of this kind of approach may be limited by perceptions regarding the value of e-governance and/or populations that do not possess the education necessary to appreciate the benefits that extensive e-government efforts may provide for their communities.

These latter points, in turn, raise normative questions that are relevant to small community governance and public sector use of the worldwide web to engage citizens. While e-government – along e-commerce and other uses of the worldwide web -- are of obvious importance in the context of our overall national and global economies, their importance for small communities in the US is less clear. Small communities tend to possess high potentials for person-to-person engagement that may make e-governance initiatives seem unnecessary to small community local government officials. Moreover, if this is the case, training and technical assistance efforts for local government officials may not prove useful until perceptions of e-governance and its value change.

There are at least two means through which this kind of perceptual change might occur. The first of these means is gradual, and relates to the demands that are made on local government officials in small communities by their citizens. As the worldwide web and e-governance become more salient to citizens and citizens themselves become more educated, residents of small communities may very well place increasing demand on their leaders for engagement opportunities through worldwide web sites. If this kind of process prevails, it suggests that efforts to foster e-governance in small communities may be best directed toward citizens rather than government leaders. However, it may also mean that advocates of e-governance should take a more measured and patient approach, and allow communities to develop their own engagement approaches without interference from external sources. While this kind of approach may yield risks as long-term prospects for small communities are compromised by their inability to compete in an increasingly global market place, it also holds the advantage of allowing communities to develop in ways that are consistent with their own perceptions and values.

A second approach to fostering perceptual changes in small communities is available for those who believe that more active efforts should be made to foster electronic engagement in the public sector, regardless of community sizes, characteristics, and interests. Here, the approach would be to build a stronger case for the value of e-government engagement. While early luminaries envisaged e-government processes that promised both improved services and higher levels of democratic engagement, it is not yet clear that this promise has been achieved. While governments of many sizes and shapes are making greater use of e-government, current research suggests that e-government progress has been inconsistent. Part of the reason for this state of affairs may be that e-government engagement has not yet proven its

worth. Future research documenting the benefits and value of e-governance in both small communities and elsewhere may prove beneficial in this regard.

## FUTURE RESEARCH DIRECTIONS

This study also points to other areas where future research would be beneficial. First, because this study is limited to one region of the US, its replication in other areas and verification of its descriptive findings would be beneficial. Second, while the regression analyses presented here suggest that municipal incorporation, population, and education affect e-government engagement efforts, the overall results achieved suggest that significant sources of unexplained variance remain. Further efforts to both identify potentially important predictor variables and to test them with empirical data would therefore seem to be appropriate. Small communities are important and unique governing bodies in the US, and further study of them may highlight variables and processes that are of widespread importance. Future research may also include studying lack of internet/broad-band access as well as differences in services provided by local government type. Differences between suburban and rural populations and potential correlations between these types of populations and education may be possible and should also be examined in greater detail.

## CONCLUSION

This study contributes to our knowledge of egovernment engagement by focusing on a group of governments that have received little attention in the literature to date – small communities with fewer than 5,000 residents. This group of governments is important because they represent a large proportion of public sector entities in the US and because their characteristics mean that they can highlight useful insights into the limits of e-governance. The limits of e-government engagement are important now because multiple studies have documented inconsistent progress towards what Fountain (2001) and others have called the "virtual state".

The findings we present suggest that e-government engagement among small communities in northeast Ohio is limited in a number of respects. Compared to larger local governments, small communities are less likely to operate websites. In addition, the websites they operate tend to be less extensive than the websites operated by larger local governments. Finally, small community websites also appear to use mixes of attributes that are generally similar to those found in larger local governments.

Our results also highlight factors that limit egovernment engagement. In this regard, we find that limited government capacities and uncertain demand for e-government engagements limit small community website operations in northeast Ohio. Survey responses from local government officials also suggest that they question whether e-government engagement is needed or beneficial to their communities. While this questioning is in part traceable to the unique circumstances of small communities (where local government officials may perceive that they are well aware of the needs of their constituents), it is a fundamentally important question for governments of all sizes. Future research on the actual and perceived benefits of e-governance would aid both small local governments and other entities. At the same time, further research on e-governance in small communities holds the potential to aid these communities in improving their engagement with citizens and in their prospects for long-term success competing in a global economy. Over time, further research of this kind may also help illuminate the promises and limits of e-governance for public sector entities of multiple sizes, shapes, and varieties.

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## **KEY TERMS AND DEFINITIONS**

**Citizen Engagement:** Involving citizens in the processes and action of government.

**E-Government:** A model of government service delivery where government functions employ aspects of information technology and are provided to citizens via the World Wide Web.

**Electronic Bureaucracy:** An infrastructure of information technology applications employed perform specific aspects of government services.

General Purpose Local Governments: Substate governmental units including counties (as well as boroughs and parishes), cities, villages, townships; specifically exclusive of special districts.

**Implementation:** The phase in which programs and/or services are put into use by government officials and/or their agents.

**Information Management:** The use ofcommunication strategies to convey information between government and citizens.

**Local Government:** Sub-state governmental units including counties (as well as boroughs and parishes), cities, villages, townships and special districts.

**Populist:** Mechanisms that allow and/or encourage citizen participation and opinion expression among citizensin regard to the scope and action of government operation.

**Virtual State:** Governmental model where interaction with its citizens relies increasingly upon information technology application and Internet service delivery.

## Chapter 15 Internet and Citizen Participation: State of the Art, Factors and Determinants at Local Level in Catalonia

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## ABSTRACT

Information and communication technologies (ICT from here on) have been incorporated into politics and democratic innovation experiences, such as citizen participation in public decision-making. However, there are important differences in the drive for and development of electronic participatory experiences, and data has not been collected in a systematic way. Which kinds of experiences are being promoted? What fosters the promotion of e-Participatory experiences? Which factors explain their impulse? This chapter aims to gather and analyse participatory experiences promoted and the Internet use for participatory purposes. So, it studies the nature of the promoted experiences and analyses the main explanatory factors of their impulse, looking for differences and similarities regarding Internet use. It focuses the analysis in Catalonia, one of the European regions with more participatory experiences.

In general terms, analyses show that participatory experiences have increased hugely in the last years and most of them use the Internet for participatory purposes. Analyses show also that political party of the mayor or electoral abstention rate would be explanatory for the promotion of e-Participatory experiences, as well as the participative context of the municipality or the population size.

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#### INTRODUCTION

When it comes to e-Governance and e-Democracy, what is the difference? To make e-Governance work it is important that local governments promote e-Participatory experiences. Thus, it is worth studying how and under which circumstances local governments promote these experiences, analyzing which factors explain that e-Participation is highly promoted in some municipalities while being almost inexistent in others.

The beginning of the 21st Century has been marked by a change of paradigm: from the industrial era to the network society (Castells, 2000). This has been caused by the revolution of ICT. Moreover it has also been marked by citizens' democratic disaffection towards the old representative democratic system, which entails a lack of citizens' confidence and participation in their institutions (Putnam & Goss, 2003). In this context, new participatory practices arise with the aim of approaching political representatives and citizens. We are talking about participatory experiences understood as citizen participation experiences in public decision-making.

The incorporation of ICT in politics has introduced fundamental changes in democratic political systems (Ciulla & Nye, 2002; Clift, 2003; Norris, 2004). Depending on the model of political management in which they are incorporated, we find models of e-Administration, e-Government or e-Governance (including e-Participation experiences). ICT are facilitating these practices with more extensive and direct information and greater communication between political representatives and citizens. Even so, we find important differences in the impulse and development of e-Participatory experiences. Thus, several questions arise: What fosters the promotion of e-Participatory experiences? Which factors enhance their development?

Literature related to the study of incorporation of ICT in politics has been focused mainly on e-Government (United Nations, 2004; West, 2004; Wong & Welch, 2004). However, there are fewer studies related to ICT incorporation in democratic innovation mechanisms such as citizen participation (Macintosh & Whyte, 2006; Finquelievich, Baumann & Jara, 2001). Furthermore, literature on e-Participation has been based mainly on case studies of concrete experiences (Coleman & Gøtze, 2001; Barrat & Reniu, 2004; Colombo, 2007) and comparative empirical studies are scarce and incipient (Pratchett, 2006; Jensen, Danzinger & Venkatesh, 2007). Moreover, the empirical existing research is mostly descriptive and evaluative and there is a lack of explanatory analyses.

This chapter analyses specifically:

- Participatory experiences promoted online and offline, analyzing both participatory experiences and participatory functionalities opened in local governments web sites.
- Explanatory factors related to the development of participatory experiences, such as population size, political colour of the mayor, electoral abstention rate, age, income and level of education in the municipality.

## DEMOCRATIC INNOVATION AND INFORMATION AND COMMUNICATION TECHNOLOGIES

## Participatory Experiences: A Challenge to Democratic Disaffection

In the beginning of the 21<sup>st</sup> Century, democratic disaffection (Putnam and Goss, 2003) involves a loss of citizens' confidence in their political representatives and the crisis of state institutions and parties. Public confidence in political institutions keeps on reducing in the occidental world (Norris, 1999; Perry & Webster, 1999) as the declining figures of electoral participation rates show (Blondel, Sinnott et at., 1998, Eijk & Franklin, 1996). These low electoral participation

rates leads to representatives being elected by a minority and to a feeling of loss of strength in the democratic process.

At the same time, there is a revitalization of civil society and citizens adopt a more critical and reflective role requiring a greater degree of cooperation, participation and interaction with the State (OECD, 2001). In this context there is a change in the traditional conception of doing politics, and the introduction of some transition experiences from the traditional government to a new form of relational government –called governance-which incorporates elements of complexity, as well as all stakeholders' participation in public decision-making (Brugué & Gomà, 1998).

Citizen participation in the public sphere is diverse and includes different forms and intensity, drawing a wide variety of situations from institutionalized participation promoted by public administrations (top down), to participation in social movements or civic networks promoted by citizenship itself (bottom-up). This chapter is focused on the study of citizen participation experiences promoted by local public administrations, where participatory experiences have had a better reception due to the greater proximity between citizens and representatives (Blanco & Gomà, 2002; Schneider, 2007; Font & Galais, 2009). Moreover, it focuses on institutionalised participatory experiences, promoted by governments to allow citizens' participation into the public sphere. According to Font and Blanco (2003) we understand citizen participation as the action to participate in the management of public and collective affaires, which affects the society as a whole. Thus, citizen participation is any activity aimed at influencing policies directly or indirectly and therefore supposes a desire to influence reality.

Citizen participation brings citizenship closer to political decisions, thus increasing its quality. It also increases the legitimacy of the government's action as well as its transparency. It allows for awareness of the fact that sovereignty falls to the people. Even so, citizen participation also entails certain risks that it is necessary to point out: the lack of a participatory culture of citizenship and institutions causes a scarce real participation, introducing problems of representation and legitimacy. Moreover, a bad management of participatory experiences could cause an increase of citizen's frustration, lack of confidence and a drift towards popularism and demagogic politics.

While participatory initiatives are being spread in Europe at the local level of government, their driving force is still minor and experiences are very diverse. Participatory experiences promoted by different levels of governments are very heterogeneous, with initiatives that go from information or consultation, to deliberation or co-management (Colino & Del Pino, 2008).

Participatory experiences can be developed through a wide range of methodologies and instruments (Font, 1998), which are adapted to the different experiences, their objectives and participatory levels. Thus, we find instruments such as deliberative surveys, citizen councils, citizen consultative committees, structures of local participation, deliberative forums, mediation or "electronic democracy" instruments. We also find methodologies such as participatory intervention cores, Strategic Plans, 21 Agenda, Participatory Budgets or Educative City Projects, among others (Font & Blanco, 2003).

# The Local Level: A Prolific Arena for Participatory Experiences

Participatory experiences are being promoted in the last few years in countries of Western Europe, Latin America, United States or New Zealand, among others. Even so, its development is quite unequal: there are countries or regions where citizen participation is being developed hugely–such as some German *länder*, the United Kingdom, Poitou-Charentes (France), Puglia and Tuscany (Italy) or Catalonia (Spain), while in others it is still beginning. In Europe there is an increase in the participatory experiences promoted by local governments. This is due to the search for efficiency, quality or strengthening of democracy in a more complex context, and deals with the concept of governance. Local governments are the most active in generating these initiatives, due to their characteristics of proximity and the role assumed in the local-global dynamics. This trend has been reinforced by the legislation in support of participatory experiences developed at national and international levels.

Since the beginning of this decade, the United Kingdom promotes a new culture of openness and the strengthening of links between local governments and citizens, private sector or voluntary organizations. Thus, local authorities have to formulate consultations on concrete public policies that affect community development. In Germany, participatory strategies have been developed since the eighties. In the nineties, local governments' political structures were reinforced and referenda introduced. In France, the nineties were associated with a participatory revival, which has been spread until the present.

Spanish local administrations have seen their functions, capacities and resources reinforced due to political and legal changes since 1995. Thus, we find new laws for local governments' modernization and principles of subsidiarity and decentralization are applied. The reinforcement of their agendas, strategic roles and control of public policies, has allowed the development of several participatory initiatives. In this context a new paradigm for the regulation of social conflict at municipal level has emerged, characterized by the participation of several actors and the development of new proximity policies (Blanco & Gomà, 2002). Thus, even though participatory spaces are still a minority in the decision making processes of modern societies, their driving force and development has increased. We can mention as an example of those kind of initiatives: the participatory experience in the improvement of the Lesseps Square, in Barcelona; the Agenda 21 of the city of Madrid; or the Participatory budgeting process in Leicestershire, among others.

## ICT and Citizen Participation: Towards an E-Participation

Information and Communication Technologies were born in the middle of the 20<sup>th</sup> Century, associated with military research and scientific experimentation. Nevertheless, their evolution has meant the current generalization of these technologies and their implantation into all areas of life, and also Politics, where they have been incorporated into processes of government, administration, governance, participation and civic mobilization.

ICT introduce fundamental changes in Politics and allow new relations between citizens and political representatives. Depending on the public management model to which they are incorporated, we find models of e-Administration, e-Government or e-Governance, where e-Participation experiences are included (Hagen, 2007, Hacker & Van Dijk, 2000; Bellamy, 2000; Hoff, Horrocks & Tops, 2000).

ICT introduce opportunities for invigorating democracy and updating forms of government, administration and political participation. They allow technical innovations that favour information, communication, transparency and interaction. Therefore these technologies introduce strong technical improvements which can lead to the improvement of information, communication, consulting, deliberation and decision making channels, making them more immediate, simple and effective (Clift, 2000). They facilitate closer and more personalized communication (Castells, 2000) and allow the taking part in the political system more directly and collectively. ICT also allow minimizing time and distance problems, reducing the costs of organization and enabling communication without technological limits.

The Web would make it possible to advance towards new forms of politics and citizen participation. However, there are some limits such as the digital divide (Warshauer, 2003; Barber, 2006), so ICT have to be used as a complement to traditional analogous political practices (Hacker & Van Dijk, 2000).

ICT are being used in Politics in two basic ways: in the support of a new form of making Politics in a more collective and participatory way and in the emergence of processes aimed at improving the democratic system. However, the dominant strategy is the second one, mainly through improvements in information and communication systems.

E-Participation is defined by the literature (Coleman & Gøtze, 2001; Krueger, 2002; Macintosh, 2004; Macintosh et al., 2005; Gibson et al., 2005; Norris & Curtice, 2006; Jensen et al., 2007) as a young concept and research field, which explores the paths for 'spreading and transforming the political processes through the use of the information and communication technologies' (Sæbø et al., 2008: 4). With the appearance of the so called Web 2.0, the focus has evolved from simple diffusion and information provision to a greater participation of the users.

In the last few years e-Participation experiences have been developed hugely. There is a considerable diversity regarding their territorial scope, the degree of participation allowed, or the approach to the incorporation of the Internet into Politics. In this sense there are experiences at a local, regional, national or international level; experiences that allow information, communication, consultation, deliberation or decision; and finally consumerist, demo elitist, civic and direct democracy experiences.

Following the territorial scope, it is worth mentioning in Catalonia several e-Participation experiences: Consensus, at local level (http:// www.e-consensus.org); e-Catalunya (www.e-catalunya.cat) and Democracia.web (http:// www.democraciaweb.org), at regional level; or IDEAL\_EU, at European level (http://www.ideal-debate.eu/).

For many, Internet incorporation into democracy allows bigger and more active citizen participation and introduces changes into the policymaking (Clift, 2003). Nonetheless, most of e-Participatory experiences do not mean a radical change in the political system or institutions. ICT have the potential to shape new forms of citizen participation, even though this fact is still incipient. The current reality is that ICT introduce changes in representative democracy, by facilitating improvements in information and communication, introducing changes in the form of understanding collective responsibilities and building citizenship.

## PARTICIPATORY EXPERIENCES IN CATALONIA

Spain has a legal framework that supports and enhances citizen participation since the eighties. The Spanish Constitution of 1978 conceives participation as a fundamental right of citizens and as a duty for public institutions, even though the government do not have the duty to promote participatory experiences. Moreover, there are special legislation, measures and regulations on citizen participation in the different levels of government. In this sense, Law 57/2003 on Measures for the Modernization of Local Government regulates mechanisms and specific participatory initiatives to be developed by municipalities. There are also decrees from the Catalan Government, establishing technical and economic support to local plans for participation and to the use of ICT for participatory experiences and goals.

Catalonia is one of the Spanish and the European Union regions which have led the driving force for participatory experiences -some based on ICT-, with the aim of revitalizing democracy, increasing public management transparency and creating new political spaces for communication and participation (Borge, Colombo & Welp, 2009). Thus, the object of study of this research is defined as participatory initiatives promoted in the area of Catalonia.

In Catalonia there are numerous participatory initiatives, cooperation and exchange networks. In the eighties, the city of Barcelona played an important international leadership role in citizen participation, and promoted the first experiences. Later on, the Regional Government of the province of Barcelona became a driving force through a specialized service working transversally with the municipalities in the promotion of participatory experiences. From then on, a set of public and private institutions -such as Universities or think tanks- have offered strong support and collaboration networks to city councils interested in citizen participation (Font & Galais, 2009). In 2004, the Directorate General for Citizen Participation of the Catalan Government was created, whose aim was the promotion of devoted to citizen participation in Catalonia.

Therefore, it is worth mentioning the existence of a strategy for the development of citizen participation defined by the Catalan Government, the financial resources available, consortiums and resources for the development of the Information and Communication Society, and a basic political consensus for maintaining participatory experiences.

At the present, citizen participation in public policies has continually gained importance and consolidated. So, we find concrete participatory experiences in concrete areas and at the same time a public policy of citizen participation emerges (Subirats, 2008).

## METHODOLOGY

This research aims to explore which type of citizen participatory experiences are being developed at local level in Catalonia. It also aims to study the possible explanatory factors for their being promoted. Moreover, it analyses the possible particularities of the explanatory factors for electronic participatory experiences. The next section establishes and describes the methodology used in order to analyse these issues.

#### **Research Questions and Hypotheses**

This research aims to contribute relevant information to the following initial research questions:

- 1. Which kind of participatory experiences -online and offline- are being promoted at local level in Catalonia?
- 2. Which are the main explanatory factors in the generation of citizen participation experiences promoted by local governments in Catalonia?
- 3. Are there specific explanatory factors for the driving force for e-Participation at the local level in Catalonia?

Each participatory experience is promoted in a concrete context, which may facilitate or complicate its driving force. In this sense the territorial situation, the population size, the socioeconomic context of the municipality, the institutional political context, the determinate relational networks or the participatory context of the municipality can explain the generation of those participatory dynamics. In the case of electronic participatory experiences, there can be also explanatory factors of an electronic type, such as the technological context of the municipality, the citizens' access to ICT or the political use of Internet.

Literature on e-Government and e-Governance at local level has traditionally studied variables of socioeconomic and technological context and population size. The intention here is to explore political variables as explanatory factors of offline and electronic participatory experiences.

This research sets out from the following working hypotheses:

• **Hypothesis 1:** The driving force for participatory experiences in public decision making by local governments varies depending on political, institutional, sociological and economical factors.

• **Hypothesis 2:** The driving force for electronic participatory experiences depends to a large extent on the same factors as offline participatory experiences, even though it incorporates some specific factors related to ICT.

From these initial hypotheses several subhypotheses are derived, which might be formulated in the following terms:

- The political party in charge of the city council influences participatory experiences. Thus, political parties on the left would promote more experiences (Colino & Del Pino, 2003; Blanco & Font, 2005; Schneider, 2007).
- Political electoral participation influences participatory experiences. So, the higher the abstention rate, the greater the probability of finding participatory experiences (Blanco & Font, 2005).
- Participatory context influences participatory experiences. Thus, the stronger the participatory context, the more citizen participation experiences are promoted (IGOP, 2005).
- Technological context would influence the impulse of e-Participation experiences, so the more technological the municipality, the more e-Participation is promoted.
- The greater the population size, the more citizen participation is promoted (Salvador, Cortés, Sánchez & Ferrer, 2004; Criado, 2004; Blanco & Font, 2005; Brown & Schelin, 2005).

## Citizen Participatory Initiatives: Dependent Variable

This research studies the factors that the literature has identified as explanatory for citizen participation, and informs on the factors that can be explanatory for electronic experiences. Therefore, it analyses institutionalized citizen participatory initiatives and mechanisms promoted at local level, composed of participatory experiences and participatory web site functionalities:

- Citizen participation experiences in public ٠ policy development, both online and offline, such as: participatory experiences in urban plans, municipality budgets, or other public policies. Citizen participation refers to any voluntary action by citizens more or less directly aimed at influencing the management of collective affairs and public decision-making (Verba, Schlozman & Bredy, 1995). Following Arnstein's ladder of participation (1969), we consider as participatory initiatives those that include a level of interaction and influence in the decision-making process -from elemental to more in-depth participation levels: information, communication, consultation, deliberation and decision-making.
- Participatory websites' functionalities. It measures the presence on the municipalities' web sites of elements such as mailboxes, e-mails, complaints and suggestions mailboxes, forums, blogs, surveys, consultations, documents or services online.

## Explanatory Factors for Participatory Initiatives

This study aims to analyse explanatory factors for citizen participation experiences and channels at the local level with the aim of contrasting and further analyzing previous research and literature (Colino & Del Pino, 2003; Salvador, Cortés,

Population sections	Number of municipalities	% Population	% Municipalities
Less than 1000	490	2.61	51.8
1000 to 5000	256	8.12	27.1
5001 to 20000	139	18.45	14.7
20001 to 50000	38	16.30	4.0
More than 50000	23	54.52	2.4
Total	946	100	100

Table 1. Distribution of Catalan municipalities by population

Source: own elaboration

Sánchez & Ferrer, 2004; Criado, 2004; Blanco & Font, 2005; Brown & Schelin, 2005; Schneider, 2007). Therefore, it studies political, sociological, economic and technological explanatory variables, which have been grouped into different analytical categories:

- **Political context:** local government's political colour, electoral abstention rate.
- **Participatory context:** e-Participation platforms, legal regulation of citizen participation, citizen participation department and number of consultative boards.
- Socioeconomic context: Gross Domestic Product per inhabitant, average age of the population and population with Spanish nationality.
- **Technological context:** through the proxy of the broadband Internet coverage as a percentage of the municipality's population<sup>1</sup>.
- **Municipality size:** number of inhabitants in the municipality.

## **Study Object and Sample**

This research analyses citizen participatory experiences promoted in Catalonia at local level, between January 2007 and June 2009. It understands participatory experiences in a wide sense, with independence of methodologies and instruments used, the level of participation attained and its time sustainability. Due to the temporary and immediate character of the Internet, the analysis is delimited to experiences and initiatives in operation during the moment of the data collection of this research, analyzing experiences active during the years 2007, 2008 and 2009.

Territorially the object of study is delimited to experiences of the area of Catalonia where numerous participatory experiences have been developed. Moreover, it is focused on experiences promoted at local level, working on a sample of Catalan municipalities, according to the population size.

The number of municipalities in Catalonia is 946 distributed regarding population size as Table 1 shows. As can be observed, more than 50% of municipalities have less than 1000 inhabitants. However, 89.27% of the population is concentrated in municipalities with more than 5000 inhabitants and 54.52% in municipalities of more than 50000. Previous research show that that in Catalonia medium-size and large municipalities have led the development of citizen participatory experiences (IGOP, 2005; Borge, Colombo & Welp, 2009). Other studies point out that population size is a determining factor in the development of web sites, online services and channels for interaction (Salvador, Cortés, Sánchez & Ferrer, 2004; Criado, 2004; Brown & Schelin, 2005). Taking all this into consideration, this research analyses a sample of 199 Catalan municipalities, that is

to say all Catalan municipalities with more than 5000 inhabitants<sup>2</sup>.

## **Data and Methods**

This chapter studies the driving force for participatory experiences, and develops an analysis of the main explanatory factors for their generation while adopting a quantitative approach.

At the time of elaborating this research, there is an exhaustive collection of e-Participatory experiences in the Catalan area. Therefore, the author set up a database collecting the distribution of the dependent variables and the explanatory variables in each municipality of the sample. The construction of this database means the elaboration of a "map" of the local participation in Catalonia and allows for quantitative analysis.

The database has been constructed between June and October 2009, by gathering data from different sources: the analysis of several existing non-exhaustive databases on participatory experiences<sup>3</sup>, the observation of e-Participatory experiences web sites, the study of municipalities' web sites, the use of aggregated databases on the economic, socio-demographic and technological characteristics of municipalities, and public information on the municipality's resources and its legal and political framework. The information has been completed through direct contact with city councils, when necessary.

The analysis is performed at two levels:

- 1. **Exploratory analysis of the data.** The objective is to describe the participatory reality at local level in Catalonia. It is the first step in a data analysis and facilitates a descriptive analysis of the experiences promoted and the several components of the dependent variable: number of promoted experiences, the Internet use for the participation and the levels of participation attained.
- 2. Multivariate explanatory statistical analyses. The objective is to analyse the

explanatory factors of the driving force for participatory experiences at local level, incorporating -or not- the Internet for participation. It relates the dependent variable with the different proposed explanatory ones.

## ANALYSIS AND FINDINGS

## Participatory Experiences Promoted in Catalonia at Local Level: A Descriptive Analysis

This section deals with a descriptive analysis of participatory experiences promoted in Catalonia. The objective is to answer the first research question, i.e. to analyse participatory experiences promoted at local level online and offline. Figure 1 displays municipalities' distribution according to dependent variables, taking into account the population size.

As can be observed in Figure 1, there is a relation between participatory experiences and functionalities promoted by municipalities, and the population size. So, the percentage of municipalities that have developed electronic and offline participatory experiences is higher among the biggest municipalities, while it is lower in those municipalities with less population. At the same time, municipalities that have not promoted any participatory experience increases as population size decreases.

There are differences among the several dependent variables, being participatory functionalities opened in the municipalities' web sites the most wide spread. Thus, all municipalities in the two bigger population bands and almost all in the minor band (98.6%), have participatory functionalities in their web sites.

While population size has a positive influence on the promotion of participatory experiences, we find differences regarding the use of Internet. Thus, in the highest population band, there would not be differences regarding the incorporation of Internet into participatory experiences, while

#### Internet and Citizen Participation

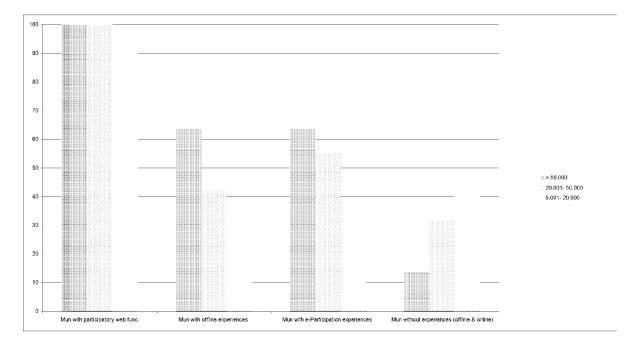


Figure 1. Municipalities by number of experiences promoted

in the two lower bands, there would be a higher driving force for the electronic ones.

It is worth pointing out that the number of developed experiences is inversely proportional to the number of municipalities promoting them. That is to say there is a high percentage of municipalities that develop few participatory experiences, while lower percentages of municipalities promote a higher number of experiences.

Figure 2 displays municipalities according to the type of experiences promoted. As can be observed, municipalities are mostly distributed among those not promoting any kind of participatory experiences (41.7%) and among those promoting participatory experiences that incorporate Internet in their development offline and configure online-offline experiences (40.7%). Municipalities developing only electronic experiences are almost inexistent and municipalities developing only offline experiences are a minority of 17.1%.

Focusing on the number of experiences promoted by the 199 municipalities (a total of 260), Figure 3 shows that the majority of those experiences use the Internet for participative purposes (59.6%), even though the experiences developed without using the Internet are still quite numerous (40.4%).

Finally, regarding the level of participation allowed (Figure 4) the majority of participatory experiences that use the Internet (49.7%) are informative, the more basic participatory level. However, offline experiences (71.8%) allow mostly a deliberative level of participation. Finally, the number of electronic experiences promoted decreases as their participatory level increases.

This statement would be in line with former research that showed the difficulty in developing experiences of high participatory levels through the Internet, while this technology would be used widely in more basic participatory levels, such as information or communication (Colombo, 2007).

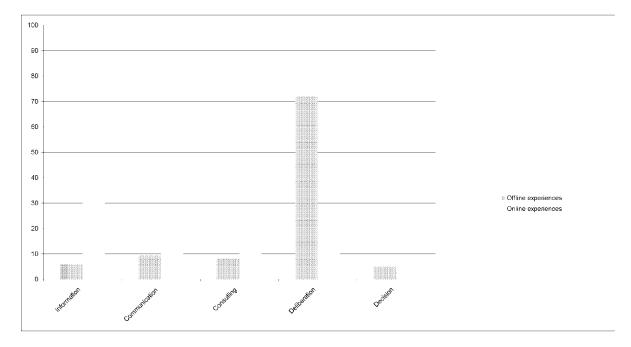


Figure 2. Municipalities by the type of experiences promoted

Figure 3. Internet use for participatory purposes

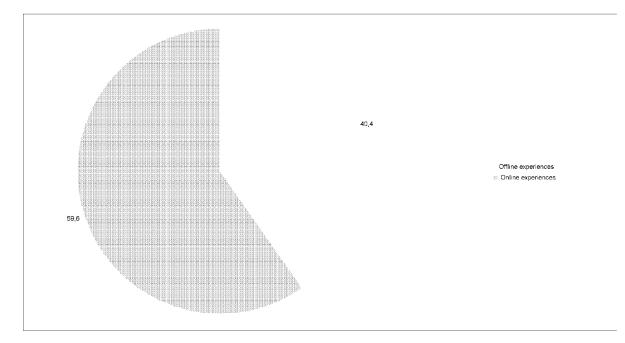
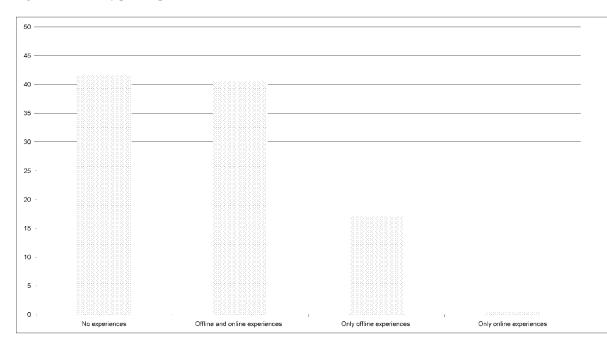


Figure 4. Level of participation



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## Factors and Determinants of Participatory Experiences: An Explanatory Approach

This section aims at answering the second and the third research questions, i.e. analyse the main explanatory factors for the driving force for citizen participatory experiences at local level (online and offline), and analyse the possible existence of specific explanatory factors for electronic experiences.

The analysis of the association between citizen participatory experiences and the explanatory variables, controlled by the factors that might affect them, is performed through multiple linear regression analysis. The study object is structured in different ways regarding the Internet use, time sustainability and the participatory level reached. Therefore, the following dependent variables are analysed: online and offline participatory experiences, e-Participation experiences, total offline participatory experiences, total e-Participation<sup>4</sup>, total participation<sup>5</sup>, e-Participation index<sup>6</sup> and (offline) participation index<sup>7</sup>. Table 2 displays the seven multiple linear analyses carried out.

As can be observed in Table 2, there are some differences and similarities worth pointing out. The next paragraphs deal with the explanation of the driving force for participatory experiences using the Internet, developed offline and both, offline and online.

**E-Participatory experiences.** To study the explanatory factors of e-Participatory experiences, we compare multiple regression models for online experiences, total e-Participation and the e-Participation index. The first variable measures the number of e-Participation experiences promoted; the second measures all electronic experiences, adding to the previous ones the participatory website functionalities; lastly, the e-Participation index measures the degree of the experiences, by considering together their number, the participatory level and the time sustainability.

			Number of experiences	experiences				Total of e-P	Total of e-Participation			e-Particip:
Model	Online exper	Online & offline experiences	Online experiences	periences	Offline ex	Offline experiences	Total e-Pa	Total e-Participation	Total ( Partici	Total (offline) Participation	e-Participation index	rticipation index
	Coeff.	Std. error	Coeff.	Std. error	Coeff.	Std. error	Coeff.	Std. error	Coeff.	Std. error	Coeff.	Std. error
Ln Population	0.433**	0.179	0.288**	0.143	0.143	0.130	0.627**	0.288	0.785**	0.314	0.309*	0.181
ICV & loc. mayor <sup>8</sup>	1.394	0.933	1.878**	0.748	0.032	0.677	1.723	1.512	1.734	1.647	0.770	0.948
PSC & loc mayor <sup>9</sup>	-0.193	0.237	0.007	0.190	-0.199	0.172	0.139	0.385	-0.053	0.419	0.059	0.241
ERC & local mayor <sup>10</sup>	-0.118	0.345	0.005	0.277	-0.138	0.250	-0.365	0.559	-0.502	0.609	0.120	0.351
PP mayor <sup>11</sup>	0.791	1.263	-0.283	1.013	1.041	0.916	-0.509	2.049	0.550	2.232	0.980	1.285
Mayor from local & ind. lists	0.226	0.402	0.084	0.322	0.141	0.291	0.651	0.649	0.806	0.707	0.634	0.407
Part. formalization factor <sup>12</sup>	0.396**	0.123	0.112	0.099	0.273**	0.089	0.411**	0.198	0.705***	0.216	0.299**	0.124
e-Participation plat- form	1.335***	0.268	1.404***	0.214	-0.044	0.194	3.183***	0.401	3.168***	0.437	2.063***	0.252
% Electoral absten- tion <sup>13</sup>	-0.021	0.032	-0.049*	0.026	0.025	0.023	-0.088*	0.052	-0.063	0.057	-0.035*	0.033
GDP per inhabitant	-0.005	0.010	-0.004	0.008	-0.002	0.007	0.006	0.017	0.005	0.018	0.007	0.010
% Bandwidth con- nection	0.045	0.038	0.024	0.030	0.022	0.027	0.042	0.061	0.065	0.067	0.038	0.039

Table 2. Regression analysis coefficients

(offline) Participation index

pation index

Std. error

> Coeff. 0.208\*\*

0.094

0.495

-0.469

0.126

-0.100

0.183 0.671

0.001

0.688

0.213

0.182

0.065

0.220\*\*\*

0.131

0.457\*\*\*

0.017 0.005

-0.003

0.002 0.022 0.020 0.000

0.033

0.064 0.014 0.017

-0.040 0.000 0.007

0.111

0.102 0.023

-0.074 -0.011 0.009

0.045 0.010

0.085\*

0.050 0.011 0.013

-0.087\*

0.063 0.014 0.017

0.003

Average age

% Spanish nationality % Post-compulsory

0.004

0.025 0.029

0.013

0.002

0.027

0.012

0.008-0.007

-0.002

-0.009

0.007

-0.003

0.020

p < 0.1 \*p < 0.1 \*p < 0.05 \*\*\*p < 0.001Source: own elaboration

Internet and Citizen Participation

1.990

0.204 169 0.279

3.812

3.251 169 0.461

6.622

4.294 169 0.479

6.078

9.309 169 0.460

2.726

-4.948\*

3.014

-1.268

Constant

 $169^{14}$ 0.426

Adjusted R2

z

169 0.124

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0.044

0.028

0.048

0.049 4.110 169 0.419

0.060 3.759

0.081

Part. web function-

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The analyses show that explanatory variables are very similar in the three cases, even though we observe differences in some variables. As Table 2 shows, the Internet use for participatory experiences would be explained in the three models by the population size, the existence of an e-Participation platform and the electoral abstention rate. Thus, there would be a greater electronic participation in larger municipalities, with an e-Participation platform and with lower electoral abstention rates.

On the other hand, we find some differences that are worth pointing out. The variable of participation formalization factor is not significant in the explanation of the number of online experiences, while it is explanatory for the total of e-Participation and for the e-Participation index. We also find differences in the model of the number of e-Participation experiences promotion, where having a mayor from ICV (a party on the left) and a low average population age would be explanatory, while they would not be in the other two models. So, we could think that when we deal with more stable e-Participation structures -as in the cases of e-Participation index or the total of e-Participation- having a strong participation formalization would be a key factor in the Internet use for citizen participation. Instead, when we only study the number of experiences, having a mayor from ICV or a young population would be explanatory for their driving force. This could be showing that Internet incorporation in participatory experiences would be more favourable in municipalities with those characteristics, even though they would not be explanatory for the level or sustainability of the experiences.

• Offline participatory experiences. To deal with the explanatory factors of offline participation, we analyse the variables offline experiences and participation index. The analyses show that there is only one common variable explanatory for both offline models: the participation formalization factor, which would explain the

number of experiences promoted, their participative level and their time sustainability. On the other hand, we find differences in the significance of other variables such as 'average population age', which would explain the number of experiences promoted while not explaining their degree in terms of level and sustainability. It is worth mentioning that although in the explanation of the number of e-Participation experiences age had a negative coefficient, in this case its coefficient is positive. Finally, the variables of population size and electronic platform for citizen participation are explanatory for the degree of offline experiences, while they are not for the number of experiences promoted by municipalities.

• Online and offline participatory experiences. Finally, we study the participatory experiences jointly. Therefore, we analyse variables of offline and online experiences, and total of participation. The developed analyses show that for both models, variables of population size, electronic platform for citizen participation and the participation formalization factor are explanatory. Even though the values of the coefficients are quite different, it is worth pointing out that their signs are equal, all them being positive.

Thus, it could be stated that even in the explanation of the number of participatory experiences (online and offline) and in the explanation of these experiences, taking also into account the web site participatory functionalities, the population size would be explanatory. So, the greater the number of inhabitants, the higher the number of experiences promoted, even though its effect would be greater in the case of 'total participation'. Likewise, municipalities with electronic citizen participation platforms would promote more experiences than municipalities without such a platform. Thus, it could be stated that this variable -although having a positive effect in both dependent variables- would have a stronger effect when it comes to explaining experiences and web site functionalities, than if only experiences are explained. This could mean that the use of e-Participation platforms could be related to the opening of participatory functionalities in municipal web sites and could be indicative of a stronger participatory culture in the municipality, which would also have effects on the offline participatory experiences. Finally, municipalities with a higher participation formalization factor would promote more participatory experiences. Again, the coefficient of the variable is higher in the case of the explanation of the experiences plus web site functionalities than in the case of the explanation of the experiences.

# FUTURE RESEARCH DIRECTIONS

Research on participatory experiences promoted at local level, both online and offline, is crucial to understanding factors and determinants of e-Governance and e-Democracy. It can be very useful in explaining the big differences existing among municipalities, and in understanding the reason that some municipalities do foster hugely e-Participation while others do not. Subsequently, it will be necessary to explore what drives citizens to participate in the electronic experiences promoted. In this sense a more general vision of the implementation of e-Governance and e-Democracy will be achieved.

This research has produced knowledge on e-Participation. From there, several recommendations and final reflections arise, related to two main issues: making possible the promotion of new citizen participatory experiences in Catalonia; and allowing for deep and systematic study of these same experiences. In order to promote citizen participatory experiences and the Internet incorporation into them, recommendations are:

- Fostering the development and implantation of electronic tools for participation. For example through the encouragement of electronic participatory platforms.
- Graduating the difficulty level of e-Participation tools. Offering tools adapted to different levels of use and knowledge of electronic means and to different levels of education.
- Looking for strategies that take participants' diversity into account. Most of the so called 'digital natives' use the net in a more active way, creating and sharing content online. Thus, it would be necessary to take into account different ways of using the Internet and to create intergenerational groups.
- Finally, until the digital divide disappears, it is necessary to promote mixed experiences as a way to incorporate the significant improvements introduced by ICT, while sustaining the socializing elements of the offline experiences and the participation of non Internet users or users with bad access.

In order to the study the nature of participatory experiences promoted, recommendations are:

- Running a systematic census of participatory experiences promoted. Nowadays there are several databases on participatory experiences but none of them is systematic and exhaustive. Moreover, most of the time those databases are not public.
- Collecting data systematically on the promoted experiences, such as data on participants, goals or results. Thus, the functioning of these experiences could be evaluated and the Internet use involved

with them could be analysed and measured. Currently there is a lack of knowledge of the municipalities' city councils regarding the experiences promoted. Furthermore, there is an absence of a systematic collection of the characteristic elements of those experiences.

Encouraging the return of the results of participatory experiences to citizens who have participated. It is crucial in terms of the research and study of the experiences promoted but also in terms of their transparency and legitimacy.

Fruit of the research process itself, new questions and enigmas arise as starting points towards future research on the study of the Internet and participatory experiences. This section presents possible paths of analysis:

- 1. Study the evolution over time. The hypothesis that local governments would increase the encouragement of electronic participatory experiences as time goes by could be studied. Thus, it would be interesting to follow the driving force for those experiences by picking up data in order to make an analysis from a temporary perspective possible.
- 2. If there was a survey on political uses of the Internet representative at local level in Catalonia, it could be used to cross the data with the present research data and analyze if there is -or not-relation with the driving force for electronic participatory experiences.
- 3. Study the possible influence of the political profile or of the personal profile of the person responsible for the citizen participation in the municipality, in order to study if variables such as the political trajectory, the associative trajectory, the age or the studies of this person might be explanatory of the driving force for participatory experiences and the Internet incorporation in these experiences.

4. Study the possible relation between the municipal web sites participatory functionalities and e-Participatory experiences promoted. The idea is to analyse if the Internet incorporation gives rise to a trivialization of the citizen participation promoted by local governments -promoting numerous experiences and functionalities of low participatory levels- or, on the contrary, it fosters the use of this digital media to improve and/or facilitate citizen participation developed offline, i.e. promoting functionalities or experiences of high participatory levels and integrated in a participatory strategy.

#### **CONCLUSION AND DISCUSSION**

This chapter studies participatory experiences promoted at local level in Catalonia and the Internet use in them. It also analyses the possible explanatory factors of their promotion, focusing the analysis on both online and offline experiences.

Thus, it analyses participatory experiences promoted in Catalonia by local governments, studying their nature and development: the number and the type of experiences launched, the Internet use for participatory purposes in these experiences and the level of participation allowed. It also analyses the most relevant explanatory variables considered by the literature: political, technological and socioeconomic variables, and the size of the municipality. It studies their influence in the number of experiences promoted and in their participatory level and time sustainability reached. It also evaluates whether the explanatory factors for offline participation can also be explanatory for e-Participation experiences.

In general terms, the analyses show that participatory experiences in Catalonia have increased notably, even though we are still far away from their generalisation, since most of the municipalities have not promoted any participatory experience during the studied period. Moreover, the number of participatory experiences promoted in the municipalities is inversely proportional to the number of municipalities promoting them.

Most of the participatory experiences use the Internet to allow citizens' participation (59.6% versus 40.4%). e-Participatory experiences have been developed hugely, even though they are very heterogeneous regarding the level of participation allowed. Moreover, e-Participation through the Internet mainly reinforces offline participation, being a complement of some participatory channels. In this sense, 40.7% of the municipalities promote participatory experiences that incorporate the Internet in their offline development; 41.7% of municipalities do not promote any participatory experience; 17.1% develop only offline participatory experiences and only 0.5% of participatory experiences are developed exclusively online.

Regarding the hypotheses, the analyses show that political variables are explanatory for e-Participation experiences in Catalonia, as suspected, but they are not for the offline ones. This may indicate a greater generalization of offline experiences, so their development would not be any longer explained by a left political colour, as previous research indicated (Colino & Del Pino, 2003; Blanco & Font, 2005; Schneider, 2007) or by the electoral abstention rate (Blanco & Font, 2005; Borge, Colombo & Welp, 2009).

Electoral abstention rate is explanatory for e-Participation in the sense that the lower the abstention rate, the higher the e-Participation. This would be contrary to previous research (Blanco & Font, 2005), even though previous research analysed offline experiences. This may indicate that e-Participation experiences are still pioneering and innovative, needing a more participatory environment to be promoted. So, political variables are explanatory for them but not for offline experiences, which are currently more widespread than in previous years.

On the participatory context, in general terms we find empirical evidence in all the models except the online experiences, that the higher the formalization of citizen participation in the municipality, the greater the citizen participatory experiences. So, there is a positive relation between promoting participatory experiences and having formal participation councils, legal regulation and a special department in the city council. This would be in line with our hypothesis and with previous research (IGOP, 2005).

Unfortunately data used does not allow us to find significance in the technological variables collected. Nonetheless, it worth mentioning that having an e-Participation platform is significant in all the models except the offline experiences one. This could be due to a possible relation between having an e-Participation platform and being a more participatory oriented municipality.

Regarding population size the greater the number of inhabitants, the greater the citizen participation, both online and offline, in line with our hypothesis and previous research (Salvador, Cortés, Sánchez & Ferrer, 2004; Criado, 2004; Blanco & Font, 2005; Brown & Schelin, 2005). Even though, the non-significance of this coefficient in the case of offline experiences, may show a generalization of those experiences in all the municipalities.

Finally, with the exception of the age, none of the socioeconomic variables explains online or offline participation. So, we could conclude that promotion of participatory experiences is tied to political context and participatory variables, and not to differential population characteristics of the municipality. This emerges from the non-significance of the analysed socioeconomic variables, as well as the significance of the age variable in the number of experiences explanation, which favours e-Participation in young populations and offline participation in older ones. Thus, it seems that participatory experiences are related to the political context of the municipality and strategies and tools that reflect the interest in developing them. So, we could conclude that in this moment, e-Participation is not a generalized tool yet, but

it already represents the spearhead of democratic innovation.

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# **KEY TERMS AND DEFINITIONS**

**Citizen Participation:** Any voluntary action by citizens more or less directly aimed at influencing the management of collective affairs and public decision-making. It can be promoted by public administrations (top-down), or by the citizenship itself (bottom-up).

**Democratic Innovation:** Revision and reinterpretation of democratic elements such as participation, accountability and responsibility, to respond to new circumstances affecting democracy. **E-Participation:** Citizen participation experience that incorporates information and communication technologies for participatory purposes.

**Internet:** Global information system. Global network of computers networks coordinated through the World Wide Web. It is logically connected through a unique system of addresses based on the TCP/IP protocol.

# **ENDNOTES**

3

- <sup>1</sup> Broadband Internet coverage as a percentage of the municipality's population is the only ICT variable disintegrated and representative at the municipal level in Catalonia.
- <sup>2</sup> The city of Barcelona is not included in the sample due to several reasons. Its complex administrative structure, the city council's high participatory activity and the lack of systematization and information centralization of the participatory experiences promoted give rise to a lack of exhaustive and systematic information on all the experiences promoted. Moreover, Barcelona city council tried to gather all this information through several research projects, which were rejected due to the great amount of resources required.

Databases used to collect data are: Democratic Innovation program and Local Government of Catalonia; the Catalonia's Public Administration School Database; the Participatory Democracy Local Observatory; the Participatory Democracy International Observatory; the Pi Sunyer Foundation good practices bank; database of the Directorate General for Citizen Participation; as well as information coming from other municipal studies or web sites.

<sup>4</sup> The total e-Participation is the sum of the number of e-Participation experiences and the participatory website functionalities.

- <sup>5</sup> The total participation is the addition of e-Participation experiences, plus offline participation experiences, plus participatory website functionalities
- 6 Measures e-Participation. It takes into account the number of eParticipatory experiences, its participatory level (information, communication, consultation, deliberation, decision) and its temporal sustainability (process, punctual or permanent). It also measures participatory website functionalities and their participatory level. This index is constructed through a weight average of these variables, weighting last two variables 0'5 (participatory website functionalities are important for e-Participation but do not constitute complete e-Participation experiences themselves). High values refer to municipalities with high e-Participation (big number, of high participatory level and time lasting experiences).
- <sup>7</sup> Measures citizen participation taking into account the number of offline participatory experiences, its participatory level and its temporal sustainability. The same weight is assigned to each one of those variables
- <sup>8</sup> Iniciativa per Catalunya-Els Verds (ICV) is a small left-leaning party, concentrated

in larger cities, which strongly defends the carrying out of participatory initiatives.

- <sup>9</sup> Partit dels Socialistes de Catalunya (PSC) is a centre-left party that has led Catalan government since 2003.
- <sup>10</sup> Esquerra Republicana de Catalunya (ERC) is a left-leaning party that strives for independence of Catalonia. It is the 4th or 3rd political force, depending on the elections.
- <sup>11</sup> Partit Popular (PP) is a right-wing Spanish party, which has little presence throughout Catalonia.
- <sup>12</sup> This factor arose from a factorial analysis of the following variables: citizen participation legal regulation in the municipality, citizen participation consultative boards, citizen participation department in the city council.
- <sup>13</sup> This variable measures the average electoral abstention rate in each municipality. It takes into account the last electoral participation rates (general elections 2008, regional elections 2006 and local elections 2007).
- <sup>14</sup> The difference between N=199 as basis for the analysis and N=169 in table 2 is due to missing values in 30 municipalities for the GDP per inhabitant variable.

# Section 5 Public Stakeholder Participation

# Chapter 16 Who Participates Now... and Why? A Case Study of Modern Interest Participation and Bureaucratic Decision-Making in the Age of E-Government

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#### ABSTRACT

This study seeks to investigate two primary questions. One, I examine how technological changes to the opportunity for participation in the notice-and-comment stage of the rulemaking process affect the quality, quantity, and content of information provided to governmental decision-makers by different types of interests. To do so, I present findings from interviews conducted with regulatory analysts who have been engaged with the transition to www.regulations.gov since the beginning stages. The interviews reveal a somewhat "mixed bag" as the impact of the transition is evaluated. As is common in public organizations, the pursuit of equity and securing the individual rights of citizens to participate is not necessarily compatible with the values of economy, efficiency, and effectiveness.

Two, I ask how the dimensions of complexity and salience of a policy issue affect the level of participation by different types of actors in the regulatory policy arena. Using Gormley's (1986) framework of regulatory politics, I develop measures that attempt to capture the dimensional constructs of rule-complexity and issue-salience that might affect different actors' levels of participation in the rulemaking process. Given the transition to the Regulations.gov platform, I test several propositions implicit to the stated equity-based mission of the George W. Bush administration's "e-Rulemaking Initiative" (eRI). My findings indicate that these dimensions do, in part, account for the amount of activity of different types of organizations and individuals, despite a "leveling" of access across stakeholder types.

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## INTRODUCTION

Technology... the knack of so arranging the world that we need not experience it. – Max Frisch, Homo Faber (1957)

Max Frisch's novel Homo Faber explores a theme that should be quite familiar to modern public administrators. The story's main character engages in a classic Oedipal struggle between technocratic ratiocination and the exigent acceptance of the chaotic real world (Ricker-Abderhalden, 2005). Recent technological innovations to the noticeand-comment stage of administrative rulemaking were proposed to "revolutionize" the nature of information exchange between agencies and different types of stakeholders (Noveck, 2004). However, the intent of this transformation is quite the opposite of Walter Faber's lament, quoted above. Rather than limiting participation in thousands of technocratic decisions that impact the everyday lives of citizens, the technological advance was intended to encourage engagement, information diffusion, transparency, and the exchange of ideas (Lubbers, 2010).

At the same time, the theme in Frisch's novel is exceedingly relevant to implementation of rulemaking processes. Rulemaking agencies are faced with shifting contextual dynamics inherent to the changes of formal and informal norms that guide behavior within their institutional settings. Emergent exigencies are invariably created by changes in the institutional structure. And with these new demands, administrators are forced to once again reconcile their own technocratic claims with political and environmental obligations. Thus, as in Frisch's work, the narrative becomes "layered with flashbacks, self-reflection, and hints of future consequences" (Ricker-Abderhalden, 2005).

Started in 2003, the "e-Rulemaking Initiative" (eRI) set out to provide all potential stakeholders a centralized, online platform from which rules issued by any and all federal agencies can be reviewed and commented on during the notice-and-comment stage. The Web site (www. regulations.gov) provides opportunities for stakeholders to more easily navigate agency rulemaking activities by dockets that hold all materials related to an issued rule (e.g., the proposed rule, supplementary materials and analysis, other stakeholder comments). The site's visitors can download documents for their own purposes and issue comments on rules directly from the site. Federal agencies migrated to the new centralized platform incrementally over the last six years of the George W. Bush administration's tenure. Full implementation, across federal agencies, was completed by September 30, 2009.

This study focuses on one regulatory agency that promulgates regulations in two distinct policy areas to test a model derived from Gormley's (1986) framework of regulatory politics. I develop measures that attempt to capture the dimensional constructs of rule-complexity and issue-salience that might affect different actors' levels of participation in the rulemaking process. Using an agency rule as my unit of analysis for the quantitative portion of the study, I analyze 65 rules issued and made final by the agency over a four-year period. Immediately preceding this period, the transition to Regulations.gov took place and qualitatively changed how potential participants could engage with the agency at this stage in the policy process. To capture the perceptual change in the quality, quantity, and substance of information exchanged between stakeholders and government officials, I provide insight obtained through a series of semistructured interviews with regulatory analysts at the agency.

This study serves as a launching point from which analysis of participation in the rulemaking process might be extended to a broader array of issue domains and agencies that have undergone similar changes to the venue's structure. This analysis may help to inform both practitioners and researchers of how to balance seemingly incongruent objectives of technocratic efficiency and representative democracy in the new age of online citizen engagement.

#### BACKGROUND

#### **Rulemaking and E-Rulemaking**

Although characteristically treated as an extension of the executive, the federal bureaucracy's rulemaking authority is delegated by Congress as an extension of its legislative power (Rosenbloom, 2001). "Rules provide the technical detail so often missing in statutes, and rulemaking brings a capacity for adaptation to changing circumstances that the letter of the law alone would lack" (Cornelius M. Kerwin, 1994, p. 8). Kerwin (2007) argues that rulemaking is the single most important function performed by agencies of the federal government. This function creates an arena for competition among affected constituencies.

The premise of the Administrative Procedure Act of 1946 (APA) rests on the analytically separate, but integrated, pillars of *information*, *participation*, and *accountability* (Cornelius M. Kerwin, 1994). It introduces mechanisms that (1) increase public awareness of the manner in which regulations are proposed and adopted, (2) increase the ability of Congress, the president, and the courts to oversee the rulemaking process by increasing the quality and transparency of information available to (and through) agencies, and (3) increase the quality of oversight by limiting bureaucratic discretion through procedural requirements.

In accordance with APA, rules promulgated by federal agencies are first published as proposals in the *Federal Register*. In publicly proposing a rule, the agency allows for a specified time for potential stakeholders to comment on the proposal (i.e., "notice-and-comment stage"). The intention of this procedure is to encourage substantive stakeholder participation in the policy process to avoid the perception of arbitrary and capricious decision-making by unelected public administrators and to ensure good policy. Given the frequency of rule promulgation and the potential impact that rules can have, notice-and-comment is an arguably necessary stage to ensure democratic governance and legitimacy of the rulemaking process (West, 2004). However, while the notice-and-comment stage provides an opportunity for interests to potentially influence rules, some researchers argue that the stage is largely symbolic and has no tangible effect on changing policy (West, 2004). "Agencies, in other words, ask for public comments because they are required to do so" (Furlong, 2007, p. 165).

Traditionally, comments have been provided by different types of policy interests, often represented by organizations that collectively represent the interests of more than one individual entity (e.g., interest groups, professional trade associations, state and local governments, corporations). It is generally accepted that comments provided by "business interests" far outweigh the number of comments provided by individual citizens and "citizen interest groups" in regulatory rulemaking (Golden, 1998; McKay & Yackee, 2007; J. W. Yackee & Yackee, 2006). This is understandable, given that decisions made in regulatory policy domains usually have the most direct effects on the industries the policies are meant to regulate (Gormley, 1986).<sup>1</sup>

However, following the rulemaking process through the *Federal Register* traditionally carried prohibitive time and information costs to resource-strapped stakeholders in different policy domains, especially individual citizens. eRI was purportedly created to decrease these costs. The stated mission of eRI is to remove "logistical and institutional barriers that previously made it difficult, if not impossible, for a citizen to navigate complex and far-reaching Federal regulatory activities."<sup>2</sup> Started in 2003, the intention of eRI is to "provide the public with one-stop Web access to all proposed federal regulations and to give the public the ability to electronically submit comments on all federal agencies' rulemakings."<sup>3</sup>

#### TECHNOCRACY, RATIOCINATION, AND REAL-WORLD IMPLICATIONS OF E-RULEMAKING

There has recently been an influx in studies that address interest group involvement in governmental decisions at the bureaucratic level of decision-making. One particular stage of the policymaking process has increasingly been explored: administrative rulemaking. This stage in the policy process provides an active environment of interest group and stakeholder participation that was largely ignored by all but a handful of empiricists until the last fifteen years (Cornelius M. Kerwin, 1994; Magat, Krupnick, & Harrington, 1996). Recent studies have largely focused on the level of influence different actors have on the outcome of rules at the notice-and-comment stage of rulemaking (Golden, 1998; McKay & Yackee, 2007; J. W. Yackee & Yackee, 2006; S. W. Yackee, 2006). The density and diversity of the pressure system at the rulemaking stage is observed in many of these studies, but the factors that contribute to these dynamics are not explicitly examined.<sup>4</sup> Rather, the studies tend to focus on the level of influence different actors have on the outcome of rules by their levels of participation at this particular stage. Typically, researchers identify the diversity of interests based on a commonly used division of interests into three broad categories: "economic, private interests" (i.e., "business"), "governmental interests", and "citizen or public interests" (Danielian, 1992; Schlozman & Tierney, 1983; J. W. Yackee & Yackee, 2006).

In this study, I question what balance should be expected in a "complex and specialized venue", such as the notice-and-comment stage of regulatory rulemaking (Furlong, 2007). Regulatory rulemaking is "explicitly designed to govern economic activity and its consequences at the level of the industry, firm, or individual unit of activity" (Eisner, Worsham, & Ringquist, 2000, p. 5).<sup>5</sup> The information needed to shape decisions in this arena is often exceedingly complex, aggregated, and developed through highly professionalized and technical orientations. As Shulman (2009) writes, "it is disingenuous to suggest volume matters when the decision-making venue is administrative rulemaking in the U.S....the message received by agency personnel and reported repeatedly...is that the public is blithely inclined to annoy government officials with a mind-numbing, redundant task that impedes real work" (p. 29).

The following analysis evaluates the proposition that technological changes in the policy venue will broaden access for the number of stakeholders and increase their participation at the notice-and-comment stage. I question whether this wider access to agency decision-making actually changes the quality of the information exchange and/or levels participation across interests under different conditions of policy salience and complexity. Additionally, I examine the impact this infrastructural change had on the agency's allocation of resources toward stakeholder participation in the rulemaking process.

# The Animal and Plant Health Inspection Service

One of the first agencies to participate in eRI and fully migrate their rulemaking procedures to *Regulations.gov* in the fourth quarter of FY 2004, the Animal and Plant Health Inspection Service (APHIS) of the U. S. Department of Agriculture (USDA) serves as an apt example of an agency that has regulatory responsibility over two distinct policy domains (i.e., animal *and* plant health concerns) whose stakeholders represent a diversity of interests. Although it was formally established in 1972, APHIS can trace its roots back in USDA history to 1883 with the establishment of the USDA's Veterinary Division. Since then, the agency has expanded with a regulatory scope

Interest Type	Rules	Comments	Mean	SD	Min	Max
Individual Citizen	65	361	5.55	28.02	0	226
Trade Associations	65	244	3.75	8.61	0	62
Individual Businesses	65	232	3.57	9.66	0	64
State Agencies	65	107	1.65	4.56	0	35
Foreign Governments	65	57	0.88	2.16	0	12
Elected Officials	65	39	0.6	2.49	0	15
Public Interest Groups	65	28	0.43	1.22	0	6
Academia	65	32	0.18	0.83	0	5
Local Agencies	65	10	0.15	0.75	0	5
Federal Agencies	65	10	0.15	0.75	0	5

Table 1. Comments by interest type

that involves all issues that deal with invasive non-native plants, animals, insects, and disease, trade issues that are related to these areas, and the prevention of inhumane treatment of animals.<sup>6</sup>

Typically, APHIS is lobbied by organizations ranging from avocado and citrus producers, gardening and nursery associations, animal rights activists, farmers, ranchers, cattlemen, and large agribusiness. Emerging issues that the agency is dealing with include bioterrorism, genetically modified organisms, and food irradiation. As one regulatory officer explained, the agency carries a strong tradition of science-based professionalism: "The basic science in risk has been our modus operandi for quite a while...the decisions we make within the agency are based in science." The agency has six program offices that have regulatory responsibilities. For the purposes of this analysis, two programs are specifically examined that are the most frequent issuers of regulatory policy in the agency: Plant Protection and Quarantine (PPO) and Veterinary Services (VS).

Through analysis of 65 rules promulgated and finalized by the agency over a four-year period, and supported through the interview process, I have devised a taxonomy of participative interests represented at the notice-and-comment stage in these policy domains that reflects the work of Marissa Golden (1998), with some minor refinements. Descriptive analysis of the typology of actors and their frequencies of participation (number of comments) in the notice-and-comment stage of APHIS'rulemaking process is provided in Table 1.

#### Complexity and Saliency

William Gormley (1986) introduced a taxonomic method of identifying the politics of any given regulatory policy by its levels of complexity and salience. According to Gormley, an issue area with a high level of salience is one that affects "a large number of people in a significant way." An issue area with a high level of complexity is one "that raises factual questions that cannot be answered by generalists or laypersons" (Gormley, 1986). Gormley proposes that these dimensions provide actors with choices on what tactics they can employ and at which given stage of the policy process. Gormley formulates a theory on where policy takes place and who is involved, depending on the complexity and saliency of a policy issue. The present study, in part, replicates earlier (re: pre-eRI) efforts of analyzing interest participation at the notice-and-comment stage where the Gormley model of interest involvement has been employed (e.g., Golden 1998, Yackee and Yackee 2006, McKay and Yackee 2007). Eshbaugh-Soha (2006) has extended Gormley's model by focus-

	Low	Complexity		High			
Low	Politicians (Electoral Incentives) Legislation/Executive Mandate*			Upper-level Bureaucrats (Professional Norms) Rulemaking*			
Saliency	Lower-level Bureaucrats		Business Groups				
High	(Standard Operating Procedures) Street-level discretion*		(Economic Motives) Expert/Legal Analysis in Rulema i.e., "capture"				

Table 2. Gormley's dominant participant model and criteria for tactical choice<sup>8</sup>

(Criteria for tactical choice in parentheses)

\* Tactical choice

ing on what activities Congress and the president apply in reaction to different issues, given their varying levels of complexity and saliency. The model's intuitive accessibility and the opportunity for comparison to earlier analyses drove the choice for its use in this study.

Table 2 presents Gormley's model of who will be the dominant actor in the policy process, given a particular dimension of complexity/salience. However, according to Gormley's model, the fixed point of the notice-and-comment stage in my analysis should always be dominated by business participants and upper-level bureaucrats in the level of participation and influence because the nature of rulemaking, itself, is highly complex and specialized or of comparatively lower salience than congressional lawmaking (Furlong, 2007; Gormley, 1986).<sup>7</sup>

This paper extends Gormley's propositions by examining one specific point of access available to all collective and individual interests: the noticeand-comment stage of administrative rulemaking. Because this stage comes after the authorizing mandate, the opaque involvement of interest groups with elected officials is less likely, providing potential for more direct attempts of interest group influence at the bureaucratic level. I contend that if the cost (i.e., information and time) of access is leveled to some degree, the dynamics of the pressure system at this particular point will change according to the policy dimensions. In constructing the following model and to supplement the quantitative findings, I integrate evidence gathered from semi-structured interviews with regulatory analysts that took place on November 25, 2008 and May 10, 2010 at APHIS headquarters in College Park, Maryland.<sup>9</sup>

Gormley identifies two categories of actors in regulatory politics: regulars and irregulars. Due to the complex nature of regulations, regular actors are those who possess the answers to highly complex issues that cannot be answered by "generalists or laypersons" (Gormley, 1986). Therefore, in regulating modern industry, regular actors are those in the industries who are regulated that possess the information that their fellow regular actors, bureaucrats, need to formulate policy. For the purposes of this study, industry actors are those individual businesses and collective trade associations who have been identified as participants in the notice-and-comment stage of APHIS rulemaking. The irregular actors are composed of an array of participants representing both citizen/public and governmental interests. They are individual citizens; public interest groups; local, state, and other federal agencies outside of the APHIS programs; elected officials; and foreign government representatives.

Public interest groups, Gormley contends, "normally confine their attention to highly salient issues" (p. 603). While complexity may present a barrier to their participation, they will rely on "technical and legal strategies" if so confronted (Gormley, 1986, p. 604). Therefore, one can infer from Gormley's model that public interest groups will insert themselves into the process at the noticeand-comment stage if the issue is salient, relying on technical and legal expertise to influence agency decisions. However, according to the interviews with APHIS regulators, public interest groups are more likely to rely on grassroots lobbying tactics.

As Shulman (2009) documents, public interest groups "increasingly use online mobilizations as a way to raise awareness, money, and membership" (p. 23). These organizations increasingly rely on form letters, in which members are prompted to electronically "sign" a prepared comment on the organization's Web site that is then sent to the regulatory agency via email. In the 2004 EPA regulation that Shulman investigates, he finds 100,828 letters emanating from a single organization's (re: MoveOn.org) campaign. APHIS regulators, too, experienced this phenomenon prior to their transition to Regulations.gov. According to the interviewees, when comments could be made by email via the APHIS web site, public interest groups would set up a web form in which they would prompt comments from members and average citizens interested in the policy area without the actual rule being attached to the format. Such prompts would read something along the lines of "Tell APHIS what you think about allowing companies to irradiate your food!" These mass mailing techniques would complicate the collection of comments and produce a stream of low quality comments because those filling out the web forms were often oblivious to the content of the rule. Therefore, the agency set forth a policy that closed email as a method for submitting public comments, thereby forcing commenters to submit via the centralized platform and disabling the ability for grassroots campaigns to submit multiple member-comments separately.

Groups now use "mail-merge" programs that generate their own formal comments as one submission. These produce large files that contain a large number of individual comments within the document itself. The interviewees indicated that they are just starting to see the use of such tools emerge. The interviewees also indicated that they take those types of comments even less seriously than from people who just happen upon a rule, read it, and give their thoughts about it. The interviewees indicated that mass mailing techniques tend to generate low quality comments by people who have not even read the rule.

Individual citizens, in the meantime, normally have fewer resources than organized public interest groups. While Gormley precludes individual citizen involvement in his model, descriptive analysis from the present study shows that they are commonly participative in the notice-and-comment procedure. As mass mailing techniques have been largely eliminated, the interviewees did note a general increase in citizen participation. When asked if they had seen any increase by particular types of commenters, one respondent answered:

We have more participation from people who might have a more casual interest in rulemaking. I think it has made it easier for them to find us and contact us. Those comments are typically not of the highest quality. The people who are commenting may not understand what a comment needs to have in it in order for the agency to change something about the rule. The comments tend to be of less quality and reflect general feelings about a rule or ideology rather than addressing specific aspects of the rule. Overall, the increase is essentially in more low-quality comments. (Emphases added.)

Thus, the perception of a *low-quality* comment is one in which the commentary does not explicitly address the substantive, economic or environmental impact of a proposed rule on a given industry, consumer, or citizen population. Quality commentary would require that the commenter unambiguously explicates the impact a rule will have on a given population through convincing and direct examples or analyses that support the commenter's contention, as opposed to stating one's general beliefs, ideology, or general feelings about the policy area or the role of governmental regulation within that policy area. Based on these parameters, an apt illustration of a low-quality comment would be the following submission by a citizen commenting on a proposed rule addressing APHIS action on the importation of nursery stock:

I oppose the careless way that aphis [sic] is allowing exotic invasives [sic] to come in to this country. This country has billions of dollars needing to be spent because aphis [sic] does its work so carelessly. They let the profiteers bring in any old plant or animal and consider profitering [sic] more important that [sic] PROTECTION OF AMERICA. (Emphasis is the commenter's own.)<sup>10</sup>

This comment follows the proposal of a rule addressing an area of APHIS regulatory action (on nursery stock importation) that has a higher relative level of salience to general public opinion than some areas of APHIS regulatory purview (Romano and Orden, 1997). Thus, this individual citizen's participation in the notice-and-comment stage for this rule was not unique. Nursery stock importation is an important issue among a heterogeneous domestic industry that includes both large agribusiness firms and smaller businesses in the wholesale and retail nursery trade (Romano and Orden, 1997). Additionally, it ranks among the most pressing issues identified by general public opinion across APHIS's regulatory policy domains. Of the 65 rules that comprise the present analysis, a Lexis Nexis search for articles in the year preceding the rule's proposal that contained the key phrase "nursery stock" produced the third largest result for any of the given rules.

One area, in particular, that appears to be highly salient to general public opinion (relative to other policy domains in which APHIS is active) is the regulation of genetically modified organisms (GMOs).<sup>11</sup>Among the concerns associated with the increased production of GMOs are the potentials for risk to human genetic and metabolic stases, the creation of new allergies and toxins, the "crowding out" of small farmers, and cross pollination of GM foods to organic crops and products (Durant and Legge, 2006). Consequently, the subject is one laced with complex arguments that broach multiple areas of modern science, technology, economics, and bioethics. At the same time, the increased salience of the issue over the last twenty years has brought an increasingly vocal public into the debate (Durant and Legge, 2006).

Another issue area in which the characteristics of complexity and salience are not mutually exclusive is the regulated testing of animal importations for "Bovine Spongiform Encephalopathy" (BSE), commonly known as "mad cow disease." On January 9th, 2007, APHIS proposed amending existing regulations regarding the conditions for the importation of commodities, such as live cows that were born after the effective enforcement of feed bans that the agency argued eliminated risk of BSE in specified regions, namely in Canada. The proposal included a mathematical model that approximated the "the proportion of BSE-infected, but not necessarily clinically diseased, cattle in Canada." The mathematical model is discussed in detail in the risk assessment the agency conducted in conjunction with the proposed rule and included as supplementary material to the posting. Using this mathematical model, APHIS analysts estimated that "the prevalence of BSE in Canada, based on data available as of August 15, 2006, is 6.8 animals per every 10 million adult cattle."

This proposal comprised 28 pages of the Federal Register, 321 pages of supplementary material, and 48 tables that ranged from purely descriptive statistics to more complex econometric models predicting the prevalence of BSE in future Canadian bovine imports. The salience of the issue was evidenced by the keyword search for articles that contained the terms "Bovine Spongiform Encephalopathy" and "import\*" on Lexis Nexis. This produced 228 articles in major U.S. newspapers in the year preceding the proposal. The rule was also a popular target for commentary by citizens, individual businesses, and trade associations, generating 226, 64, and 57 comments, respectively. This represents the largest number of comments from each of these categories of interest on any given rule in the present analysis. However, there are distinct differences in the level of sophistication generated within the comments produced by each category of interest.

Typically, trade associations were apt to directly address the risk analysis and economic and environmental assessments accompanying the proposals. For instance, the National Milk Producers Federation notes that these analyses are "lengthy and detailed, thus requiring close examination before adequate comments can be provided." Others, such as the South Dakota Cattlemen's Association point to specific implementation details for which they ask for detailed consideration and explanation, such as how the age of live animals proposed for import would be verified.12 The National Cattlemen's Association includes a direct assessment of the agency's analysis, providing its own supportive analyses that adjust some of the underlying assumptions guiding the agency's mathematical model, noting improved outcomes using Bayesian techniques that force the assumption of prior information into the models to "produce more realistic estimates if that prior knowledge is appropriate."13

Citizen comments, meanwhile, were typically of low quality, as defined by the parameters noted above. In general, these comments highlighted very broad and unclear reasoning on why the relaxation of regulatory action toward Canadian bovine imports was undesirable, other than emphasizing a wide-ranging lack of assurance in APHIS intentions. The following comment left by an individual citizen, and self-identified as such, was characteristic of this lack of articulated reasoning for opposition to the proposal:

Dear Sir or Madam, I am opposed to the proposed USDA allowing cattle coming from Canada and other BSE infected countries to be allowed into the U.S.A. As a wife and mother, I am concerned about what I am feeding my family. I want assurance the meat I put on the table is BSE free. Cattle and cattle products from BSE countries, such as Canada should not be allowed in the U.S.A. until there is an effective feed ban in place for a minimum of 7 years. There is no doubt, if you allow more Canadian cattle into our food system, you will be allowing more disease in the U.S.A. and onto our American family tables. Please oppose APHIS-2006-0041.<sup>14</sup>

It is beyond the present analysis to determine the validity of the arguments posed by any of the commenters. The essential point is that the information being provided in these cases seems to be of much greater sophistication on behalf of trade associations and business, while the comments generally provided by individual citizens more likely fit the content parameters of "low quality." I propose that both public interest groups and individual citizens will participate at higher levels when an issue is salient, regardless of the rule's complexity. However, the perceived quality of citizen participation will be dependent on the relative complexity of a given rule-i.e., increased rule complexity will be negatively associated with the quality of citizen commentary.

**H1**: Issue-salience, within a policy domain (APHIS: PPQ and VS), is positively associated with the frequency of participation by individual citizens and public interest groups.

**H2**: Issue-complexity, within a policy domain (APHIS: PPQ and VS), is negatively associated with the perceived quality of participation by individual citizens and public interest groups.

The second hypothesis can only be tested through the qualitative interview analysis, as there was no systematic method available to test this hypothesis quantitatively. Also, given the barriers that the centralized platform has introduced to grassroots mobilization, we discover through Table 1 the relatively low number of comments (28) that public interest groups have submitted.

"Business groups", presently identified as "trade associations", are active "whether issues are salient or not, whether issues are complex or not" (Gormley, 1986). As one regulatory analyst put it, "I think the [trade] associations knew how to get their comments in before and after. So, that's the same." The influence an industry has over agency decision-making often takes place through informal relationships with an agency. APHIS interviewees indicated that the agency often takes a collaborative approach on many of their rule formulations that entails an informal process of negotiation prior to the proposal of the rule. APHIS will many times familiarize those industry stakeholders with the content of the rule who they think will be affected, and encourage feedback before the proposal is posted to encourage buy-in from the industry through slight adjustments that keep them on board-however begrudgingly. As one respondent put it, "even if they don't like it, I think they'd prefer to know about it before it comes out." These informal contacts are often maintained through the relationships that program specialists have with former employers and trade association representatives. One regulatory analyst noted, "a lot of our program specialists come, at one point, from industry positions. So, they have contacts, old colleagues, who they're talking with as much as anything else. So there's a very close relationship there."

Despite possible constraints that industries may introduce to information-collection through selective sharing, as Coglianese (2007) explains, regulators often extract the information necessary to formulate regulations by exploiting differences in intra-industry interests and/or creating "incentives for disclosure." This does not mean, however, that regulations carry all the necessary information for implementation at the proposal stage of a rule, or that trade associations are always successful at constraining information-sharing. Agencies are issuing rules through statutory guidance that often carries "hammer requirements" for rule promulgation (Durant & Resh, 2010). If the industry does not offer quality information at the information collection stage of the rulemaking process, the agency is many times required to issue a rule under conditions of uncertainty as to how it will affect an industry. So, even though an agency may rely on informal relationships with industry representatives at the formulation stage, if the information they receive is of low quality, the notice-and-comment stage theoretically provides an opportunity to exploit the differences among businesses' interests in order to collect the necessary information for the rule.

The interviewees indicated that the stakeholders whose comments are particularly anticipated are those who the agency expects to bring litigation over the regulation. One particular trade association was identified as a frequent litigant, that was originally opposed to APHIS actions in one particular issue area, but expanded litigation as a reactionary technique to APHIS regulations across policy areas that affect the association's membership. This stakeholder strategy tends to have an impact on the care that the writers take in answering comments in the final rule by expected or past litigants in other issue areas, even if the desired changes are not made.<sup>15</sup>

Although Table 1 indicates that both trade associations and individual businesses have lower variances of participation than citizens, I revise Gormley's contention that the level of complexity and salience will have no effect on the level of participation by businesses and trade associations. Gormley argues that their participation will remain relatively constant. I posit that participation by individual businesses will increase as the rule-complexity increases. This follows from the presumption that the monitoring cost has decreased for individual businesses with the transition to *Regulations.gov*, increasing the likelihood that proposed rules will not comprehensively address industry concerns by the time of issuance. Also, a rule's complexity is likely to increase the opportunity for "sue and settle" techniques, most often employed by trade associations.

**H3**: Changes in the dimensions of rule-complexity will be positively associated with participation by individual businesses or trade associations.

Local and state governmental agencies are not identified explicitly in Gormley's model. However, as indicated in the descriptive statistics, they are participants in APHIS' notice-and-comment procedures. Gormley does, on the other hand, identify a venue in which regulatory policy is delegated to local and state actors in the policy process as "street-level" politics. Gormley posits that street-level politics occur when issues are "low in salience and low in complexity." He describes this level of politics as "a routine, bloodless kind of politics" that involve low-stakes operations and governmental involvement.

Many of the rules APHIS issues affect states or regions in which a particular commodity is harvested or a particular behavior is common. In such cases, APHIS regulators indicated that a lot of upfront negotiation occurs with affected states and localities prior to a rule's release. State agencies are often affected by federal regulations in adverse ways. They commonly complain about "unfunded mandates" in which state agencies are expected to carry out federal law without being provided the resources to carry out such actions. Also, many times federal regulations will conflict with existing state regulations that require more stringent behavior modifications than the federal regulation, but the behavior is monitored or changed through different mechanisms than what is required by the federal agency. Consequently, I posit that state and local agencies will increase when the scope of a policy is not focused on a particular state or region. Complexity should not be an issue as many state and local agencies are deftly equipped for carrying out complex policies that have increasingly been devolved from federal

to state implementation responsibility. Due to the nature of a broader scope, however, I also posit that issues with higher salience will be correlated to higher involvement by local and state agencies.

**H4**: Issue-salience, and the geographic scope of a regulation, will be positively correlated with the frequency of participation by local and state governments.

In running multivariate analysis, I expect to find that these dimensions (complexity \* saliency) will have significant effects on the level of participation by different groups. I present Table 3 as a generic example of the expected changes in participation per group type.

#### **Data and Measures**

The quantitative analysis of the study is a nonexperimental, cross-sectional design. I examine one agency that has fully implemented eRulemaking: the Animal and Plant Health Inspection Service (APHIS) of the Department of Agriculture (USDA).<sup>16</sup> The agency promulgated 65 rules that have been finalized from July 2004 through October 2008.

# **Dependent Variable**

Participation, the dependent variable, is captured by the number of comments by a given type of interest, per rule. The 65 rules produced a total of 1,120 comments. I evaluated the source of each comment and coded it according to the type of interest it represented. The codes were applied in accordance with the typology noted in Table 1.<sup>17</sup>

# Complexity

The first measure for rule-complexity is a count of the number of tables or figures in the supplementary material that accompanies many rules. This measure follows Gormley's claim that

*Table 3. Expected change in activity* 

	Low	Complexity	High			
Low	Individual citizen (+) Public interest (+) State/Local Govts. (+) Business (±) Trade Associations (±)		Individual citizen (+) Public interest (+) State/Local Govts. (+) Business (+) Trade Associations (+)			
Saliency High	Individual citizen (-) Public interest (-) State/Local Govts. (±) Business (±) Trade Associations (±)		Individual citizen (-) Public interest (-) State/Local Govts. (±) Business (+) Trade Associations (+)			

+ increase

- decrease

 $\pm$  no change expected

"specialized knowledge and training are needed if certain factual questions are to be satisfactorily addressed" (Gormley, 1986). If supplementary materials and analysis are intended to provide technical justification and evidence for a rule, then it follows that such materials capture the construct of complexity.

The second measure of complexity quantifies the reading complexity of the language of a given rule. This measure is the Gunning-Fog Index (GFI), which evaluates the degree of "fog" written in any given text (Gunning & Kallan, 1994). Chun and Rainey (2005) use this same measurement technique to capture the construct of complexity in their analysis of goal ambiguity in agency mission statements. I follow their claim that "the GFI has predicted fairly well the extent to which a piece of writing would be easily understood by readers" (Chun & Rainey, 2005). I insert the text of a proposed rule into a GFI "calculator," which produces a grade-level reading score measuring the reading comprehension necessary to adequately process the material, according to GFI standards.<sup>18</sup> This measure captures the experiential construct of complexity in the practice of the agency while following the theoretical construct as Gormley (1986) has defined it. The interviewees emphasized the exceptional care they take to make sure the language they use in a proposed rule is as plain

as possible to ensure its accessibility to any and all stakeholders. According to one regulatory analyst, the language should be as accessible as possible: "Some of it, you have to use scientific terms or otherwise you won't be able to talk about the issue. But, I'm constantly battering the program saying 'is there a simpler way we can say this? Can you give me an explanation of this term? We need some background so a reasonably intelligent person can understand.""

#### Salience

The salience of the issue is measured in two ways. First, key words or phrases that most precisely define the issue area were extracted from the rule and used as the criterion for searches on Lexis Nexis. Each search's time parameters were set for the entirety of the period for which the proposed rule was open for comments.<sup>19</sup> Typically, the construct "salience" is measured by media attention (e.g., Brians & Wattenberg, 1996; Givens & Luedtke, 2005). A refined and quantifiable measure, therefore, is the number of newspaper and magazine articles in which the issue is raised. Also, this follows Gormley's theoretical model as he speculates that "journalists gravitate toward salient issues" (Gormley, 1986). Second, a dichotomous measure was employed that measures whether the agency designated the rule to be "major" or "significant" (Significant/ Major = 1; Not Significant = 0), as defined by Office of Management and Budget (OMB). "Significant rules require preclearance by OMB and are judged to have significant impact on the economy" (Golden, 1998). Therefore, use of the "significant" determination follows Gormley's (1986) definition of a "salient" issue as one that affects "a large number of people in a significant way."

#### Controls

Each of the models contains a vector of control variables. Structural and policy variation within the agency itself is limited to two programs (PPQ and VS) for which a dummy variable is constructed (PPQ = 1; VS = 0). Also, some of the rules were declared in the rule's preamble to be "nonsubstantive" in nature, or were the issuance of "voluntary" programs only that did not coerce action by affected stakeholders. These rules were also coded as dummy variables (Nonsubstantive = 1; Other = 0). Rules that were limited in geographic scope, directed toward a specific region, county, or state, were coded as a dummy variable (limited geographic scope = 1; no limit = 0). Finally, if a regulation was directed toward only the importation of commodities or goods, it was also coded according to a dummy variable (Import = 1; Other = 0).

#### Methods and Results

I employ negative binomial regression analysis to assess the impact of complexity and saliency on the number of comments on a rule by any given interest type. Because the dependent variables are count variables, I use *Countfit* software to evaluate the best model fit for the analysis (Long & Freese, 2006). This produced an evaluation of negative binomial regression as the best fit for each of the four models in Table 4. To supplement the quantitative findings, I integrate additional evidence gathered from the semi-structured interviews with APHIS regulatory analysts in the discussion below.

#### Citizen Model

I find strong support in the data for my hypothesis that increased issue salience will positively impact the number of comments individual citizens will submit. Due to the lack of comments submitted by public interest groups (28), it is not surprising that the model indicated a poor overall fit, and therefore it was dropped from the analysis. Nonetheless, as indicated in the first column of Table 4, the media measure for issue salience shows that it is significant in the expected (positive) direction on the dependent variable (citizen participation). This indication helps confirm the supposition that citizens will participate in the rulemaking process if an issue has a high level of salience.<sup>20</sup>

To further explain the theoretical relationship of interest, I employ King et al's (2000) Clarify analysis software to determine what impact the media measure of salience has on the number of citizen comments (King, Tomz, & Wittenberg, 2000). By holding all intervening variables at their means and the two dummy variables with statistically significant negative impacts at 0, I adjust the media salience variable to one standard deviation above its mean. This predicts a count of 9.71 citizen comments, an increase of 4.16 citizen comments from the expected value (5.55). This indicates that an increase in salience of one standard deviation almost doubles the number of citizen comments, holding all other variables at the noted values.

#### **Business and Trade Association Models**

The findings for both the business and trade association models reveal interesting evidence that, while individual business participation is not affected by either salience or complexity, trade

	CITIZI	ENS	BUSINESSES		TRADE ASSOCIATIONS		STATE GOVERNMENTS	
Log Likelihood	-123.9	55	-121.107		-130.603		-90.816	
LR chi2	52.440		27.600		32.380		28.160	
p > chi2	0.000		0.001		0.000		0.001	
Pseudo R2	0.175		0.102		0.110		0.134	
	Coef. (SE)	p >  z	Coef. (SE)	p >  z	Coef. (SE)	p >  z	Coef. (SE)	p >  z
Supplementary Tables/Graphs	0.016 (0.015)	0.287	0.022 (0.016)	0.175	0.008 (0.012)	0.532	0.008 (0.012)	0.488
Gunning Fog Index	0.036 (0.110)	0.740	0.034 (0.141)	0.808	0.177 (0.108)	0.101	0.064 (0.122)	0.604
Lexis Nexis	0.012 (0.005)	0.012	0.008 (0.005)	0.147	0.011 (0.004)	0.005	0.004 (0.004)	0.397
Significant Regulation	0.584 (0.636)	0.358	0.738 (0.762)	0.333	0.798 (0.555)	0.719	1.623 (0.641)	0.011
PPQ Program	-0.526 (0.393)	0.181	0.586 (0.472)	0.214	0.050 (0.366)	0.891	0.344 (0.436)	0.430
Nonsubstantive Rule	-1.106 (0.587)	0.060	-2.267 (0.814)	0.005	-0.284 (0.544)	0.601	-1.397 (0.793)	0.078
Ltd. Geographic Scope	-0.662 (0.680)	0.330	-0.771 (0.760)	0.310	-0.732 (0.684)	0.285	-1.457 (0.837)	0.082
Importation Rule	-0.937 (0.416)	0.024	-0.686 (0.516)	0.000	-0.397 (0.407)	0.330	-0.601 (0.525)	0.252
Intercept	0.550 (1.448)	0.704	0.259 (1.931)	0.84	-1.285 (1.457)	0.378	-0.738 (1.626)	0.650

Table 4. Negative binomial regression analysis: The impact of complexity and salience on notice-andcomment participation; N = 65

association participation is positively impacted by the salience of a given issue (See Table 4, columns 2 and 3). Intuitively this makes sense. Trade associations represent the collective interests of individual businesses. Depending on how an issue is framed, active lobbying can many times negatively impact a business that desires to maintain good relations with its customers. Associations provide a method for businesses to elude public scrutiny while attempting to influence governmental decision-making. Therefore, in some ways, the representative function of trade associations is weakened by the ability of individual businesses to more easily monitor agency actions in the new online environment. Nonetheless, this function may also be bolstered when an issue has a high level of public salience, due to the venue's increased accessibility to everyday citizens (i.e., consumers).

As indicated in the third column of Table 4, the media measure for issue salience shows that the coefficient is statistically significant, having a positive impact on the dependent variable (number of association comments). Again, using Clarify (King, et al., 2000), and holding all intervening variables at their means, I adjust the salience variable to one standard deviation above its mean. This predicts a count of 4.77 association comments, an increase of almost exactly one more comment from the expected value (3.75).

#### State Government Model

The findings for the state government model disclose evidence indicating that salience also positively impacts participation by state governmental agencies (See Table 4, column 4). In this case, the economic salience measure indicates that the relationship is positive. The impact of the dummy variable for the limited geographic scope of an issue is significant in the hypothesized direction (-). Also, as should be expected, the impact of the dummy variable for a nonsubstantive rule has a statistically significant negative impact on participation by state governmental agencies.<sup>21</sup>

#### Additional Findings and Directions for Future Research

At first glance, eRI seems to address some of the normative questions that have been proposed regarding the access that a diversity of interests may afford to bureaucratic decision-making. The work of McKay and Yackee (2007) finds that the outcomes of rules are largely determined by the collection of interests that dominate the quantity of comments on a particular rule, while there is no change when a relatively equal amount of "noise" is generated from both sides of conflict over a particular rule. However, other empirical evidence questions whether the quantity of comments on a rule has much of an effect (Furlong & Kerwin, 2005). To a large extent, the present case study bolsters the latter conclusion. As one interviewee at APHIS noted, "most of the time we have an idea of what is going to draw a lot of interest. Anything on high-stakes commodities, such as citrus fruits or cattle imports, we will expect an increase of comments."

Rulemakers are "not worth their salt" unless they know who will be affected and from whom to expect responses when the rule is being developed. While the evidence presented above indicates that citizens will become more engaged as the salience of an issue increases, the interviews yielded little support for the idea that this participation will yield substantive differences in the outcome of a proposed rule. Thus, as Furlong argues, access is a "necessary condition for influence to occur, [but] it is not a sufficient condition" (Furlong, 2007, p. 163). From this perspective, while *Regulations.gov* may have eased accessibility for everyday citizens to rulemaking, it has not produced a practicable difference in the level of direct accountability to citizen concerns. Accordingly, the interviews yield considerable evidence that regulators find citizen comments have increased, but tend to be of generally low value.

However, the interviews also suggest that researchers should make a distinction between direct and representative accountability to citizens' concerns when evaluating the impact that increased participation at the notice-and-comment stage has on agency actions. The regulatory analysts at APHIS noted that a lot of their internal resources are devoted to going through comments to make sure they are posted and reviewed. One analyst recalled a rule with a specific timeframe for issuance, which generated a substantial number of comments. This required analysts to train a "very big ad hoc team" within their biotech division's line staff on how to process comments. Additionally, while a sizeable quantity of low-quality citizen comments may not have an impact on the decision leading to a rule being finalized, a relative increase in comments from a given sector may rouse an extensive effort at outreach and education during implementation. According to one interviewee, "the decision doesn't change, but everything surrounding it-specifically outreach-is heightened." In other words, citizens' concerns are being formally addressed, or attended to, through information and outreach programs that are outside the purview of the regulatory decision at hand.

The quality of the information exchanged between affected stakeholders and agencies will probably be the largest determinant in the outcome of policy (i.e., rules) (Reenock & Gerber, 2008). Coglianese (2007) finds that information "plays a particularly vital role because the development of regulation calls for making fine-grained, technical judgments about how to control the behavior of the private sector organizations and the design of major industrial organizations" (p. 201). As executive administrations have imposed increasingly stringent standards on agencies to perform cost-benefit analyses before the issuance of rules (Durant & Resh, 2010), the information agencies need to perform these analyses is often "held only by the very businesses they seek to regulate" (Coglianese, 2007, p. 187).

Conversely, while selective information sharing might be maintained by an industry that shares the same interests, many times the inherent competition of an industry will advantage an agency in extracting information that helps them formulate regulations. Trade associations are often formed to overcome the collective action problems that intra-industry competition causes (Olson, 1965). The trade association can reward or sanction individual businesses for the amount and quality of information they share with a regulatory agency (Coglianese, Zeckhauser, & Parson, 2004). At the same time, the representation and agency-monitoring incentives that trade associations traditionally provided businesses could be threatened by the introduction of eRI. With the migration to a centralized, online platform, individual businesses can monitor agency activities on their own and provide valuable information that may have been suppressed by trade association leadership at the informal stage of rulemaking, thereby increasing the influence that individual business participation may have over the rule and the information advantage that the agency can have over the justification for a regulation.

The interviewees stressed that, when there is a large amount of comments emanating from the business community, they will take these quite seriously. When a number of individual businesses provide information that enhances the quality of the regulation, the agency will often incorporate these changes. Also, when the information provided through informal contacts at the formulation stage is incomplete or simply counter to the statutory purpose of the regulation, some agencies have been found to take care to look for comments that formally repeat these assertions at the notice-and-comment stage (Coglianese, 2007). The regulatory analysts at APHIS indicated that they will strategically coordinate outreach efforts immediately preceding the proposal of a rule, if they seek specific information. For instance, one analyst told me of a rule currently being considered in which the agency sought cost estimates for the labeling and packing of nursery stock in a quarantined area:

We assume that it's going to take about 3-cents per tag and that you could apply 15-to-20 tags per minute, but we're actually delaying the implementation date of that particular provision because we want to hear back from the small folks. We specifically asked for comments from smaller guys to ask if that estimate was accurate. Like, 'Hey, is this actually going to cost you 3 cents? Because if will cost you 30 cents, we want to know!'

APHIS employs a listserv and social networking tools like Twitter and Facebook to notify potential stakeholders of proposals and specific information they are seeking. This complements the unidimensional purpose of E-rulemaking as an "acceptance" technology. Online social networking mechanisms provide the technology necessary to reach smaller, less represented populations. Future research should take care to gauge the extent to which (or whether) agencies employ similar outreach strategies during the proposal stage of rulemaking and their relative success with different types of stakeholders.

The extent to which eRI, as a tool, has yielded increased efforts at outreach should be placed in the context of the political leadership who can determine the allocation of these resources. The interviewed analysts at APHIS noted that the

Obama administration, and specifically Secretary Tom Vilsack, "emphatically" endorses outreach to a diversity of stakeholders before, during, and after a rule's notice-and-comment stage. The Bush administration, in contrast, tended to treat industry interests more monolithically: "[the Bush administration was] more comfortable with the idea that they were talking with the dominant industry groups and that those groups represented the industry as a whole, regardless of whether there were dissenting views in the industry. And, the Department of Agriculture was the Department for Agriculture. Whereas, Secretary Vilsack has made it very clear that all of our stakeholders are everyone in America who eats food, not just the agricultural industry." Outreach, in and of itself, did not produce any changed impression within the agency of the diversity within the industries they regulated. Instead, it is the discretion allowed to regulators by their political leadership that has the most meaningful impact on whether intraindustry diversity is made the most of. Therefore, practitioners and researchers alike should qualify their expectations for "revolutionary" change to rulemaking through technology by recognizing the politics that are inherent to the process.

Finally, supportive of McKay and Yackee's (2007) supposition that interest groups "may further their policy goals by observing more closely the actions of opposing groups during agency policymaking", the interviewees noted that one thing that eRI has especially helped to foster is a dialogue between commenters. Although this tactic is not often employed, it has "vastly increased", according to one analyst. The interviewees noted how they enjoy the interaction that has arisen during some notice-and-comment periods. Before *Regulations.gov*, the ability for commenters to read each other's comments was nonexistent.

The interviewees identified one particular organization that quotes prior comments and provides clarification on its position through such dialogue. The interviewees were careful to note that these dialogues are not yet frequent enough to be a regularly employed tactic by commenters. But, they recognize its increased frequency and expect these trends to continue. These dialogues provide considerable insight to the agency when finalizing a rule. As one analyst recalled, "I had a rulemaking last summer where people actually wrote in specifically to rebut other commenters, which made it delightfully easy to write the final rule. The high profile rules that I worked on in 2009, all of them had inter-comment dialogue." Thus, content analysis that evaluates the timing, quality, frequency, and extent of this dialogical tactic would be a welcomed insight into the qualitative change that has incurred with the transition to Regulations.gov. Also, content analysis software that is being developed to detect and sort duplicate comments should be careful to incorporate the possibility of dialogue. The interviewees indicated that they were especially wary of betastage software currently being developed for these purposes, specifically because of the possibility of losing commentary quoting previous comments at length to serve valid points.

In sum, eRI has had some effects on (1) the level of participation by types of actors and their tactics at the notice-and-comment stage of rulemaking and (2) the level of influence they can potentially have over the final rule. However, it is the manner in which agencies use the tool, rather than the tool itself, that largely determine these effects. Agencies can limit the ability for public interest organizations to occupy substantial agency resources in reviewing comments generated by grassroots mobilization efforts. The centralized platform can be leveraged to prevent mass email submissions at the comment stage, successfully disabling rule-commenting as a grassroots mobilization technique for public interest groups. Trade associations may be less able to constrain the quality of information they provide at the formulation stage because the online platform provides individual businesses with the opportunity to monitor agency actions more easily, thus also possibly limiting the incentives they offer members in issue areas where there are higher levels of intra-industry competition. However, it is the extent to which regulators choose to exploit intra-industry diversity that matters most. Also, eRI provides an opportunity for commenters to engage in dialogue that allows for counteractive tactics by interests to be employed and, at the same time, better informs the regulating agency. Finally, while citizen participation has increased, the quality of the information provided by those comments has generally been of low quality. Each of these changes has a complementary effect on how agencies expend their resources before, during, and after the rulemaking stage, especially as it concerns outreach. However, the political leadership of the agency will ultimately influence the degree to which these resources are shifted.

#### CONCLUSION

This study integrated two stages of analysis using two distinctly different analytical techniques to provide a comprehensive look at the modernized rulemaking process at a regulatory agency. The purpose of the study was to gain more comprehensive insight into the pressure system that is present at one particular venue in the policymaking process, and whether the onset of technological changes to this venue has had a tangible impact on the dynamics of the pressure system. This study confirms some evidence revealed in previous studies of the rulemaking process, while revealing new insight as to how policy conditions the actions of political actors. Through the qualitative analysis, we find that there are real changes in the method of access available to affected stakeholders and interest groups. Some of these changes limit the effectiveness of traditional lobbying techniques to the bureaucracy. We also confirm the longstanding proposition that information is currency in the development of regulatory policy. Regulators care far more for the technical and substantive quality of the information they are provided, rather than the quantity. And, the information they use is only as much as the discretion they are permitted by their political leadership.

Through the quantitative analysis of the study, we find that the dimensions of complexity and salience continue to have determinant effects on the level of participation by different stakeholder groups and individuals. The study also shows the nuanced differences between actors within the broad categories of interest representation, traditionally used in the interest group literature. The title of this article summarizes both the purpose and the findings of the present study. We discover not only who participates, but we also are enlightened as to why different actors participate in "sweet-talking the fourth branch" in an age of e-governance (S. W. Yackee, 2006). The quote that began this chapter, however, must be qualified in respect to the present case study: The real world has a knack for arranging things in a way that makes our experience with technology, more than technology determines our experience with the world

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# **ENDNOTES**

- <sup>1</sup> Meanwhile, the findings regarding influence are mixed (Golden, 1998; J. W. Yackee & Yackee, 2006).
- Available at http://www.regulations.gov/ search/Regs/home.html#aboutProgram. Last accessed March 10, 2010.
- <sup>3</sup> Ibid.
- <sup>4</sup> An exception could be made to Marrissa Golden's (1998) work, and more recently the extensive work of Stuart Shulman (2003, 2004, 2009).
- <sup>5</sup> As cited in Furlong (2007)
- <sup>6</sup> Available at http://www.aphis.usda.gov/ about\_aphis/history.shtml. Last Accessed, June 8, 2010.
- <sup>7</sup> See the gray areas of the table.
- <sup>8</sup> Table 2 is a slight amendment to Table 3 in Gormley (1986).
- <sup>9</sup> Each of the interviews lasted approximately two hours. Please contact the author for a list of the questions as they were asked to the respondents. The conversations were recorded and anonymity was assured.

- Available at http://www.regulations.gov/search/Regs/home.
   html#documentDetail?R=
   09000064800f77f3. Last accessed November 16, 2010.
- <sup>11</sup> See Paarlberg (2001) for a thorough overview of the emerging importance and politics of GMOs.
- <sup>12</sup> Available at http://www.regulations.gov/ search/Regs/home.html#docketDetail?R=A PHIS-2006-0041. Last accessed November 16, 2010.
- <sup>13</sup> Available at http://www.regulations.gov/ search/Regs/home.html#docketDetail?R=A PHIS-2006-0041. Last accessed November 16, 2010.
- Available at http://www.regulations.gov/ search/Regs/home.html#documentDetail?R
   =09000064801f3f0d. Last accessed November 16, 2010.
- <sup>15</sup> Furlong calls this the "appeals court" technique, in which a formal record is established through the notice-and-comment stage to use as evidence in litigation that the agency was aware of any harm the rule would have caused the litigants (Furlong, 2007). This also provides evidence of what Klyza and Sousa (2008) call "venue shifting", which extends to interest groups "sue-and-settle" strategy of continuing conflict from the rulemaking stage to the courts (Teles, 2007) (As cited in Kerwin et al (2010)).

<sup>16</sup> For the present study, I chose an agency with regulatory responsibility over two distinctly different policy domains: (1) Plant Protection and Quarantine (PPQ) and (2) Veterinary Services (VS). I assume (as confirmed through the interviews) that each of the policy domains serve different clientele and, therefore, invite involvement from a completely different collection of interest groups and individuals.

- <sup>17</sup> There were also 12 comments that were anonymously provided to the agency. These comments were dropped from the analysis.
- <sup>18</sup> For an explanation of the GFI formula, see http://www.readabilityformulas.com/ gunning-fog-readability-formula.php. Last accessed November 16, 2010.
- <sup>19</sup> Please contact the author for a list of key terms, booleans, and information on rule IDs and time frames.
- <sup>20</sup> The chi-square statistic indicates that the overall fit of the model is good. A test for heteroscedasticity-corrected coefficients

revealed that a model with robust standard errors revealed similar results. Therefore, I present the original model for the analysis. The same tests are done for each of the remaining models and reveal like results. Therefore, I leave this language out of the remaining analysis.

<sup>21</sup> Due to the lack of comments submitted by local government agencies (10), it is (like the public interest model) not surprising that the model indicated a poor overall fit, and consequently was dropped from the analysis.

# Chapter 17 Introducing Psychological Factors into E-Participation Research

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#### ABSTRACT

This chapter looks at e-petitioning as a successful application of e-participation from a psychological perspective. It notes that e-participation should not be viewed uncritically, as digital technologies cannot remedy all (political) problems: indeed, they can strengthen old ones and create new ones. Following a brief reviews of socio-economic and application-acceptance models of e-participation, a small selection of psychological approaches factors are presented that could be applied to this context. It is argued that it is useful and important to understand the psychological factors that influence the decisions made by individuals about whether to participate in the political system by initiating, or simply signing, a petition, or choose to remain mere passive observers, no matter how well informed. These insights can both help practitioners designing an e-participation system, and designing new research projects.

#### INTRODUCTION

Since its beginning, the Internet has been a tool for democratic communication – simply by being able to establish communication between any two people on this earth (Schuler, 2010). Society has

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used the Internet for positive social change (Surman & Reilly, 2003), and Internet use has long been associated with increased civic involvement (Kraut et al., 2002) and greater engagement in social-capital-building activities (Kavanaugh & Patterson, 2001). It has been used since the 1980s to promote political participation and activism, and is now a favorite tool to promote political knowledge, interest, discussion and voting (Mossberger, 2007). In 2006, Time Magazine<sup>1</sup> nominated "You" as the person of the year, where "you" meant all the users of the Internet who were driving the Internet development by producing "user-generated content", including a variety of online participatory activities such as chatting, file sharing, emailing, blogging, socializing, creating Wikis; this implies that a different framework is necessary for understanding citizens and their interactions with government and public administration.

Digital technologies alone will not remedy all political or democratic problems: indeed, they can amplify old ones, and they can create new ones. Carman (2010) and Ostling (2010) point out that in the context of e-participation, the new digital tools may not only lead to inflated expectations, but to disillusionment and at the end of the day, not solve the problems imminent in democracy. Public administrations and governments will need to adopt a different attitude in their understanding and attitude towards the citizens and learn to deal with their complexity, rather than expect citizens to work with the official spaces provided for them (Ferro & Molinari, 2010). Democratic communication requires not only suitable participation or deliberation venues Schuler (2010) but individuals will also need to have the skills, the needs or desire to contribute and participate.

There is no doubt that the Internet has had a big impact on the way people communicate, and behave – the Internet is a social place, and many people fulfill their most important social needs such as affiliation, support, or affirmation over the Internet. Whilst tools and technology lead, support and sustain users' interactions, it is the users' social behavior, needs and personality that 'makes' interaction and participation happen. This chapter outlines the potential of using psychological perspectives in understanding the factors behind civic engagement: that is, why individuals would chose to participate in a political process, rather than on the many available online alternatives. It focuses on the field of online petitions or e-petitions in particular, as they are one area of e-participation with a relatively long history as part of established political processes, rather than pilot projects. By examining a number of psychological factors the aim is to encourage a deeper understanding of citizens' behaviors and intentions whether to engage or not with an e-participation system. Psychological dimensions such as personality, needs and self-efficacy can offer both practitioners and academics an understanding of patterns of uptake, the use of e-petitioning systems, as well as the factors that influence the citizens' decision-making process as to simply access information or act as a participating signatory.

# THE CONTEXT

# **E-Participation**

In the context of the broader use of the Internet, it may seem confusing that 'e-participation' is not used to refer to participation in online communities in general. Rather, e-participation refers to one aspect in particular: the use of ICT (Information and Communication Technology) by governments, elected officials, media, political parties and interest groups, civil society organizations, international governmental organizations, citizens and voters within any of the political processes at local, regional, national and global communities (Clift, 2003). In this narrower sense, e-participation is "the use of information and communication technologies to broaden and deepen political participation by enabling citizens to connect with one another and with their elected representatives" (Macintosh, 2004) or as aiming to include citizens in policy and decision-making, thus broadening and deepening their political participation (Creighton, 2005; O'Donnell et al., 2007). For Coleman and Blumler (2009), the Internet is the space for democratic citizenship, a space for interaction between citizens and elected representatives which has a meaningful impact on political outcomes. These definitions place ICT tools at the centre for facilitating two-way communication between governments and citizens in all democratic decision-making processes (both bottom-up and top-down) such as electronic public administration, service delivery, policymaking and decision-making, security and archive maintenance.

Another motivation for the development of eparticipation is that for some years now, people's interest and knowledge in politics and social issues has been felt to be in decline across the Western world<sup>2</sup> (Turnsek, 2007); public sharing of information, the creation of community and commitment to debate are also falling (Putnam, 2000). The media is blamed for providing entertainment rather than information,: infotainment that does not lead to participation; acting as a strong source for identity construction, the media leads individuals to be consumers rather than citizens (Hardt, 2004). Traditional authorities and institutions (family, schools, religious institutions, neighborhoods, civic organizations) as well as the state misunderstand their citizens and their changing needs (Codrington & Grant-Marshall, 2005; Coleman & Blumler, 2009) and are therefore losing power over the development of identity, particularly in terms of citizenship. As individuals' identities become more fragmented and less connected to a single group or community, participation is shifting to a more personalized or issue-based form of politics or societal interest. (Putnam, 2000)

At the level of the European Union, there has been strong political support for e-participation initiatives from the European Parliament and Council of Ministers following ongoing concerns about the democratic deficit, issues of public trust and active citizenship. In 2005, the European Parliament asked the European Commission to launch an e-participation Preparatory Action which underlines the importance of this field. The i2010 eGovernment Action Plan (European Commission, 2006) which aims to make public services more efficient and more modern, at the same time aims "to target the needs of the general population more precisely"<sup>3</sup>. The European Commission thus encourages the Member States to experiment with innovative e-participation schemes which increase participation in democratic processes in terms of tools and addressing citizens' demands. The e-participation initiatives aim to support deliberation (the process of communication where people discuss their concerns with the intent of arriving at a decision) and engagement (Charalabidis, Koussouris, & Kipenis, 2009); these initiatives are justified with arguments such as raising the public's interest for politics and strengthening European citizenship (Panopoulou, Tambouris, & Tarabanis, 2009).

E-participation is perceived as leading to shared decisions or activities and possibly to increased societal solidarity – it is a social activity, therefore meaningful only when it is linked to multiple levels of society and able to lead to social change (Schuler, 2010). However, e-participation processes are complex, and this complexity results from the large number of different participation areas, the range and variety of stakeholders, levels of engagement, and stages in policy making (Fraser et al., 2006). Although the move to modernize transactional public services (e-government) has indeed been successful in many administrations, there are still problems with communication between politicians, government authorities and citizens so that participation in the majority of civic platforms and networks has not yet been as successful as anticipated (Schuler, 2009).

Top-down and bottom-up e-participation certainly challenges the traditional understanding of political participation, but as Ostling (2010) notes, ICT cannot change the existing political practices, rather, it reflects and amplifies existing political trends – in the short term at least, the new digital technologies may have not led to any change in representative democracy, and e-participation may neither have led to success nor to any impacts on decision-making processes (Davies 2009). The initiatives are often expensive, and politicians may not be interested in relinquishing control and power. A number of issues have still not been addressed, for example, accountability, in particular when the minority has an impact on policy, or when outcomes lead to outputs that are not advantageous to the public interest but the participants themselves are not formally responsible for the policy outcome (Ekelin, 2007).

# **E-Petitions**

Despite the above, one e-participation tool that has had success at least in some countries (such as the UK and Germany) is e-petitioning. In the area of political participation, petitioning is a simple yet effective tool which provides a first step for citizens who want to interact with and influence democratically-elected assemblies, from their Local Council to the European Parliament. Internet-based e-petition systems have already been introduced in some EU member states both at national and, increasingly, local levels in order to make it easier to gather signatures from a wider audience.

The traditional representative approaches in local democracy are now increasingly supplemented with (if not substituted by) forms of direct democracy, participation and/or deliberation, such as e-petitions. As a device to transform established representative democracies into more participatory democracies (Ferro & Molinari, 2010), epetitioning has been the source for great advances in the effort to confront the perceived decline in the public's trust of political institutions and the associated symptoms of disengagement (Lindner & Riehm, 2008).

In response, political scientists have conceptualized petitioning as a mechanism for making democratic inputs, sitting somewhere between pure representative democracy and direct democracy (which bypasses representatives altogether), in a distinct category of advocacy democracy (Carman, 2010), where the participation activities are directed towards influencing the decisions of elected representatives, thereby mitigating the risks of weakening existing democratic institutions. On the other hand, since the policy impact is indirect as it is mediated by representatives, perceived fairness and openness in the process can be as important as the actual outcome.

It is necessary to remember that the participants in the petitioning process and e-democracy have been shown to be generally male, educated and older than the general population (Lindner & Riehm, 2008; Carman, 2010). This is despite the potential of these systems to widen the pool of participants in the decision making process; conversely, it is unrealistic to assume that universal participation could be achieved or indeed is desirable – there appears to be a realistic ceiling of around 30% active participation (Maier-Rabler & Reimer, 2009; Ferro & Molinari, 2010). Even more realistically, achieving the participation of 1% of citizens in any one e-petition would generally be considered a stunning success.

Cruickshank and Smith (2009) provide a brief overview of the state of play with e-petitions. The main actors in the petitioning process can be placed into two groups:

- Internal actors: (a) Officers of the assembly who are responsible for the operation of the system (forum moderators are generally considered to belonging to a subcategory of officer). (b) Elected Representatives (and their support staff), who respond to petitions individually and collectively.
- External actors: (a) Petitioners; that is, the person (or group) who initiates a petition after identifying an issue and follows its progress through submission to final feedback and outcome. (b) Citizens: that is, those persons who are entitled to sign the petition. Eligibility rules may vary here, and this raises important questions of identity and authentication which are beyond the scope of this article. However, Citizens can be broadly divided between those who

are participating in a petition by signing it (referred to here as the Signatory), and the non-participating majority.

## **Psychology of Online Participation**

Digital technologies and social media have changed the way people communicate, participate and behave – understanding the characteristics of online behavior and communication therefore means understanding the individuals who choose to use the possibilities offered by the Internet.

In terms of identity and expression, Internet use can be positive and offer opportunities for participation and citizen involvement. From the early days of the mass use of the world wide web, it has been felt that the online context can be used as a learning or testing environment, and that the Internet may actually encourage participation in real life (Putnam, 2000; Horrigan, 2001). It has also been argued that participation in online activities can confer social and psychological benefits (Shaw & Gant, 2002)-social companionship is an important motive for Internet use (Whitty, 2008). Online activities provide support, information and opportunities for connection to the marginalized and socially isolated groups (Hillier & Harrison, 2007), people with social anxiety or medical problems. It is important to note that the use of Internet is not to be seen or used as an alternative to social activities, but as an additional social tool (e.g. Facebook) or channel for voicing opinions, conducting research and sharing information. Indeed, the potential for negative psychological and social consequences (e.g. 'Internet addiction') are reduced as society becomes more accustomed to using the Internet (Kraut et al., 2002), and almost a decade later, these negative consequences should have been minimized or at least reduced.

Attracting and getting people to return to a website or participation initiative is a major challenge – users may not find the sites, and the majority of visitors do not return, unless they become intensely involved (Blanchard & Markus, 2004). People will slowly start making more contributions as their confidence grows and they feel empowered and appreciated. Factors which have an impact here are for example visibility of contributions, recognition, reputation and celebrating status (Preece & Shneiderman, 2009).

"Lurking" is a common activity on the Internet - it is a way of describing those who participants that do not actively and visibly contribute, yet can make up over 90% of the online group (Nonnecke & Preece, 2000; Nielsen, 2006). It is often assumed that they are free-riders (Smith and Kollock, 1999), but recognizing and understanding the factors for lurking has important implications for public deliberation and democracy-public forums suffer from social-psychological influences such as majority opinion (Noelle-Neumann, 1984; Sunstein, 2006). The term "lurker" describes someone who does not actively participate, observes what is going on, but remains silent. Lurking is possible because of the technology used: it provides access without being visible or having to publicly participate. Lurking is a strategic and idiosyncratic activity driven by the individual's needs and background, which means that different people have different reasons for lurking as well as different lurking strategies (Nonnecke & Preece, 2003). Considering the variety of reasons such as personality, motivations, psychological needs and the users' experiences may lead to finding ways of improving the online community experiences for citizens whether they are users or lurkers as well as lead to increased interest and participation.

If encouraging participation is one of the biggest challenges for any online community, then it is necessary to understand why and how citizens choose to participate or not (Bishop, 2007). For e-participation initiatives, which aim to reach, engage and mobilize citizens, it may be helpful to move the focus onto the invisible participants, the so-called 'lurkers' who may not seem to be actively contributing, but nonetheless are valuable for e-participation. For these reasons, it is useful and important to understand the psychological factors influencing the behaviors and decisions made by citizens about whether to participate in the political system, which can range from signing a petition to creating an online initiative, but can also mean remaining a passive, yet well informed observer.

## MAIN FOCUS OF THE CHAPTER

There are a number of established approaches to understanding take up of e-participation systems and evaluating e-participation initiatives, with those based on socio-economic and technical factors tending to predominate (Wimmer & Holler, 2003; Aichholzer & Westholm, 2009). This section starts with a brief overview these before turning to examine the value that person-oriented psychological insights can add.

# Non-Psychological Approaches in E-Participation

## TAM: Technology Acceptance Model and Related Approaches

Starting very much at the technical end of the socio-technical spectrum, the Technology Acceptance Model (TAM) and its derivatives are widely used models of software acceptance which goes beyond a basic measurement of usability and accessibility. They derive from behavioral psychology and identify a number of factors that are claimed to predict decisions to use software or hardware, in particular:

- **Perceived usefulness:** the degree to which a person believes that using a particular system would enhance his or her task performance.
- **Perceived ease-of-use:** the degree to which a person believes that using a particular system would be free from effort.

Successor models, such as the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh, Morris, & Davis, 2003) introduce a range of other factors, incorporating concepts from other approaches such as Social influence and Facilitating conditions including gender, age, experience and voluntariness of use on the basis that other studies have shown that they too influence the other factors.

Although these approaches are informed by psychology, acceptance modeling is based on predicting or understanding the success of the application: the focus is not on the individual, or the socio-political context for that matter. And even when the evaluators look for a bigger picture, the focus has tended to be on acceptance by organizations rather than citizens, as has been noted by Rose and Sandford (2007) as well as Lindner and Riehm (2008).

## Socio-Economic Factors

Income or socio-economic status is one of the most commonly used factors for explaining use of the Internet (Martin & Robinson, 2007). The dimensions usually preferred for understanding the use of IT and participation are often income (Fuchs, 2009), gender, with men having more access and women using ICT less, although the difference is declining (Selwyn, 2006), age, where increased age is associated with lower levels of access and less use, education, with lower levels of education corresponding to divides related to access and range of use (Roe & Broos, 2005), family structure, where school-age children seem to increase contact with ICTs (Kennedy, Wellman, & Klement, 2003), race (Kvasny, 2005) and geographical location (Warren, 2007).

Other similar frameworks have been drawn up. For instance, in order to be more inclusive, to involve and engage citizens in government and business, Schuler (2009) proposes six core values for the development of online community networks, platforms or spaces: conviviality and culture; education, strong (or participatory) democracy, health and human services, economic equity, opportunity, sustainability, information and communication. Similarly, (Ferro & Molinari, 2010) suggest that 5 main enabling conditions must be fulfilled in order to increase citizen participation: access, awareness, skills, motivation and representation (of the citizen).

Another view of participation comes from economic views of impact, mainly related to the business models of traditional companies, where the new forms of content provision are decentralized, allowing more participants and experimentation with new business models based on the Internet. User content, previously seen as competition by publishers and broadcasters is now actively encouraged. The economic impact can be understood in different ways (Li, 2007):

- 1. Providing social computing devices is increasingly profitable, they can contribute to growth and employment;
- 2. Social computing applications are a threat to telecommunication and content industries;
- 3. Social computing applications are being used as a tool for productivity in both the private and the public sector;
- 4. Social computing applications are able to make customers smarter due to the horizontal exchange of information with other users.

Social impacts are those which describe the ways users produce, distribute, access and re-use information, knowledge and entertainment, thus (potentially) leading to increased user autonomy, participation and diversity. Further effects are seen in terms of informed user and consumer decisions, strengthening existing social ties, making new social contacts (Boyd & Ellison, 2007); this understanding could equally be applied to online interactions with government.

## Psychological Approaches to Online Participation

Overall, although a socio-economic or demographic approach provides a starting point to understanding the uptake of e-participation, understanding why people choose to participate and contribute using online tools needs a focus on the individual differences and the role of personal influences on the Internet (Sunstein, 2006). This means recognizing that people use online tools and information to discover alternatives, for help with taking decisions, to participate with others and in society, engaging in behaviors that can and do lead to the development and cultivation of their identity (Turkle, 2007) in the context of society and citizenship.

It is insufficient to analyze an individual's decision to participate in terms of socio-economic factors since it loses the individual exception. The role of the Internet in influencing levels and styles of political participation has often been investigated, however, it is not yet clear why the Internet is perceived as a medium that can increase participation. Putting the emphasis on the Internet and technology rather than citizens indicates a tendency for technological determinism. TAM and derived approaches are too simplistic, as they still focus on the application rather than the variety of citizens using it. Different types of participants are motivated to do particular tasks and will therefore have different needs and require different skills and tools.

Approaches based on psychology offer ways of looking at citizens at a more individual, personal level, including aspects of their personality, their motivations, emotions and needs, and can provide valuable insights into the reasons why individuals choose to participate in an online political process. This will lead to an alternative approach to seeing why citizens choose to participate (or not), as well as learn about the advantages and disadvantages of e-participation methods, help improve existing participation processes or reveal alternative and valuable ways of participating. Three such approaches are reviewed in the rest of this section.

#### Self-Efficacy

The perspectives offered by a social-cognitive approach provide a stimulus to address personal and societal aspects, placing the user (and citizen) at the centre of the process. Social Cognitive Theory (SCT) broadens the analysis offered by traditional acceptance models with their history in behaviorist psychology and focus on perceived outcomes by giving prominence to the concept of self-efficacy – defined as beliefs about one's ability to perform a specific behavior. Unlike efficacy, which is the power to produce an effect (in essence, competence), self-efficacy is the belief (whether or not accurate) that one has the power to produce that effect.

People who regard themselves as highly efficacious act, think, and feel differently from those who perceive themselves as inefficacious. They produce their own future, rather than simply foretell it. (Bandura, 1986)

Expectations of positive outcomes of behavior are meaningless if we doubt our capacity to successfully execute the behavior at all; conversely, previous bad experiences can create a self-reinforcing cycle of expectations of negative outcomes. This could potentially provide a model for understanding why citizens would choose to sign a petition, or just remain as an observer. There are two aspects to this.

The concept of Computer Self-Efficacy (CSE) is used to make individuals' judgment of their capability to perform a computer-based task central to the analysis (Compeau & Higgins, 1995). CSE has been used to help understand the decision of an individual to use an application, generally in an institutional or business context rather than within a democratic system. However, is seems clear that CSE is an appropriate conceptual tool which can help illuminate the decision-making process around the use of e-participation systems. Further, while CSE is typically applied to 'professional' users, which in the e-participation context might equate to the 'internal actors' (council/assembly officers, elected representatives and their staff), it seems plausible and useful to apply it to the decisions of the external actors (petitioners and citizens) to submit and to sign or discuss a petition online respectively.

There are clear parallels to be drawn between Computer Self Efficacy and Political Self Efficacy (PSE) (Caprara, Vecchione, Capanna, & Mebane, 2009). Where CSE is concerned with self-perception of the ability to produce an intended result with computer-based systems, PSE is concerned with citizens' perceptions of their own ability to bring about intended results in dealing with politics and public authorities. PSE addresses the estimations that citizens make about their own capacities to effect a result through their actions (internal PSE), and also about their attitudes to the political system as a whole (external PSE). Therefore, while CSE effectively models the role of the confidence of citizens in engaging with an e-petitioning system, PSE models the role of both their confidence in their own ability to deal with public authorities, and their views on the extent to which public authorities can be influenced, affected or changed by individual or group actions.

PSE is important because critical thinking, communication and persuasion skills are important for successful political behavior and performance (Silvester & Dykes, 2007) and political deliberation, i.e. the ability to discuss, understand and make decisions also have powerful political effects on (internal) political efficacy (Morrell, 2005). Self-efficacy beliefs mediate the influence of personality traits and they channel the dispositions into the service of political activities: "whichever their habits, dispositions and preferences, it is unlikely that people get involved in politics unless they feel capable to do what political participation commonly requires" (p. 49). Improvements in the online environment which improve social support and the increased use of social media can help in healthcare, energy management, economic development, education (Ben Shneiderman & Plaisant, 2009) and political participation.

The benefits of the SCT approach are twofold. Firstly, it allows judgment to be made of the role of efficacy-related factors in the decision to use an eparticipation system to participate in a democratic process. Secondly, it highlights citizens' perceptions of the system. Fundamentally, it is also of interest to assess the interaction between CSE and PSE, and whether a citizen's confidence in their ability to utilize interactive systems is paralleled by a belief in their ability to successfully interact with the political system as a whole.

In other words, this framework centers on the person, not the application, and allows exploration of environmental (social / cultural / institutional / educational) and personal factors (experience) behind the decision to either engage or not. The analysis therefore focuses on the participant's (or potential participant's) subjective perspective as well as upon the objective context.

#### Needs

Needs are evolved desires and can be found within every person. Psychological needs are particular qualities of experience that all people require to thrive (Sheldon, Elliot, Kim, & Kasser, 2001). Needs are universal, that is, they are inborn, but they do not specify the behaviors needed to satisfy them, allowing for a range of behaviors in order to achieve the satisfaction of needs. When a person behaves successfully within a particular life domain, there will be a reward which is satisfying and which a person will try to achieve again and again. This also means that they will be motivated to further develop those skills so as to achieve the sense of satisfaction (e.g. within a social environment, within a certain vocational area).

Maslow's (1954) theory of personality looks at 5 fundamental needs: physical health, security,

self-esteem, love/belongingness and self-actualization. Maslow suggests that people need to feel that the biological requirements of their physical organism are satisfied, have a sense of order and predictability within their lives as well as a sense of personal worthiness and importance, a sense of love and affection with important others and that they are moving toward an ideal world or version of themselves. Similar alternatives are Derber's (1979) "American Dream" theory, i.e. that happiness results when individuals acquire popularity, influence, money and luxuries or Epstein's (1990) cognitive-experiential self-theory that specifies the four needs that all individuals must satisfy: self-esteem, relatedness, pleasure (vs. pain) and self-concept consistency (sense of stability to the individual).

Some researchers (Kim 2000; Krasnova et al. 2008) use Maslow's (1943) hierarchical needs theory to understand online behavior. They suggest that users do not participate because their basic (physiological or security) needs are not being met. Although Maslow's (1954) and similar theories are popular, they have received little research support. The models are controversial and have been criticized on the grounds that even individuals who are not fulfilling their needs still want to participate and be sociable with others and exhibited altruistic behaviors. Bishop (2007) believes that it is not necessary for users to feel safe or physiologically satisfied in order to interact with a system and suggests that users must have an initial desire (to post or act) that is consistent with their goals and plans and have the skills to do so, whilst Nielsen (2006) and Norman (2003) suggest that users are goal-driven rather than needs-driven.

#### **Prosocial Behavior**

Participation requires members, relationships between them, individuals who will devote time and effort to the community and can include generating messages, reading them and responding to them, organizing discussion, offering other online activities. But why do individuals choose to commit time and effort to supporting an online community of people they do not know, how do they determine whether it is worthwhile when they can't see other potential helpers and find it difficult to judge whether their help would be useful? Tools and technology are in part able to sustain online interaction, but it is the social and prosocial behaviors that lead to interaction and make participation happen.

Prosocial behavior is voluntary, intentional behavior that results in benefits for another person or cause (Eisenberg & Miller, 1987), and can include donating money, computer power, software and documentation, time and attention, information and emotional support. Help in the electronic context may be due to empathy, community interest, generalized reciprocity, a personal return of learning and/or reputation enhancement. In the electronic context, prosocial behavior is observable by many, it is socially reinforced and has visible peer recognition.

There are a number of reasons why individuals choose to participate online, for example because the individuals believe that their participation is important for the group's performance or because they like the group. Whilst individuals will participate for altruistic or conformist reasons, they will also do so to boost their feelings of self-esteem (McLureWasko & Faraj, 2000), selfenhancement (Allport, 1937) and self-efficacy. The benefits which result from being involved in an online group can also be more personal, such as visibility and self-promotion or gaining status as an expert (Hiltz and Turoff 1993). The degree to which participants value the benefits obtained from their group will also predict the amount of community building work (Butler, Sproull, Kiesler, & Kraut, 2002).

Ridings et al. (2006) analyze lurkers on the basis of social exchange theory (Thibaut & Kelley 1959; Blau 1964), where users view interpersonal interactions from a subjective cost-benefit perspective. They compare the intangible costs, such as the cost of helping others, with the expected future intangible benefits of these, such as receiving respect. This is sometimes seen in those communities which rely on knowledge such as Wikipedia and the open source community (Tapscott & Williams 2006). Social exchange theory is not to be confused with economic exchange (Blau, 1964) which is governed by rules and regulations – in social exchange, there are no explicit rules or agreements, and individuals' actions are motivated by social behavior that is expected from others Ridings et al. (2006).

## **User Personality**

In the online environment, individuals have learned to connect more with others, using different means (tools) and at varying levels of involvement. The popularity of the Internet as a social tool is popular due to four characteristics in particular:

- 1. **Controllability:** people have more time to think about what they would like to say than in face-to-face communication, so they can control if, when, how, how much and what to say (McKenna & Bargh, 2000);
- 2. **Status:** the Internet conveys fewer social status cues (Sara Kiesler, Siegel, & McGuire, 1984);
- 3. **Reciprocity:** people feel that they and their communication partners are more responsive on the Internet;
- 4. **Anonymity:** the Internet allows people to overcome their shyness.

The Internet is thus an environment that can encourage people to express themselves more freely than they would in a regular interaction (Amichai-Hamburger, 2005). It facilitates selfexpression, particularly because of the anonymity of the interactions, and the individual is free of the typical constraints found with communication. Given the inherently social nature of all online activities, personality traits will determine user behavior and choice on the Internet. Differences in personality are able to explain the choice and motivation of some individuals to participate by signing a petition or participating in an Internet community. Personality dispositions have been found to be responsible for political choice (Block & Block, 2006), and may account for variations in political behavior. Individuality and personality are important to political predispositions in two important ways: firstly, personality is an important variable when studying political behavior, including partisanship, ideology, presidential approval, internal efficacy, trust, participation in local politics, political discussion, development and expression of opinion and political knowledge; secondly, no individual facet of personality influences all aspects of political behavior.

So far, thousands of personality attributes have been identified, but there has been some consolidation with the development of personality frameworks, for example of the Big Five Model of personality (Costa & McCrae, 1992). The Big Five framework is able to assess personality and behavior in both the "real world" as well as the "virtual world" contexts by providing a broad, replicable framework based on the traits extroversion, agreeableness, conscientiousness, emotional stability, and openness to experience:

- **Neuroticism:** a person's tendency to experience psychological distress, where high levels are associated with a sensitivity to threat;
- **Extraversion:** a person's tendency to be sociable and able to experience positive emotions;
- **Openness to experience:** the person's willingness to consider alternative approaches, be intellectually curious, and enjoy artistic experiences;
- Agreeableness: an aspect of interpersonal behavior, it reflects the tendency to be trusting, sympathetic and cooperative;

• **Conscientiousness:** this tendency reflects the degree to which an individual is organized, scrupulous and diligent.

Butt and Phillips (2008) suggest that the trait "openness to experience" is the personality factor most likely to be associated with trying out new methods of communication, such as those found in the online environment. Critical thinking, which is related to openness (Clifford, Boufal, & Kurtz, 2004) seems to encourage political participation by enhancing personal efficacy and personal control (Guyton, 1988). Other aspects such as assertiveness, persuasiveness and dominance are also part of the extraversion trait and crucial to successful political life and participation (Vecchione & Caprara, 2009). The Big Five model is useful as an initial exploration for the relevance of personality in many areas of behavior, including online and political behavior and provides a context for those analyses where links between political behavior and personality attributes have already been found (Ozer & Reise, 1994).

The Internet seems to be able to support an individual's need for expression of individuality but at the same time also able to satisfy the need to belong and relate to others or a group. On the Internet, individuals can easily find groups and social roles that suit them, achieve self-expression and self-actualization (Amichai-Hamburger, 2005). The positive online experience can also be used for the offline world: the Internet is thus a communication channel which can help people express themselves, but at the same time, is a testing ground for skills which users then apply to the offline world - for example, gaining a sense of effective self-efficacy from an online interaction that is then used in the offline environment. The Internet can therefore be an environment to be used for acquiring and learning social skills and confidence before they are then used in an offline environment, an issue which would be particularly important for a citizen who perhaps is not used to taking part in political processes.

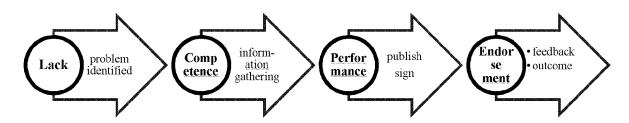


Figure 1. Overview of stages in a petition, following Santucci (2007)

## The Psychology of Using E-petitions

Using e-petitions as an example of e-participation, this section examines the transition from lurker to active participant through the simple step of signing a petition and in the context of the approaches that we have discussed. We will consider e-participation in general and e-petitions specifically in terms of creating and then signing a petition.

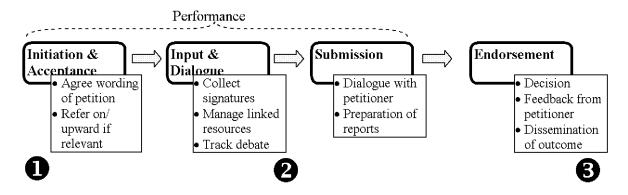
#### Creating a Petition

We start with an overview of the petitioning process. Santucci (2007) provides a useful generalization of the stages which a petitioner goes through, illustrated in Figure 1. The petitioner starts in a stage referred to as a 'Lack' - an awareness on the part of the petitioner that there is an issue that needs to be addressed, and then moves onto the stage referred to as 'Competence' (where an understanding of the issue and how to address it is gained). Both of these stages largely happen away from any formal petitioning system, whether electronic or paper. It is only at the final 'Performance' and 'Endorsement' stages that the petitioning system becomes relevant to the wider petitioning process.

These last two stages – where wider citizen participation is expected – are shown in further detail in Figure 2, where the performance stage is shown further broken down into three sub-stages of *initiation* & acceptance, *input* & *dialogue*, and *submission*.

Even in this brief outline, the challenges faced by potential petitioners are clear: moving between the Lack and Competence stages to actually submitting a petition and following it through, requires a real commitment, and an understanding of the best approaches to support them would seem essential in broadening the range of people who raise petitions in the first place.

Figure 2. Details of the performance and endorsement stages of the petition cycle



This chapter restricts itself to discussion of the simple action of signing a petition – one of the simplest forms of e-participation possible. It is at ② – quite far in to the petitioning cycle – that potential signatories become aware of a petition. It is here that they have the opportunity to sign it, and may decide to do so, or having become aware of the petition, they may still choose to remain as a 'lurker' in the political process, as we now discuss.

### THE CHALLENGE OF THE LURKER: DECIDING TO SIGN

"Lurking" may be central to help understanding participation in online environments. Few users intend to lurk from the onset – instead, the majority of lurkers may become lurkers as a result from previous (presumably negative) interactions with the community (Preece et al., 2004): there are obvious parallels to be drawn with the ideas behind self-efficacy being influenced by past experiences.

In the context of e-participation at least, lurking should not be seen as a "negative" form of behavior: it still implies a positive choice to pay attention to what is happening in a community (Preece, 2000). Indeed, one challenge that e-participation set itself is to move even beyond those who are lurkers – and to focus on the "ignorers", competing against rival streams in the attention economy (e.g. sport or entertainment), and bringing citizens back to focus and take an interest in the democratic decision making process. From this perspective, for a citizen to become a lurker is the first, and possibly hardest, step in engagement.

Findings from research into online communities in general may be of use here. Preece and Shneiderman (2009) provide one model that differentiates between levels of participation, and suggest the "Reader-to-leader Framework" as a way of understanding and motivating participation. Starting from "all users", these move to become readers (i.e. lurkers), then contributors, collaborators and finally leaders. Participation in each of the phases is characterized by certain behaviors and motivations which need to change, be encouraged and supported. Each transition includes a number of steps and behaviors; the aim is to increase the user's confidence and activity, knowing that at the same time many will also terminate their participation for a variety of reasons. Reading is a typical first step toward more active participation (Preece et al., 2004) - for some people, overcoming their resistance to novelty may require strong encouragement, while others tend to embrace new experiences - the insights offered by models of user personality have clear applications here.

The most understandable motivation for people to read content (or follow a political debate) is that they can personally benefit from doing so. The next step, getting return visitors is more difficult, as is making a contribution and collaborating. Those factors that motivate readers are also important to those who then decide to contribute and gain the confidence to do so: for example, a sense of belonging, a welcoming environment, safety, support for newcomers, and contacts to ask questions. Other issues such as the ease for making small contributions, visibility of contributions made, recognition of quality and quantity of contributions, rewards, etc. can also be important (Preece & Shneiderman, 2009).

The transition of users between the different participation stages is little understood, and even less understood or discussed are the reasons why participants terminate or why they give up collaborating and return to individual contributions or merely reading. As has been shown earlier, factors affecting self-efficacy, variables such as the community size, personality of participants, topic, social interactions, such as conflicts and other, external factors such as worldwide news events (Preece, 2009) can undermine (or support) participation. A "successful" petitioning action could be experienced in terms of satisfying psychological needs, so the role of delay and other elements in affecting satisfaction, even if engagement remains limited to the act of signing a petition. Political, social, and economic changes may also be tied to effective participation in social media. Changing user (consumer and citizen) values with respect to societal and political issues as well as changing attitudes, for example, concerning privacy, also have an impact on participation. This area may be best understood by looking at individuals' decision processes and the psychological factors impacting them in the context of the well known models discussed earlier.

## DISCUSSION AND RECOMMENDATIONS

To recap: the Internet can be and is used for political activism and democratic decision-making processes, such as online campaigns or mobilizing offline political action. Online participation and activism can, like any form of online participation, be conducted at any time, from any place; it allows for ideas and tactics different from traditional media, such as explaining the motives of their actions and coming away from a traditional or stereotypical portrayal. The goals of e-participation are highly idealized though, and these goals lead to material consequences such as the introduction of technology into public organizations, restructuring resources and responsibilities as well as new forms of behavior (increased / online interaction). This chapter has used e-petitioning an example, as it is arguably the most mature area of e-participation, in that it is well-established and has a history of making useful inputs to political processes in some countries.

Merely providing an environment that can support collaboration will not automatically lead to participation and collaboration (Kreijns, Kirschner, & Jochems, 2003). It is important to remember that the Internet is about communication, and not content or functionality as such. For all the enthusiasm for the online environment, "the reality is that many websites fail to retain participants, tagging initiatives go quiet, and online communities become ghost towns. Many government agencies are reluctant to even try social participation..."(p.15, Preece & Shneiderman, 2009). A reason for this is that the online participant is often seen as an information gatherer rather than as a social being, so tools are often designed at increasing the provision of information, usability of websites and the links between information. Social networking sites, however, show clearly that users will want to communicate in the right circumstances. Supporting communication and participation ("de-lurking" - moving from the information gatherer role) means considering user personality, motivation, and emotions.

Political behavior requires the capabilities to organize and integrate information, convince and persuade people, capabilities related to the personality traits openness and extraversion, and feelings of self-efficacy – in using the technology, but also in relation to the political process. People will participate regardless of their political orientation – but they must believe that they can exert some influence over the political world and to avoid increasing further cynicism and disengagement, and that belief has to be backed up by positive experience.

It is therefore important to move away from the technologically deterministic perspective that still often underlies e-participation projects and to look at the reasons how and why people communicate on the Internet – their perception of the Internet, personality, motivations and emotions may moderate the use of participation in the online environment. Tools and technology are in part able to sustain online interaction, but is social behavior that "makes" interaction and participation. It is the participants who choose the tools to be used, recruit people, ensure communication and promote the behavior desirable in the community. Psychological approaches have already been used to understand mass political participation and political behavior e.g. Vecchione and Caprara (2009), they can therefore supplement the approaches taken so far to understand e-participation behavior. Online activities provide support, information and opportunities for connection to the marginalized and socially isolated groups (Hillier & Harrison, 2007) and adopting a psychological perspective can help to attract and getting people to return to a website or participation initiative. Attracting and getting people to return to a website or participation initiative is a major challenge – users may not find the sites, and the majority of visitors do not return, unless they become intensely involved.

In terms of Preece and Shneiderman's (2009) Reader-to-Leader Framework, this would mean understanding the users so as to achieve the next stages, beginning with making a contribution (an individual act such as signing a petition) that adds to a larger communal effort, even when there is no intention of collaborating, communicating or forming a relationship. People will slowly start making more contributions as their confidence grows and they feel empowered and appreciated. Factors which have an impact here are for example visibility of contributions, recognition, reputation and celebrating status.

Individual participants do benefit from prosocial behavior such as contributions and collaboration, and are often grateful for it - the users will also contribute more if they believe that their contributions are important to the group's performance, their contributions are identifiable and if they like the group they are working with (Ling et al., 2005). In their recent book The Internet and Democratic Citzenship, Coleman and Blumler (2009) assess the democratic potential of the Internet and reassess their manifesto Realising Democracy Online (Blumler & Coleman, 2001) by looking at the relationship between governments and the governed and suggest that strategies need to be developed which "shrink and transcend political distance" (p. 166). They believe that for people to be involved requires three things:

- Democratic institutions and processes need to be sensitized to the way people "tell their stories" and "express their fears and desires";
- Democracy needs to "remain in touch" with those governed (i.e. communication needs to go beyond voting);
- Public interaction must lead to change or results, an "authentic relationship" needs speaking and being heard;

Coleman and Blumler therefore suggest the development of a "civic commons" that is inclusive, expansive and meaningful for e-participation to achieve the results and aims that have been set. We argue that the development of a civic commons or new e-participation policies would be helped by psychological approaches as they can provide a profound understanding of the citizen and his or her role in society at the personal, individual level, away from the stereotypes inherent in sociological categories.

Taken together, this means that further studies are required to look at personality, individual needs and motivational factors that are relevant in the specific context of online civic participation and also to understand how individuals decide to move between being ignorer, lurker and participant, even at the simple level of signing an online petition.

## CONCLUSION

This chapter started by noting that e-petitions are one of the most mature and proven e-participation tools, in that it is well-established and has a history of making useful inputs to political processes, at least in some countries. This article has focused on approaches to understanding the motivators and de-motivators to e-participation, as these are perceived by individual 'external' actors, the citizens and petition signatories.

Although e-participation may help increase the satisfaction citizens have with governments

and politics, e-participation should not be viewed uncritically. Digital technologies cannot remedy all (political) problems: indeed, they can amplify old ones and create new ones, and in the context of e-participation, the new digital tools used may not only lead to inflated expectations, but to disillusionment and at the end of the day, not solve the problems imminent in democracy.

It has been argued that it is insufficient to analyze an individual's decision to participate in terms of socio-economic and technical factors since it loses the individual exception. TAM and derived approaches are too simplistic, since they still centre on the application. Rather, we feel that different types of participants are motivated to do particular tasks and will therefore have different needs and thus require different skills and tools. Insights provided by psychology and socio-cognitive theory into users' personality and motivations can provide valuable insights into the different reasons why individuals choose to participate in an online political process, in this case using e-petitions.

Practitioners implementing e-participation and e-petition systems can use these insights to create an awareness of need for supporting for instance self-efficacy and prosocial behavior, and taking into account the different personality types of individual citizens. This could involve offline activity to support and encourage engagement by new users, or multiple routes to carry out the same action. Practitioner need to remember that it is generally the minority of their users are visible participants – and the 'lurking' majority should be supported, and taken into account when decisions about the site are made, and routes to provide an easy transition to active participation provided.

More broadly it is clear that further studies are required to support a move away from sociological stereotypes (no matter how well justified) to look instead at which personality, online behavior and motivational factors relevant to the specific context of online civic participation, and help understand how individuals decide to move between ignorer, 'lurker' and participant, even at the simple level of signing an online petition.

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### **KEY TERMS AND DEFINITIONS**

**E-Participation:** The use of information and communication technologies to broaden and deepen political participation by enabling citizens to connect with one another and with their elected representatives. It can also be seen as aiming to include citizens in policy and decision-making, thus broadening and deepening their political participation.

**E-Petition:** Online equivalent of a petition; in the context of this article3, it refers to petitions which are have at least a semi-official role in the political process.

**Lurking:** A way of describing those who participants that do not actively and visibly contribute Lurking is a strategic and idiosyncratic activity driven by the individual's needs and background, which means that different people have different reasons for lurking as well as different lurking strategies. A term that should not be used negatively.

**Needs:** Particular qualities of experience that all people require to thrive. Needs are universal and inborn, but they do not specify the behaviors needed to satisfy them.

**Personality:** Differences in personality are able to explain the choice and motivation of some individuals to participate by signing a petition or participating in an Internet community. Popularly measured using the Big Five framework which provides a framework based on the traits of extroversion, agreeableness, conscientiousness, emotional stability, and openness to experience.

**Prosocial Behavior:** Intentional behavior that results in benefits for another person or cause. In the electronic context, prosocial behavior is observable by many, it is socially reinforced and has visible peer recognition.

**Self-Efficacy:** The belief whether or not accurate that one has the power to produce an effect; this contrasts with efficacy, which is the

objective power to produce an effect (in essence, competence).

## **ENDNOTES**

- <sup>1</sup> http://www.time.com/time/magazine/article/0,9171,1569514,00.html, retrieved 22 November 2010
- <sup>2</sup> I.e. USA, Canada, Japan and the EEA countries
- <sup>3</sup> http://europa.eu/legislation\_summaries/ information\_society/l24226j\_en.htm, retrieved 22 November 2010

## Chapter 18 The Internet and Representative Democracy: A Doomed Marriage? Lessons Learned from the Downing Street E-Petition Website and the Case of the 2007 Road-Tax Petition

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#### ABSTRACT

The chapter questions a conventional line of interpretation of the political relevance of the Internet in democratic countries: if on the one hand new communication media such as the Internet represent a positive element in the fight against the hubris of power; on the other hand, the same technologies can serve the agenda of those who want to influence popular consent in support of questionable politics and, hence, hinder the representative system in its very essence. To elucidate this point, the chapter focuses on the Road Tax online-petition that in the early months of 2007 attracted almost 2 million signatures on the UK Government e-Petition website. My argument here is that when simple and historical democratic means such as petitions are coupled with the new generation of Web technologies, the outcome might be unexpected. The road-tax petition will serve us as a blueprint of: the possibilities embedded in the use of new technologies within representative democratic systems, the challenges they pose for democracy, and their unforeseen consequences.

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#### INTRODUCTION

The web offers people the chance to express their views at very little cost and, as this week has shown, generate a national debate at the click of a mouse. - Tony Blair, 18 Feb. 2007

Started off as a closed niche for computer geeks in the Seventies, during the last two decades, the Internet has evolved into a complex communication network used nowadays by more than a billion people worldwide as the backbone of a broad range of activities (from communicating with peers to working; from shopping to learning; from leisure to politics). In 2001, the sociologist Manuel Castells argued that, for its persistent expansion, for its scope and reach in our society, the Internet is for the contemporary world what the printing press was for the Modern era: it is a driver of socio-economical and political changes. Paying homage to Marshall McLuhan's work, Castells (2001) maintains that at the turn of the twenty-first century we have left what the Canadian media theorist defined the Gutenberg Galaxy and "entered a new world of communication: the Internet Galaxy." (p. 3). Along these lines are many other scholars, politicians, and practitioners who, especially in democratic countries, consider the new communication galaxy a powerful instrument in the hands of citizens that can significantly alter the traditional role citizens play in established democratic systems.

In this chapter I challenge this line of argument. I do not deny that the Internet plays an important socio-economical and political role in advanced technological democratic societies, but, playing devil's advocate and taking as an example Britain, a country that in the last two decades has witnessed a constant growth in the use of Information Technologies, I argue that the effects of new communication media on the quality of Britain's democratic system have recently produced some ambiguous results that deserve further analysis. Such ambiguity in fact needs to be taken into account when promoting or assessing changes in governments' use of new technologies applied to the democratic process. In this new era of communicative abundance, the question permanently seeking for answer is whether or not the Internet is good for democracy, or, in its more negative form, whether or not the Internet is in fact the end of it?

To elucidate my argument and clarify the quality of the ambivalent relationship between democracy and new communication media, the first part of the chapter looks at the meaning of the term democracy in the twenty-first century. The remaining part instead analyses a recent experiment of the British government with an Internet-based petitioning tool used to improve the quality of the relationship between the government and its citizens: the Road-tax petition, that is the case-study at the core of this chapter, was published in November 2006 in the UK Government newly launched electronic-Petition website and collected almost 2 million signatures. The pressure generated from that petition in the early months of 2007 played an important role in the Government's decision (one year later) to postpone sine die its plans for a new road tax. Focusing on that particular petition, in this chapter, I sustain that in general to increase citizens' political involvement in the complex mechanism of a representative system, that is to allow citizens to continuously scrutinize the use (and abuse) of power, assess their representatives' work, and openly question the policies they advocate, the use of the Internet in government's matters can guarantee a certain degree of transparency and accountability, which are indeed fundamental elements of a healthy democratic system. However, when simple and historical political tools such as petitions are coupled with the new generation of Web technologies, those referred in the literature as Web  $2.0^1$ , the outcome can often result in an unexpected strong challenge of the political status quo. Therefore, I argue in this chapter, one important lesson to be drawn from experiments such as the British government e-petition website

is that the use of new communication technology in policies' matters, although often it's a laudable endeavour, should always be accompanied by a clear and thorough understanding of the possible implications and impact of that technology onto the existing political process, otherwise the unintended result spawn by the new technology can have serious negative consequences for the complex mechanism that sustain that process.

#### **DEMOCRACY IN THE 21<sup>ST</sup> CENTURY**

The Greek word dêmokratia indicates a form of government where the people (dêmos) rule (kratos), or, to say it with the often cited words used by Abraham Lincoln at Gettysburg, it refers to the "government of the people, by the people, and for the people" (Lincoln, 1992, p. 405). Their popularity notwithstanding, definitions like these miss somehow the point, for they strip bare the concept of democracy to a minimum common denominator (the rule of the people) whose simplicity can never suffice for the inherent complexity that the term carries with it. The term democracy in fact indicates a much more complex form of government with a history that stretches over many centuries and many different models (Held 1996; Keane 2009). One of its most widely adopted forms today is based on governing through elected representatives. The representative model of democracy became popular in the eighteenth century, when the amalgamation of the old Greek ideal of assembly-based democracy and that of representation seemed the best possible solution for governing large nation-states. "Extend the suffrage, and democracy would be enabled by representation" wrote Hanna Pitkin (2004), "since, as John Selden put it, 'the room will not hold all', the people would rule themselves vicariously, through their representatives" (p. 338).

In a typical representative democratic system, traditionally, the fundamental role of citizens is to take part in regular elections to choose representatives who then govern on their behalf. That simple act of casting a vote, of choosing one candidate (or one party) over others, ideally, has two main advantages: it guarantees to the people a chance to evaluate periodically their political leadership and at the same time it gives the members of that political leadership enough time to earn their voters' trust for a new mandate. In this context, ideally, citizens should rarely be called into action between elections. The system however is far from perfect and too often winning a majority of seats in Parliament for the government of the leading party or coalition equals to a pass to do whatever it likes (at least until the next election day). For this reason, among others, in his The Life and Death of Democracy (2009), the historian John Keane has recently argued that since 1945 that ideal-typical model of democratic government by representation has seen a radical "sea change" that has deeply altered its essence. The political geography of representative democracy has mutated from its original static hierarchical and territorially-bound configuration; to one where the exercise of power (willingly or not) is more open to questioning and scrutiny, not only from within the state but also from across borders (Keane, 2009, p 695). Representative democratic systems are progressively morphing into monitory democracies. With the term monitory democracy, Keane (2009) refers to a complex and intricate structure of government that incorporates all elements of the representative model and adds to them "many different kinds of extra-parliamentary, power-scrutinising mechanisms" (p. 688). Keane calls these mechanisms monitory bodies and they work at national and international level. They in fact can be found "within the domestic fields of government and civil society, as well as in crossborder settings", the same realms of influence "once controlled by empires, states and business organizations" (p. 689).

We now live in an age where "Democracy", Keane writes (2009), "is coming to mean more than elections, although nothing less" (p. 689).

Since 1945, we have witnessed "the birth of nearly one hundred new types of power-scrutinising institutions unknown to previous democrats" (p. 689). Among these are activist courts, electoral commissions and consumer protection agencies, blogs, online forums, and online petitions. These mechanisms of power scrutiny - working from within and across borders - serve the purpose to make democracy and democrats more accountable and more democratic, especially in complex societies where an always increasing number of people has lost belief in politicians and politics. In twenty-first century democracies, the monitorial bodies indicated by Keane are crucial elements of the politics of everyday life: they work as antidotes against the hubris of power that constantly threaten the functioning of representative systems. Through these mechanisms, those who represent are constantly reminded that their power is not immune from control, it is never absolute; and they must account for their actions throughout their entire time in office and not only before an election. In a monitory system that works well "the grip of the majority-rule principle - the worship of numbers - associated with representative democracy" is broken (Keane, 2009, p. 689), whilst those that are too often relegated in the back-seats of the political stage, whose rights are only remembered before election day, have the chance, through these new mechanisms, to voice out their concern clearly and loudly, not only at election day, but throughout the whole cycle between elections.

In this new political geography of democracy, a crucial role within its complex mechanisms of power-scrutiny is played by new communication media such as the Internet. "The political dynamics and overall 'feel' of monitory democracies are very different from during the era of representative democracy", writes Keane (2009). "Politics in the age of monitory democracy has a definite 'viral' quality about it." (p. 744). This is a crucial quality of politics on the Web. Within this setting, that quality allows actions of resistance to power to follow unconventional paths and make their outcomes rather unpredictable. The facility with which in the Internet Galaxy citizens acting individually or organised in groups simply using mobile phones, relying on basic Web-tools (such as old style bulletin boards or news groups); or by using more advanced Web 2.0 applications (blogs, wikis, or video-sharing Web-platforms) can monitor, embarrass, and humble those in power reveals the growing political importance of new communication media in advanced technological societies that are governed according to the rule of democracy.

The political potential of the new communication galaxy ushered in by the Internet can crucially affect the balance of power relationships in existing representative systems. From a narrow point of view, new communication media seem to play merely a supporting role in the oiled dynamics of representative democracy: they enhance dramatically the possibility for the members of the public to establish a direct and privileged relationship with their political representatives; and vice versa, the chance for politicians to keep in contact easily and inexpensively with each member of their constituency (Coleman, 1999; Kingham, 2003). From a wider and different perspective instead, one that sees politics as an ongoing process of active (albeit discontinue) participation rather than simply a mere act of delegation, the marriage between politics and new media offers the citizens of the Twenty-first century the chance to alter the periodicity of the major cycle that rules over who gets what, when, and how in a representative system. Using media like the Internet, citizens have in their hands an effective tool to easily break that cycle into a stream of continuous public acts of assessment, that potentially are as politically significant as an election can be. But contrary to this latter, the formers are never predictable and can be quite sudden.

On the one hand, it can be argued, new communication media represent a positive element in the fight against the hubris of power; on the other hand, the same technologies can serve the agenda of those who want to influence popular consent in support of questionable politics and, hence, hinder the representative system in its very essence, representation. The 2006 Road Tax electronic Petition, discussed below, is a case in point of the negative impact new technologies can have on a representative system. Between the end of 2006 and the early months of 2007, the Road Tax petition managed to collect almost 2 million signatures. The populist pressure generated from its impressive success, amplified by mainstream media interest in the issue, was crucial in the Government's decision (one year later) to postpone sine die its plans for a new road tax scheme that many, instead, considered an unpopular but necessary path to safeguard the environment.

### PETITIONS.PM.GOV.UK

At the end of the 90s, the Labour Party Government led by Prime Minister Tony Blair believed that investing in IT was crucial for the future of Britain (Avery et al., 2007, p. 14). Since then, as reported by the UK Office for National Statistics (Skentelbery, 2008), the country has witnessed a constant growth in the use of Information Technology both at individual and governmental level. Households' ownership of computers rose from 33 percent in 1998 to 70 percent in 2007. While both the figures of mobile phones and digital receivers have nearly tripled since 1998: mobiles from 27% to 78%, digital receivers from 28% to 77%. The Internet has witnessed an analogous growth and it is now an essential feature in the everyday activities of Britons. From 1998 to 2007, the percentage of households with an Internet connection rose from 10 per cent to 61 per cent (Skentelbery, 2008, p. 167) - four out five of these users access the Web via broadband connection (Dutton & Helsper, 2007, p. 8). A recent Survey sponsored by the British Government (Get Safe Online, 2008) has found out that over a third

(33%) of the UK users spends between one and two hours a day in online activities. 15% instead declared their daily time online ranges from three to four hours. More than half (58%) is confident enough to use the Web to manage their finances (i.e.: Internet banking, or pay bills) and 64% percent shop online regularly. 40% of Britons use social networking site like myspace.org and Facebook.com. That figure is about 70% when we consider only the younger age group (18-24) British people also explore the Internet Galaxy in search of information. While non-users follow faithfully traditional media such as TV and Radio, Internet users turn "almost uniquely" to the Internet as their favoured source of information<sup>2</sup>. These figures picture Britain as an advanced technological country where people's attitude is generally positive about digital technologies. The Internet especially is considered as an important element of the daily routine. The majority of British users (75%) think that it makes life easier, and that it is an efficient means to gain information (88%) (Dutton & Helsper, 2007, p. 27).

The British government - both at local and national level - nowadays routinely employs Information Technology in a wide range of bureaucratic and policing issues. Digital technology and computer networks provide authorities with new tools and options to scrutinize citizens' behaviour (from a nation-wide CCTV network linked to Police's computers, to the national DNA database). At the same time, these technologies represent the foundations of a long-term project of transformation of the UK government into an effective and productive e-Government. e-Government is here understood as the use information technology in government's activities to store, transfer and elaborate data at a little cost and across many organisational units; it means building a new structure of governance that helps the UK government agencies provide a better, more sophisticated, fast and smooth, service delivery to citizens and businesses. The ultimate aim of this process is to create a new virtual seamless administrative environment through which the intricate, hidden and often incomprehensible chaotic net that for citizens once stood for governmental bureaucracy, becomes order and synonym of accessibility and trust. This new system is based on non-linear, non-exclusively hierarchical, highly interactive and always available service. Citizens can use the system whenever and from wherever according to their own schedule and needs.

As the former Prime Minister Tony Blair put it, we live in times in which for a government is no longer advisable to lean backward; but instead, the government should "push forward, faster and on all fronts: open up the system, break down its monoliths, put the parent and pupil and patient and law-abiding citizen at the centre of it. We have made great progress. Let us learn the lessons of it not so as to rest on present achievements but to take them to a new and higher level, in the future." (Quoted in Cabinet Office, 2005: 2).

In this context, cannot come as a surprise that, in November 2006, in collaboration with MySociety. org (a non-partisan, London-based organization), the UK government, under the leadership of Tony Blair, launched a new service in the form of a website (Petitions.pm.gov.uk) to allow citizens to create new or sign up for existing petitions addressed to the Prime Minister's Cabinet. It was a laudable but ill-conceived initiative that soon backfired and gave the government more troubles than benefits.

Petitions are not new in the United Kingdom. The right to petition the Monarch for redress of personal grievances dates back to the *Magna Carta* sealed by King John in 1215.<sup>3</sup> By the end of the 13<sup>th</sup> century, "much of the business of early parliaments was judicial rather than legislative [and] dealt with matters raised by individuals via petitions" (Lyon, 2003, p. 66). And in 1688 the Bill of Rights signed by King William III and Queen Mary II sanctioned that "it is the Right of the Subjects to petition the King, and all commitments and prosecutions for such petitioning are illegal" (William and Mary, 1688, Sess. 2, cap

2). Notwithstanding their long lasting tradition, conventional forms of petitioning are often time consuming and difficult to set up. In the age of the Internet and mobile phones, they are still bound to follow a complex (sometimes cumbersome) bureaucratic process. Consider the case of the petitions submitted to the UK House of Commons: the text must be "respectful, decorous and temperate"; before submitting it, the petitioner must contact the House Clerk "to ensure the petition is in an acceptable form". Only then, the petitioner can finally start collecting signatures. However, for the petition to be valid, "each signatory must include his or her address" (House of Commons, 2008, p. 2). To be successful, such kinds of petition - as any other traditional form of grass-root political campaign - must also rely on a certain degree of organization, a substantial financial basis to cover logistical costs and publicity (this latter, nowadays, might also involve costs for setting up a website to publicise the campaign) (Bimber, 2003, pp. 99-101). And many hours of volunteers' time dedicated to exhausting doorto-door canvassing, or spent standing in a public square collecting signatures.

On the other hand, setting an online petition on the UK government website, literally, takes no longer than five minutes of a petitioner's time, and even less to sign it. Moreover, the Government service opens up new opportunities for prospective petitioners to reach a wide audience with virtually no cost or other strings attached. Contrary to traditional petition, an online petition campaign does not need an organised army of committed volunteers. The whole process in fact can be comfortably organised from one's living room with just few clicks of the mouse, some links posted on online forums, and by sending out few emails to friends and acquaintances. Furthermore, as it happens in the case of the petitions hosted by the UK Cabinet website, the institutional location guarantees a wide degree of visibility (in terms of media attention and access to the site); hence, it

gives, potentially, access to a much wider audience, than any other normal online petition.

Since its launch the website Petitions.pm.gov. uk has proven very successful. In its first year it published more than 14 thousands petitions that gathered nearly six million signatures (e-Petitions Website, 2008). To make a comparison with traditional means of petitioning, according to official data released by the House of Commons (2008, p. 8), between 1989 and 2007 the yearly average number of petition received by the British Parliament was just 327, a number far below its online counterpart.

Prime Minister Tony Blair praised the success of the e-petition website as a sign of the good health of Britain's democracy (Blair, 2007 and 2007a). He also pointed out the positive impact the Internet has on the way in which the dialogue between representatives and citizens is organised. Others – and among these his successors, Gordon Brown and recently David Cameron – were less than impressed with the effects of the new service on government's business. The reasons of such discordant judgments are to be found in the attention attracted by one particular petition, commonly known as the Road Tax Petition.

## THE ROAD TAX PETITION

Started by Peter Roberts, an accountant manager of an English manufacturing company, the Road Tax was a direct challenge of the government's intention to tackle road congestion and reduce  $CO_2$  emissions. To achieve its goal, the scheme, similarly to the one successfully introduced by the Greater London Authority for some areas of the capital, aimed at reducing drastically the number of vehicles on British roads by introducing a nationwide pay-as-you-drive tax for all motorists. Robert's online petition, submitted through the Cabinet's website, asked the Prime Minister to scrap the new scheme on the grounds that it was inappropriate and entirely unfair to motorists. In fact, Roberts argued, a stealth congestion charge was already in use through taxation on fuel: "the more you travel, the more tax you pay." (10 Downing Street, 2007).

Furthermore, the new scheme had already raised concern over the risks it represented for citizens' privacy. Messages post on various Internet forums and some part of the press speculated that for the new scheme to be effective and ensure payments, the government was planning to equip each vehicle with electronic tracking devices. These concerns were echoed by Roberts in the text of his petition: "The idea of tracking every vehicle at all times is sinister and wrong". Therefore, Roberts asked the Prime Minister to "forget about road pricing and concentrate on improving our roads to reduce congestion." (10 Downing Street, 2007)

Until November 2006, the accountant manager had been interested in politics, but had never really been involved in any political activity, neither traditional, nor online. Notwithstanding this lack of experience, thanks to the Web it didn't take him long to step into action. After visiting the webpage of the Downing Street's petition service, Roberts realised that a petition could help him questioning the Government's policy (Roberts, 2008)<sup>4</sup>. It was a quick and small step into the wider political arena. Yet, the petition's success went beyond any of Roberts' expectations. It began with just a few e-mails sent to a handful of friends (29 emails in total) and some links posted on a number of websites that dealt with drivers' issues (Roberts, 2008). Roberts' intention was, in his own words (2008), "to start a viral email asking people to sign up the petition", hoping to raise around 35 thousand signatures before the petition's deadline in February. However, by the end of the first week, Roberts confirmed during our interview, the petition was already over 14 thousand signatures. Ten days into 2007, the number had gone up to 125 thousand (Williams, 2007), and by the end of January the petition had crossed the threshold of the half a million mark (Oliver, 2007). Eventually

by its deadline, February 20, 2007, the final tally had surpassed the 1.8 million signatures mark (e-Petitions Website, 2007). In fact, at a certain point the petition generated so much Web-traffic that it crashed the Prime Minister's website (BBC News, 2007).

#### THE ROAD TO RUIN

During its initial phases, despite the rising impressive number of signatures, the UK Cabinet attempted to minimize the significance of the petition. Douglas Alexander, in his capacity as Transport secretary in Blair's cabinet, declared to the BBC that the government intended to proceed in finding a satisfactory solution to road congestion even if that meant asking motorists to pay a road tax. Nevertheless, he reassured, we "will listen to people" (BBC News, 2007a) and rebutted as "falsehoods" some of the claims made by Roberts. Alexander promised "that there would be safeguards to protect motorists' privacy and that the system would not be used to catch drivers speeding" (Webster, 2007). By the petition's deadline, however, because of the pressure generated through the media, Prime Minister Blair could no longer avoid to address the issue publicly. Thus, to explain the government's position, Blair (2007) wrote an article published by The Observer and personally responded via email to each of the signatory of the petition, reassuring all of the interested parties that the proposed scheme was not about imposing "stealth taxes", and, most importantly, that the government had not yet made any final decision about it. In that article, Blair remarked that the e-petition and the debate that it had sparked were undoubtedly signs of the good health of British politics. It had brought the government closer to its citizens. During the last decade, the Internet has transformed politics, and Web-based forms of dissent, such as electronic petitions, the Prime Minister pointed out, are as important as any other form of traditional political

contestation. Thus, Blair continued, it would be unwise for politicians and surely unhealthy for democracy to ignore the views of such a large number of citizens and simply "try and sweep them under the carpet."

Notwithstanding Blair's words, the clamour surrounding the petition did not wither away. Its unparalleled success and its location (the government website), in the hands of the media and of the opposition in the Parliament quickly turned those electronic signatures into a national referendum, the unmistakable mark of the public's will and its hostility towards the new tax scheme.

The Telegraph, a conservative-leaning newspaper<sup>5</sup>, used the petition as the foundation of its active and pressing campaign against the government, The Road to ruin, which lasted for several months (Telegraph, 2007). By the end of 2007, was the then current Prime Minister Gordon Brown that at last decided – as the *Telegraph* put it – "to listen to his constituents" (Millward, 2007) and instruct his cabinet to ditch the scheme. The *Telegraph* (2007a) and other dailies emphasised the role played by the e-petition in Brown's decision (see for instance Mulholland, 2007). Subsequently, in March 2008, Ruth Kelly, the Transport Secretary at the time, surrendered to citizens' criticism and told the BBC that the government had finally decided to withdraw its proposal: "People legitimately raised concerns about privacy, fairness and how any scheme would be enforced. We don't have all the answers to those questions yet." Hence, she concluded, the government must put on hold the scheme until all those questions are answered. (BBC News, 2008)

Echoing Blair's words of praise, Peter Roberts said that the new service was an effective instrument to question the government's action and clearly a benefit for the quality of democracy in Britain, without it the government would have certainly gone ahead with its plan (Millward, 2007). Others, like Steve Richards, chief political columnist of the *Independent*, a left-leaning newspaper<sup>6</sup>, labelled the Transport Secretary's decision "a classic case of a necessary policy killed by cowardice" (Richards, 2008). Notwithstanding that many believe that new laws are much needed to safeguard the environment, the electronic *cry wolf* of a tiny minority of the population managed to send the government into a frenzy and decisively affect the rights of the silent majority who did not sign the petition, or express its view on the matter. In a country of sixty million people, the journalist pointed out, this is hardly a sign of the good health of democracy in Britain.

These two views represent the extreme sides of a complex issue: is the Web good or bad for democracy?

#### THE E-CHALLENGE TO DEMOCRACY

Without debating the merits or disadvantages of Roberts' views on the environment, what is interesting about his petition is that in a short period of time, with as little organizational effort as possible and no financial commitment, a citizen with no previous experience in either politics or petitioning managed to achieve something unthinkable for any traditional petitioner in the same conditions as Roberts: the petition attracted the attention of a considerable number of people and of the media, and generated enough public pressure to eventually force the Government to forego its plan for the proposed new tax scheme. Quite remarkably, as noted by Tony Blair himself (2007), Roberts succeeded in generating a national debate with just few clicks of a mouse.

Many cheered to that achievement. Others, however, did not share the same enthusiasm. According to a Government's source, who asked not to be named<sup>7</sup>, Tony Blair's successor at n. 10 Downing Street, Gordon Brown utterly despised the whole idea of the e-Petitions website which he inherited from Blair. Brown's contempt against the petitioning tool is to a certain extent quite understandable. For Brown, as for many elected representatives, tools like the e-petition website encompass some of the most dangerous challenges the Internet can pose to a representative system. A Web-tool that allows citizens to record their own views or cast a vote on important and complex issues in ways and speed that are unprecedented can potentially corrupt the whole idea of governing through representatives. It challenges the very essence of the system that produced it, and sometimes, ironically, it does that by acting from within that system itself – as it happened in the case of the Road Tax petition. In such instances, the act of governing through representatives is compromised by the emergence of a new system of government. At the core of this system is the will of the people and the decision-making process that sustains it is based on only two limited options of choices (yes or not) and very little space for debate. This new system masked as Web-enhanced representative democracy is far from what Keane labels monitory democracy, and in fact it can easily open the door to the worst form of plebiscitary democracy or, as Benjamin Barber (2004) would call it, "plebiscitary tyranny" (p. 25). That is a system that does not allow "informed and reflective decisions", or the constructive monitoring of power; but on the contrary the system is based on "snapshots of individuals opinions suitably aggregated" (Sunstein, 2007, p. 35). In this new kind of political setting populist charismatic leaders thrive while democracy dies.8

In the case of the Road Tax petition the authority of the British representative system was put in jeopardy since the start by the arguable choice of hosting the petition within the Cabinet's official website. With that move the government gave the new service a public seal of recognition that increased the political weight of the petitions submitted through the site (or at the least altered the perception of citizens and media towards those petitions.) The end-result was that the government found itself in a rather awkward position in the eye of the public and of the media. It was as though the government had publicly announced: let the people speak out loud and clear through this new service, their voices will count. Unsurprisingly, once the people spoke, the media and the opposition parties quite legitimately asked the Prime Minister and his Cabinet: why are you not listening?

### BEYOND THE CHALLENGE: LESSONS LEARNED

The UK press reported that at the height of the road tax controversy, one anonymous Cabinet minister, outraged by the negative effects that *Petition.gov. uk* had had on the Government, said: "Whoever came up with this idea must be a prat" (Burkeman, 2007). The minister was later be "rumoured, reasonably enough, to be Douglas Alexander, the then transport secretary" (Ibid.) Ironically, some years earlier, when he was Minister of Commerce, Alexander had a different opinion on the merits of new technologies applied to politics. During a keynote speech on the value of the marriage between democracy and new media, in 2001, Alexander stated:

In order to attract people to get involved in online consultations and discussions, it is vital that government and representatives demonstrate their commitment to listening to and learning from the contributions that are made and to respond to them in a timely and transparent way. (Quoted in Coleman and Coetze, 2001, p. 20)

The recent-elected coalition government that has replaced the Labour government of Gordon Brown at the helm of the country has placed the e-petition service under-review, effectively putting the service in freeze indefinitely. "With a new Government in place a review is taking place of online services, including e-petitions" states a message that appeared on the website in May 2010. The new government is "committed to improving the e-petitions process" but before putting the service back online, the government is "looking at ways of ensuring that it functions as part of a cohesive approach to public debate and transparent government."<sup>9</sup> In other words, the new government lead by a coalition formed by the Conservatories and Liberal Democrats has learned the lesson from the road tax petition and intends to think carefully on whether or not to follow on the path opened up by Tony Blair in 2006.

Douglas Alexander's shifting position and the new coalition government's decision to stop the e-petition service are indicators of the growing uneasiness politicians feel towards the impact new communication media may have on the complex mechanisms of the exercise of power that constitute the basis of their world. This is a fear that, although justified from a personal perspective (this is a new political environment that confronts politicians with new and unexpected challenges that can ultimately seriously hinder their careers); it is, however, a fear unjustified from the standpoint of the quality of democratic systems. There is more to gain than to lose from the use of new communication media in politics, however, the thorough understanding of the technology in use and of its impact on existing democratic mechanisms is a key factor in insuring the success of the marriage between technology and politics.

True, the excessive use of fashionable new tools in government business to reach out to the people, as demonstrated by the case of the Road Tax petition, can sometimes bring a representative system to a dangerous standstill and crucially hinder the quality of its very essence: ideally, the elected representative at the core of this system is never simply the echo chamber of his/her own constituency's will, but he/she must play a more important and proactive role of mediation between the will of the people and the need of the state. The successful exercise of such role can only be guaranteed by a fine balance between the independence of action of the representatives and the need for assessment of the electing constituencies. That, at least, would be the case in an ideal world where elected representatives never succumb to the hubris of power. Alas, the daily experience of the majority of citizens in representative democracies is quite different. Monitoring bodies and new communication media are not a destructive challenge; in fact they are crucial elements to keep that system in balance or, better, to improve its democratic quality. The Internet Galaxy provides a whole new range of tools and spaces that, on the one hand, enable citizens to monitor constantly those in power; on the other hand, they increase citizens' chances to influence directly the political dynamics that inform their every day life (Wilhelm, 2001; Coleman and Norris, 2005). Apart from Petition.gov.uk, the case of Britain provides us with some other good examples of this dual effect. Through the Internet citizens can access websites that feed them with crucial information to monitor what their representatives are constantly doing on their behalf. An example of this is Thevworkforvou.com a non-partisan website that provides data on the daily activities of the Members of Parliament - i.e. voting record, texts of speeches, expenses claims<sup>10</sup>. So if a citizen wants to know whether or not an MP has kept his or her campaign's promises, he or she can simply visit the website and type in the name of the MP and he or she will be given access to that MP's historical record. Consider for instance Gordon Brown and David Cameron (respectively the former and the current British Prime Minister). If we check their names through Theyworkforyou.org. *uk* we instantly gather a snapshot of where they stand in political matters debated in parliament. We can then easily compare their Parliament's records and see, for instance, that Cameron has "voted strongly for laws to stop climate change" whereas Brown "has never voted on laws to stop climate change".

On the other hand, blogs and free video-sharing services (such as *youtube.com*) provide instead access to independent media platforms that allow citizens to denounce wrongdoings, and openly question who gets what when and how without relying on the public service broadcasting to do that on their behalf. In this category, Guido Fawkes's blog is probably one of the most famous of such examples of monitorial bodies. The blog is run by Paul Staines, a self-described Libertarian and former Conservatory Party activist, who "campaigns against political sleaze and hypocrisy' and 'doesn't believe in impartiality nor pretend to" (Staines, 2004.) In the recent years the blog has become quite popular in Britain. Guido Fawkes is considered the most influential independent political blog in the country "devoured by politicians. lobby correspondents and anyone with an interest in the seamier workings of the political process" (Guardian.co.uk, 2008). Devoted to uncover "parliamentary plots, rumours and conspiracies"11, the blog has played some crucial role in uncovering stories regarding politicians misconduct that were often ignored or sidelined as not very relevant by mainstream media. In 2006 Staines was the first source to name Deputy Prime Minister John Prescott's lover when other media had instead refused to publicise the story of Prescott's extramarital affair (Barkham, 2006). And in 2008, Staines's 18-months long uncovering of a scandal related to undisclosed campaign donations forced Peter Hain, a long standing Member of the Labor Party to resign from his Cabinet post. Hain had hitherto served as Secretary of State for Work and Pensions and Secretary of State for Wales in both Blair's and Brown's cabinets. Mick Fealty (2008) from the pages of *The Telegraph* called Hain: "Blogging's first UK scalp". And giving credit to Guido Fawkes' work, Fealty went on writing that after the Hain's affair "the mainstream will be able to publicly recognise that the blogosphere is more than just a collection of 'human interest' stories. And not least, that it ain't fluffy and has real teeth that bite."

Moreover, it is important to remark here, if on the one hand the coalition government has put on hold some of the former government's Internet initiatives, on the other hand Cameron's new cabinet has embraced the Web as the perfect space to nurture transparency about the government and its activities. Data.gov.uk, a portal that hosts hundreds of datasets from across all area of government, is the best example of this new trend. Started under the labour government of Gordon Brown, at its official launch date, in January 2010, the portal hosted about 2500 dataset, in the autumn of the same year, only few months after the coalition Government had come into power, that number has risen over 4500. In order to increase transparency and open up to the public the intricate dynamics of governing, both local and national Government agencies have been requested to add information to the searchable database on a regular basis. The data comprises information about new policies, budgets, spendings, geographical locations, health related matters, road works and much more. Thanks to the data published on the website, software developers have been able to create many citizens-friendly applications and website sites such as Where Does My Money Go. Fix My Street, UK Dentist12. These web sites, run by non-governmental organizations, unlike the online petition website, provide a much more proactive and constructive experience to their users. They allow citizens access to an unprecedented degree of information on government's matters. And, more importantly, these websites provide citizens with effective and constructive means of dialogue with their elected representatives. They allow citizens to suggest solutions and work together with their representatives in matters that concern their every-day lives.

When it all started, at the end of 2006, Tony Blair and his staff were seeking to break new grounds for strengthening the Government's relationship with the public by providing citizens with new ways to engage directly with the Cabinet and vice versa (Winnet and Swinford, 2007). The e-petition website was indeed a precise effort towards that direction. Reportedly, the original idea behind Tony Blair's decision to equip the Government website with an e-petitioning tool was influenced by a meeting the Prime Minister had with Eric Schmidt, the chairman and chief executive of the Internet company Google Inc., in October 2006 (Winnet and Swinford, 2007). Interestingly, Schmidt is not only the number 3 in Google's power hierarchy, but he is also a man who believes that "the true political power of the Internet will be to hold politicians to account. Computers will be able to test politicians' statements for truthfulness" (Forbes, 2006). To a certain extent, that is exactly what happened with Peter Robert's Road Tax petition.

The marriage between the Internet and a representative system is only doomed if and when that fine balance (between the representative's independence and his/her electing constituencies' rights to assess his/her work) is significantly altered, as indeed happened in the case of the UK government's questionable choice of equipping its own website with an e-petition tool, clearly without properly understanding the long term consequences of that choice. In all other instances, instead, the facility with which political dissent is organised and cultivated through the Internet can only be an asset for democracy, one to protect and nurture. Forcing elected representatives to loosen their firm grip on power can transform a society ruled through representatives in a more democratic environment; one where monitoring closely those in power becomes an integral part of the political process.

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## **KEY TERMS AND DEFINITIONS**

**E-Democracy:** The use of internet and computer technology in matters that relate to the democratic process.

**E-Petitioning Tool:** A Web-based tool that allows citizens to record their own views or cast a vote on important and complex issues in ways and speed that are unprecedented.

**Monitory Democracy:** Term coined by John Keane refers to a complex and intricate structure of government that incorporates all elements of the representative model and adds to them many different kinds of extra-parliamentary, powerscrutinising mechanisms. Among these are activist courts, electoral commissions and consumer protection agencies, blogs, online forums, and online petitions. These mechanisms of power scrutiny – working from within and across borders – serve the purpose to make democracy and democrats more accountable and more democratic, especially in complex societies where an always increasing number of people has lost belief in politicians and politics.

**Politics:** The term encompasses the complex dynamics of power struggle, that is a process intrinsic in every social relationship that aims at establishing who gets what, when and how.

**Power:** the term is here defined broadly as the mere ability to do or prevent things from happening.

The Road Tax Petition: Started by Peter Roberts, an accountant manager of an English manufacturing company, the Road Tax was a direct challenge of the UK government's intention to tackle road congestion and reduce CO2 emissions by introducing a new tax for motorist. The petition is to date the most successful online petition in the UK. Web 2.0: Web 2.0 is a neologism that attempts to capture the full spectrum and depth of the evolution of web-technology in recent years in the field of what is known as participatory media. Web 2.0. applications allow any user to fully interact with it. Interaction in this case is broadly understood: it goes from simply inputting a comment about a blog's post, or insert new content, modify it, edit, reject it (as it is the case of the online encyclopaedia Wikipedia). Blogs, Wikis, social network website such as Meetup.com, Second Life, Myspace.com, Facebook.com they can all be considered Web 2.0. applications.

## ENDNOTES

- 1 Web 2.0 is a neologism that attempts to capture the full spectrum and depth of the evolution of web-technology in recent years in the field of what is known as participatory media. Web 2.0. applications allow any user to fully interact with it. Interaction in this case is broadly understood: it goes from simply inputting a comment about a blog's post, or insert new content, modify it, edit, reject it (as it is the case of the online encyclopaedia Wikipedia). Blogs, Wikis, social network website such as Meetup.com, Second Life, Myspace.com, Facebook.com they can all be considered Web 2.0. applications. (Madden and Fox, 2006)
- <sup>2</sup> According to the Oxford Internet Institute yearly survey of British Internet users, in 2007, people used the Internet to find information in the following field: planning a trip (54%), finding books (47%), finding the name of a local MP (46%), finding information about taxes (39%) or finding information about local schools (40%) (Dutton & Helsper, 2007, pp. 22-3)
- <sup>3</sup> The right to petition can be found in chapter 61. A scanned version of the Magna Carta is available online at British Library website:

http://www.bl.uk/treasures/magnacarta/ index.html#

- <sup>4</sup> During our interview (6 May 2008), Roberts clarified that he came across the e-petition website quite accidentally through a web link posted on an online forum for motorist (Roberts, 2008).
- <sup>5</sup> 61% of the Telegraph's readership supports the Conservative party, the main opposition party in Britain. (Mori, 2004)
- <sup>6</sup> Over 75% of the Independent's readership supports either the Labour Party (36%) or the Liberal Democrats (39%) (Mori, 2004)
- <sup>7</sup> From a discussion with members of the cabinet during a workshop on the effects of the e-petition service. Discussion held under Chatham House Rule of anonymity.
- <sup>8</sup> Already in 1992, it is worth here remembering, the American billionaire Ross Perot, well ahead of the Dot-com boom, had spotted the importance of new media for a populist leader like himself. For this reason during his contested presidential campaign, Perot famously promised that – if elected – he would support the creation of electronic town halls to allow all citizens to take active part in public debates and voting procedures (Grefe and Castleman, 2005: 163).
- <sup>9</sup> http://petitions.number10.gov.uk/, 20 May 2010.
- <sup>10</sup> It is worth noting that the presence of similar web tools is already a trend in advanced democracies. Theyworkforyou.org.uk in fact is not an isolated case. Similar services are provided for other parliaments: in the US is Watchdog.net; Italy's is watched over by openparlamento.it; while the European Union MPs are monitored by Epvote.eu
- <sup>11</sup> Guido Fawkes' motto, as it appears on his blog: http://order-order.com/
- <sup>12</sup> www.wheredoesmymoneygo.org; www. elbatrop.com/ukdentists; www.fixmystreet. com/;

## Section 6 Advocacy Group Participation

## Chapter 19 ICTs for Empowerment? Disability Organizations and the Democratizing Potential of Web 2.0 in Scotland

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#### ABSTRACT

In recent years, voluntary organizations and advocacy groups have become increasingly influential in the British political landscape as intermediaries between institutions and citizens. Amongst those, disability organizations constitute an important example because they seek to represent a group which has traditionally been excluded from politics. However, concerns remain with regard to the representativeness and accountability of these bodies, and therefore with the legitimacy of their role in governance. This chapter sets out to understand whether disability organizations can use the internet, and especially Web 2.0 features, to develop a more participatory relationship with disabled people<sup>1</sup>, thus becoming better democratic actors. In particular, this issue is addressed through the results of an empirical study of Scottish disability organizations 'websites. Whilst the internet seems to possess great potential against disabling barriers, findings for this study are controversial, and disabled users seem at best to be mobilized around a pre-determined agenda rather than genuinely engaged as participants.

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#### INTRODUCTION

Can the internet contribute to the empowerment of "people who are often left out of the [*public*] debate, because they lack the competencies needed to gain a voice"? (Coleman & Blumler, 2009, p. 176). In order to provide useful insights into this issue, this chapter sets out to look beyond formal e-democracy platforms and to establish whether there are areas of contemporary governance in which the internet can have a significant, albeit indirect, democratizing impact. Whilst in fact "official" spaces for citizen consultation and deliberation represent technology's most recognizable contribution to public decision-making, it seems also crucial to understand whether the combination of changing governance arrangements with the social affordances of the internet in everyday life can foster participation amongst those in society that are otherwise excluded from the public arena.

In this context, one area in which the internet could be particularly significant is that of Voluntary Sector Organizations (VSOs). In recent years, these have become important players in public decision-making in the UK, especially when acting on behalf of marginalized groups. In particular, the internet could provide these organizations with opportunities to connect with their "constituents," and thus acquire something closer to a democratic mandate in the policy debate.

This chapter explores such a possibility through an empirical investigation of the websites of Scottish disability organizations. Following a brief review of existing research on these issues, an innovative framework for the analysis of the position of disabled people *vis-à-vis* governance processes in the digital age is presented. Thereafter, findings are discussed in connection with relevant literature from both internet politics research and disability studies. While generalizations will only be possible within the limitations imposed by a case study approach, both the methodology designed for this study and its results are intended to contribute to a growing body of literature on the political significance of Information and Communication Technologies (ICTs) for marginalized and disadvantaged groups.

### BACKGROUND: NEW TECHNOLOGIES, OLD INEQUALITIES

In recent decades, British politics has been affected by a decline in public participation, primarily signalled by a steep fall in electoral turnout rates. While some have argued that citizen disengagement from traditional politics in Western democracies is to some extent being compensated by a shift towards alternative forms of engagement and mobilization (Norris, 2002; Wellman *et al.*, 1988), it remains that the emergence of such a (perceived) democratic gap has prompted specific government action to reform governance in the UK both at local and national level.

Therefore, since the landslide election of 1997 and for the following thirteen years, Britain's New Labour government looked at ways to bring decision-making closer to citizens as part of a comprehensive plan for "democratic renewal" (Ashworth et al., 2004; Stewart, 2003). Besides regulations aimed at making voting easier and the establishment of devolved national assemblies in Northern Ireland and Wales, as well as the Scottish Parliament in Edinburgh, government efforts have in recent years been directed at encouraging local authorities to involve their residents in decision-making through a series of innovative consultation and deliberation processes, with the aim of becoming more accountable and responsive to their needs (for a detailed description of these see: Stoker, 2004, pp. 108-25). Furthermore, an expansion in citizen participation also seems to remain high amongst the priorities of the current Conservative-led coalition government, as outlined in David Cameron's "Big Society" speech in July 2010 (www.number10.gov.uk), and initiatives in this direction seem therefore likely to continue.

In this context, the internet has been regarded by both local and national administrations as a useful channel to promote citizen participation through e-consultations and, in some cases, e-deliberation initiatives. However, research has shown that "it cannot be assumed that legitimacy, transparency and accountability will be automatically achieved" (Tomkova, 2002, p. 9) through these types of tools. Despite differences between case studies, and although generalizations can only stretch to a limited extent, a vast part of the literature agrees that these forums tend to foster tokenistic discussion and to be dominated by "gladiators from existing forms of political participation who flock to the new medium" (Jensen, 2006, p. 48), thus failing to engage disenfranchised citizens. This is because these platforms respond to the logic and mechanisms of "politics as usual" (Margolis & Resnick, 2000), and as such are generally designed to ensure that control of the agenda remains in the hands of elected representatives (Wright & Street, 2007).

For these reasons, it would be restrictive and potentially distortive to limit research of online participation to "formal" sites since these might in fact alienate even more from politics those who are already marginalized in the public arena. Hence, it is essential to look more closely at the evolving system of contemporary governance in order to understand whether there are any other areas, beyond the direct control of institutional actors, in which the internet could play a positive role in engaging and empowering citizens.

## Voluntary Sector Organisations: New Democratic Actors or Part of the Problem?

A set of actors that has acquired growing prominence in the UK's governance landscape and which could potentially benefit from the online medium is that of Voluntary Sector Organizations (VSOs).

In recent years, subsequent governments have encouraged charitable organizations, non-profit bodies, advocacy and campaign groups to take part not only in the implementation of policy and the delivery of services, but also in their design stage (Craig & Taylor, 2002). As a result, these groups have often established themselves as influential actors in the vacuum existing between disenfranchised citizens on the one hand and political institutions on the other, constituting, especially at local level, a bottom-up "transmission belt" of concerns, views, and opinions (Barnes et al., 2007). However, while some have spoken of "multi-level" or "multi-stakeholder" governance (Stoker, 2004, pp. 18-20), others have instead been sceptical about such "co-optation" of voluntary organizations in decision-making, pointing out their lack of legitimacy as democratic actors (Leat, 1996). In particular, some have argued that VSOs' newly achieved influence in policymaking problematically allows unelected bodies to perform representative functions without being directly accountable to anyone but themselves or those who support them financially (Mordaunt, 2006; Barnes et al., 2003, p. 394).

In this context, researchers have explored the idea that VSOs could take advantage of the internet in order to become better democratic actors, more accountable to and representative of those on whose behalf they claim to speak. Although conclusions in this area have been controversial, with a vast body of evidence pointing at the lack of participatory features on the websites of voluntary sector organizations (Kenix, 2007), it has also emerged that under certain circumstances the internet allows these groups to capture the voices of their members and supporters, and to introduce them in the public debate (Taylor & Burt, 2005). In particular, this has been shown to be the case for those organizations which are characterised by a pre-existing participatory ethos (Burt & Taylor, 2003).

Such opportunities for e-engagement can be especially relevant for disadvantaged groups that

have traditionally been excluded from "formal" politics, and which in the new system of "multistakeholder" governance are now at risk of being represented by organizations which may not interpret their needs correctly (Foot, 2009, p. 16). Amongst the latter, disabled people are in a particularly precarious position not only because of their traditional marginalization in the political arena (Gilbert, Sarb & Bush, 2010), but also due to the general reluctance of disability organizations to involve their primary "constituents" in internal decision-making processes, and because of their tendency to act as arbitrary "filters" of disabled people's concerns in public decision-making (Drake, 1994, 2002). Online communications, especially if embraced in their most interactive forms through Web 2.0 technology, could represent an important opportunity for some of these bodies to become more democratic by connecting directly with those whom they seek to represent by listening to their voices.

Within the UK, these issues assume even greater relevance in Scotland, where VSOs are able to exert a particularly strong influence on public decision-making with regard to disability issues. Firstly, since devolution was implemented in 1999 a number of relevant policy domains have been under the exclusive control of the Scottish Parliament. These include: health; social work; transport; education and training; housing; sport and the arts; and local government. Political debate on these issues occurs entirely within Scotland, and key decisions, including the allocation and distribution of budgets, are taken by elected representatives in Edinburgh as opposed to London. In such a small context, the Scottish voluntary and non-profit sector, which is legally separated from that of the rest of the UK, enjoys facilitated access to decision-makers (Maxwell, 2007, p. 221). In addition to that, Scottish political parties have also generally been particularly keen on the inclusion of VSOs in policy-making as part of the establishment of a new, more consensual, and citizen-oriented model of governance (Keating,

2010, pp. 92-93). Finally, Scotland has been home to coalition or minority governments from when devolution arrangements were put in place until early 2011, creating an increased number of opportunities for VSOs to influence decision-making than has been traditionally possible at Westminster.

In light of these considerations, Scottish disability organizations constitute an especially relevant case study within the British context. Thus, the rest of this chapter will focus on whether they are able to take advantage of the internet in order to promote disabled people's engagement in their work with government, thus indirectly contributing to their empowerment. The next section will clarify problematic aspects of British disability organizations that were mentioned above, and illustrate how the internet could help resolve some of these issues.

### ENTERPRENEURIAL ENGAGEMENT: WEB 2.0 AGAINST ORGANIZATIONAL DISABLING BARRIERS

The idea that technological development, and especially ICTs, could contribute to the empowerment of disabled people is, strictly speaking, not new and was initially suggested in the early 1980s by the some of the first theorists of the social model of disability (Finkelstein, 1980). This critical concept is based on the distinction between impairment and disability, proposing that the latter derives from environmental barriers discriminating against impaired people and preventing them from enjoying equal opportunities in all aspects of social life (UPIAS, 1976). The social model, together with the past experience of the women's and civil rights movements, provided fundamental inspiration for the creation of the disabled people's movement, which successfully campaigned for crucial changes in the principles underpinning social policy both in Britain and in the US throughout the 1980s and 1990s (Campbell

& Oliver, 1996). However, some three decades later, ideas of emancipation through ICTs have yet to be comprehensively substantiated by empirical research, which has instead been limited to the investigation of issues of access and accessibility (Goggin & Newell, 2003; Ellcessor, 2010).

Given that only 42% of disabled people identify themselves as internet users in the UK (Williams et al., 2008) compared to 70% of the general population (ONS, 2009), access and accessibility remain problems requiring great attention from both policy makers and technology developers. Nevertheless, pioneering qualitative research with disabled users' has also shown that, despite persisting issues of a "digital divide," the internet can have an overwhelmingly positive impact on their lives. In particular, disabled users seem to share an enthusiastic approach to this technology, and to greatly benefit from the online medium, using it to join and expand interpersonal networks, access peer-support spaces, and express their opinions without intermediaries (Anderberg & Jönsson, 2005; Obst & Stafurik, 2010). These findings demonstrate that there is scope for shifting the focus of research from the interpersonal to the political domain in order to establish whether the online medium can be the emancipatory tool envisaged by disability scholars some thirty years ago. Therefore, in order to meaningfully assess the internet's potential in this area, it will be crucial to avoid deterministic assumptions, and to concentrate instead on its relevance vis-à-vis the specific issues with disability organizations that were identified above.

How then can the internet promote the internal democratization of disability organizations, and thus empower their disabled members and supporters in the contemporary governance system? To answer this question it will be necessary to briefly turn to relevant theory in internet politics and combine it with disability studies' critical stance on VSOs. This will provide a clear framework for the empirical section of the study and enable the formulation of reasonable expectations to be tested.

### Online Democratization "From Within"

While just a few years ago internet researchers warned about the risk that online communications could exacerbate pre-existing trends of de-institutionalization, individualization, and fragmentation of politics (Bimber, 1998; Wellman et al., 2003), Web 2.0 seems now capable of outweighing some of these issues by promoting pluralism" from within" established organizations. This is because of the "new" internet's ability to support "entrepreneurial engagement" amongst individual members and supporters (Bimber, Stohl & Flanagin, 2008), i.e. there is a possibility for them to seize ownership of the organization by creating their own opportunities for involvement and promote their own views and priorities through user-generated content. By providing lay individuals with opportunities to acquire a direct "voice" through readily available, low-cost participatory tools, Web 2.0 (or social media as it is increasingly being described) could challenge traditional patterns of power distribution within VSOs and foster internal pluralism and democratization. As a result, organizations would not only enhance their accountability and representativeness in the public arena, but also take on a new role as catalysts, rather than filters, of participation.

However, it would be naïve to expect all types of VSOs to embrace this strategy, since many organisations never intended to provide discussion and deliberation spaces for their members, but rather set out to aggregate people around a pre-determined agenda. Developing participatory communications would in fact inevitably require these groups to transfer a significant share of control from their leadership and executive staff to their member and supporter base (Oates, 2008; Sey & Castells, 2004), which indeed may raise strong objections from those currently in top posts. For these reasons, as briefly mentioned in the previous section, it is crucial to look at the intersection between technology and embedded organizational ideology in order to determine which, amongst different types of disability groups, might be more likely to embrace the participatory internet.

# The Issue with Disability Organizations

In broad terms, disability organizations in the UK can be divided into three groups: big, bureaucratic, traditional charities led by non-disabled voluntary sector professionals and mainly orientated towards service-provision; smaller, poorly resourced but politically relevant, member-led groups of disabled people characterised, at least on paper, by a strong participatory ethos, primarily involved in campaigning and self-advocacy activities, and collectively defined as the core of the "disabled people's movement"; and finally, hybrid bodies that started off as traditional charities but which in recent years have embraced some of the key organizational features of member-led groups (Shakespeare, 2006).

The role of these different types of organizations in the public arena has been of interest to scholars within disability studies for a number of years, and conclusions have generally been two-fold. On the one hand, traditional charities have typically come under fire for their inability to meaningfully involve disabled members and service-users in their decision-making processes (Drake, 1994), and because the tendency of their fundraising campaigns to reproduce negative stereotypes of disabled people as "needy" and "vulnerable" (Barnett & Hammond, 1999). These organizations however seem to enjoy a somewhat privileged relationship with government, possibly because of their extensive formal partnerships with state agencies in the area of service-delivery, and also because of the perceived credibility of their professional staff (Drake, 2002). On the other hand, member-led groups have generally been regarded

more positively as the "engine" behind crucial changes in social policy and anti-discrimination legislation introduced in the UK from the mid-1990s onwards. However, these groups have also been criticised more recently because of their tendency to become increasingly professionalised, and thus "distant" from those whom they should primarily seek to engage (Oliver & Barnes, 2006).

In addition to this, it is also important to provide an overview of the ways in which these organisations, including those examined in the empirical study carried out for this chapter, compile their agendas. Organizations operating under charity regulations in the UK are legally required to be overseen by a board of elected trustees that collectively set their strategic objectives and priorities (for more on this point see: www. charity-commission.gov.uk). However, both in the case of disability organizations and of others, this system has repeatedly been criticized as ineffective, with power concentrating in the hands of managerial and executive staff (Harris, 1996). In the disability area, this is particularly the case with traditional charities but also, although to a lesser extent, hybrid bodies (Shakespeare, 2006). In contrast, membership-run organizations have traditionally been more successful at engaging their "constituents" in their decision-making through a variety of means, including regular meetings, working groups, surveys, and workshop events. However in recent years, concerns have also begun to emerge in this area: the frequency of meetings is low; the structure of committees requires members to be elected, which is a daunting prospect for disabled people who might lack the necessary confidence and consequently feel "inadequate" for a representative roles; and, finally, the lack of ongoing engagement means that the vast majority of members still remain excluded from most decisions, especially when a quick response to emergency issues is needed.

For these reasons, and in light of work showing that smaller, resource-poor, non-hierarchical organizations are more likely to approach new media to promote participation (Pickerill, 2004; Norris, 2002), it seems reasonable to expect member-led disabled groups to be more inclined than traditional charities or hybrid organisations to embrace Web 2.0 technology. True to their original ethos, groups "of" disabled people might therefore regard the internet as a channel to democratize their decision-making processes, thus solving some of the issues illustrated above, while differentiating themselves once again from the other types of disability organizations. Conversely, traditional charities and hybrid bodies might not find this option equally as appealing due to their different nature, objectives, and organizational set-up.

#### **Research Design and Methodology**

In order to verify these expectations, an empirical study of the websites of Scottish disability organizations was carried out. Despite being unable to capture any given organization's internet strategy in its entirety, website analysis focuses on the central element around which established groups tend to organize their online presence, thus providing significant insights into their relationship with the online medium more generally. A mixed-methods approach was adopted for this study, combining quantitative content analysis of websites and nine qualitative face-to-face interviews with communication executives from the organizations under scrutiny. Besides allowing the contextualization of content analysis results (Oates, 2008; Witschge, 2008), in-depth interviews also mirror an established practice in disability studies which sees engaging key stakeholders, and especially disabled people, in the research process as essential in order to obtain meaningful results (Barnes, 1992). In accordance with this principle, and due to the focus of the study, it could also have been interesting to investigate the "audience" perspective on these websites, especially amongst disabled internet users. While in this instance space limitations prevented online "audience" research

from being included, this remains an important area that should be explored in the future.

#### Sampling

Apurposive sample of nine websites was identified through relevant keyword searches on Google. co.uk. Criteria for selection included not only the websites' ranking on the search engine, but also the offline profile of the organizations to which each website belongs. The final sample included three websites from each category of organization described above:

Member-led Groups:

- a. www.inclusionscotland.org (Inclusion Scotland)
- b. www.gcil.org.uk (Glasgow Centre for Inclusive Living - GCIL)
- c. www.gdaonline.co.uk (Glasgow Disability Alliance - GDA)

Traditional Charities:

- d. www.quarriers.org.uk (Quarriers)
- e. www.enable.org.uk (Enable Scotland)
- f. www.samh.org.uk (Scottish Association for Mental Health - SAMH)

#### Hybrid Bodies:

- g. www.capability-scotland.org.uk (Capability Scotland)
- h. www.ssba.org.uk (Spina Bifida Association Scotland - SBAS)
- i. www.sisonline.org (Spinal Injuries Scotland - SIS)

All of these groups are heavily involved in work with local and national government in Scotland: both the Glasgow Disability Alliance and the Glasgow Centre for Inclusive Living, for example, have strong local ties but are also key players in the national debate on disability issues.

It is important to note at this stage that, although these organizations were originally set up for different and, to a certain extent, complementary purposes, some of their functions currently overlap. In short, traditional charities have gradually become more interested in policy, lobbying and campaigning, while member-led groups are increasingly offering services to disabled people, primarily as a way to contribute to their personal development. For these reasons, despite retaining different values and organizational principles at their core, these groups are increasingly competing not only for attention from political actors, but also for access to public funding. This is a problematic issue, especially for member-led groups that tend not to elicit donations from the general public, and whose position could be threatened by traditional organizations adding campaigning to their priorities. In this context, Inclusion Scotland represents an exception because it is set up as a "consortium" acting on behalf of several member-led groups, and providing a platform for confrontation and collaboration amongst the latter. Furthermore, it also fulfils a key role as the only "one-stop-shop" for disability information in Scotland run by disabled people. Despite its particular features, it constitutes a key case study to be included because of its role in promoting the principles of the social model in the Scottish debate on disability issues, and its ability to aggregate a number of smaller groups around common purposes.

## **Coding Frame**

The coding frame developed to analyze these websites included sixteen variables and was organized in two sections, which sought to capture dynamics of content control, and opportunities for user-engagement through specific Web 2.0 features respectively (see Table 1 and Table 2). For the first section of the coding frame all pages located up to three clicks from home were individually coded, and results were then aggregated for each group of websites at the analysis stage. In total, 766 individual web pages were coded: 111 for the first group of websites; 391 for the second group; and 264 for the third group.

For the second section, each website was instead adopted as a recording unit in its entirety. Furthermore, variables in this section were inspired by the framework for the analysis of "site delivery" developed by Gibson and Ward for the investigation of political party websites (2000, pp. 303 and 308-309). Therefore, each website's functionalities were recorded in order to establish their compliance with participatory technological developments. In addition to variables drawn from previous research on user-engagement in voluntary sector websites (Burt & Taylor, 2008; Kenix, 2007), new and innovative ones were also devised in order to capture specific Web 2.0 features. Although results for this section did not allow for statistical inferences and generalizations due to the limited number of cases observed, findings will nevertheless offer crucial insights into Scottish disability organizations' approach to the internet. Furthermore, while it is important to acknowledge that the internet is a constantly moving target, this section of the coding frame is seeking to provide a flexible research tool that could be adapted for the study of other organizations participating in evolving governance practices.

After piloting, reliability coefficients were found to be .83 for the first section, and .90 for the second one. All coding was completed between July and August 2009.

#### **FINDINGS AND ANALYSIS**

While data were clustered for groups of websites (traditional charities, member-led groups, and hybrid bodies) in order to assess the main expectation that different types of organizations would adopt different approaches to the participatory internet, results for individual websites will also be pointed out in case they are of particular inter-

Table 1.	Coding frame,	section 1
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Coding Frame Section 1 – Dynamics of Online Content Control				
Predominant information medium:	1- Text 2- Images 3- Equally both 4- Multimedia 5- Link to downloadable text/image 6- Other 7- n/c			
Content authorship:	<ol> <li>1- Organization</li> <li>2- Members (individual or group)</li> <li>3- External source (e.g. mass media, government agency, other charity)</li> <li>4- Other</li> <li>5- n/c</li> </ol>			
Source of Multimedia Content:	<ol> <li>1- Original content (organization)</li> <li>2- Embedded from other sites</li> <li>3- Both</li> <li>4- Other</li> <li>5- n/a</li> <li>6- n/c</li> </ol>			
Opportunity to leave comment/feedback:	<ol> <li>Present, comments/feedback displayed on page</li> <li>Present, comments/feedback not displayed</li> <li>Absent, feedback/comments not prompted</li> </ol>			
Total number of links on page to:	Other disability organizations Other voluntary organizations Institutions (general) Institutions (of medical nature) Mass Media websites Personal Web pages/Blogs Social Networking Sites Multimedia Hosting Sites			
Type of links to social networking sites:	1- To official supporters/fan group 2- To other disability groups 3- To individual activist/supporter's page 4- To networking site homepage 5- Other 6- n/a 7- n/c			
Total number of links on web page	Number			

n/a = not applicable

n/c = non-classifiable

est. Furthermore, although website coding and interviews were carried out in parallel, content analysis results will be discussed first in order to identify central themes, which will then be explored in detail through qualitative interview data.

## **Content Analysis**

A basic observation that can be made by simply looking at the total number of web pages coded for each website is that websites of member-led groups are notably less extended than others (see Table 3). At first, this would seem to confirm the general expectation that websites associated with more loosely tied, poorly resourced and non-

Table 2. Coding frame, section 2

Coding Frame Section 2 – User-engagement Features	
Opportunities to contact organization:	<ol> <li>Personal contact details of trustees/staff</li> <li>Generic email address/contact form</li> <li>Other</li> <li>Absent</li> </ol>
Members-only area:	1- Present 2- Absent
Bulletin board/Discussion Forum (asynchronous):	<ol> <li>Present, predominantly on issues internal to the organization</li> <li>Present, predominantly on external issues (e.g. policy debate, etc.)</li> <li>Present, equally focussed on both</li> <li>Absent</li> </ol>
Chat room (synchronous):	1- Present 2- Absent
Online polls:	Number of polls
Type of online polls:	<ol> <li>Predominantly on issues internal to the organization</li> <li>Predominantly on external issues (e.g. policy debates, etc.)</li> <li>n/c</li> <li>n/a</li> </ol>
Cyber-activism (online petition, e-postcards, etc.):	1- Present 2- Absent
Consultation space on campaigns, policy and advocacy:	<ol> <li>Present, users' responses displayed</li> <li>Present, users' responses not displayed</li> <li>Absent</li> </ol>
Peer support/experience sharing space:	<ol> <li>Present, internal to site</li> <li>Present, hosted on external site</li> <li>Mention of offline opportunities only</li> <li>Absent</li> </ol>

n/a = not applicable

n/c = non-classifiable

Website	Nr of Pages Coded	Total for Website Group	
Inclusion Scotland	52	Member-led: 111	
GCIL	29		
Glasgow Disability Alliance	30		
Quarriers	133	Traditional Charity: 391	
Enable Scotland	148		
SAMH	110		
Scottish Spina Bifida Ass	92	Hybrid Organization: 264	
Capability Scotland	123		
Spinal Injuries Scotland	49	]	
Total	766		

Table 3. Number of pages coded for each website and group of websites

hierarchical groups tend to be simpler than those of traditional organizations in the voluntary sector.

On the one hand, this might reflect member-led groups' flexible structure and typical modus operandi, deliberately intending that their internet presence spread across different platforms in a way that other organizations might prefer to avoid due to a - perceived - loss of control associated with diversification. On the other hand, however, differences in website size might also simply be related to the amount of resources that each organization is able to invest in their websites (Taylor & Burt, 2005, p. 606). Thus, small websites could result from the need to channel limited funds into other areas of communications, rather than from a deliberate choice to develop a "de-centralised" internet strategy (Gillan, Pickerill & Webster, 2008, p. 163). At this stage, however, content analysis results only allow preliminary remarks and it is necessary to integrate this discussion with interview data in order to fully appreciate all factors relevant to website size.

Nevertheless, by looking at results for the overall number of hyperlinks available on each website, something more can be said with regard to the position of these platforms within the online space. In fact, when looking at the data (see Table 4 below), the idea of a "diffused" internet presence for member-led groups seems less appealing than expected at first: with the exception of Inclusion Scotland, the other two sites in the group provide only a handful of links to external online platforms, and could therefore be regarded as rather disconnected "islands" within the internet.

With regard to Inclusion Scotland's website, it is crucial to point out that its seemingly sizeable number of hyperlinks to external web pages depends upon the organization's strategic choice to provide a disability news digest for the benefit of their partner organizations and of disabled users. If the hyperlinks for news stories are taken out of the picture, results are comparable to those obtained for the other two member-led groups included in the sample.

Website	<b>Total Number of Links</b>
Inclusion Scotland	250
GCIL	3
Glasgow Disability Alli- ance	9
Quarriers	50
Enable Scotland	39
SAMH	32
Scottish Spina Bifida Ass	15
Capability Scotland	39
Spinal Injuries Scotland	108

Table 4. Total number of hyperlinks per website

Furthermore, it is also important to reflect on the type of websites to which hyperlinks connect. Firstly, results indicate not only that all of the websites under scrutiny are scarcely integrated with online social networking platforms, but also that member-led groups are particularly reluctant to embark on this type of media (see Table 5 below). These results are sharply at odds with initial expectations, and constitute an important indication of membership organizations' general approach to Web 2.0 participatory innovations. Secondly, it is also interesting to note that the majority of traditional charities and hybrid bodies are instead providing some links to social networking websites, mainly Facebook. However, these always lead to either the organization's "official" pages on these platforms, or to pages set up jointly with other organizations. These were mostly pages promoting fundraising events, but also a few pages related to campaigns for disabled people's rights.

This last result was somewhat unexpected and suggests that traditional charities and hybrid bodies might share a wider interest in the potential of online social networking rather than just using it for fundraising purposes. In particular, interviews provided further insights into this issue, and will be discussed in detail below. At this stage, all groups under scrutiny seemed to share a similar approach to the internet, characterised

Organization Type	Website	Number of links to Social Networking Sites	Predominant Type of Links to Social Networking Sites
Member-led Group	Inclusion Scotland	×	×
	GCIL	×	×
	GDA	×	×
Traditional Charity	Quarriers	3	Other Dis. Pages
	Enable	4	Own "Official" Pages
	SAMH	×	×
Hybrid Organization	SSBA	6	Own "Official" Pages
	Capability Scotland	1	Other Dis. Pages
	SIS	×	×

Table 5. Number of links to social networking sites

primarily by a strong centralization of control over online content and communications.

A set of results that reinforces and further substantiates the points made above is those for authorship of online content and opportunities for users to post comments and feedback on the websites. Firstly, it is crucial to point out that all websites were overwhelmingly dominated by content produced directly by the organizations, and that paid members of staff were generally in control of this process, as all interviewees later confirmed. Further to this, the most interesting finding in this area is that, while user-generated content accounted for less than one percent of web pages of traditional charities and hybrid groups, it was entirely missing from those of member-led disabled groups. If this is in contrast with initial expectations for membership organizations, it nevertheless is in line with the point made above about organizations retaining nearly absolute control of what does and does not feature on their web pages. For these reasons, the websites under scrutiny were quickly exposed as information boards promoting top-down monologue, rather than engaging in dialogical exchanges between the organizations and the users.

With regard to the seemingly sizeable amount of content from external sources on websites of member-led groups (see Table 6), this result was again skewed by Inclusion Scotland's decision to provide a news digest on disability issues on their website, which accounted for virtually all of the external content appearing on those pages and as such is only marginally relevant for the purpose of this study.

Source of Content	Group		
	Member-led	Traditional	Hybrid
Organization (staff)	71.2%	95.9%	95.1%
Users	-	0.3%	0.4%
External Source (mass media, institu- tions, etc.)	23.4%	0.8%	0.4%
Other	1.8%	0.3%	-
n/c	3.6%	2.8%	2.7%

Table 6. Source of content per group of websites (percentage on total number of web pages)

Feedback/Comments	Group		
	Member-led	Traditional	Hybrid
Displayed on website	-	-	-
Prompted, but not displayed on website	-	2.8%	4.2%
No opportunity for feedback/comments	-	97.2%	95.8%

Table 7. Percentage of web pages with user-comment/feedback facilities

While the lack of user-generated content constituted a generalised pattern affecting organizations of all types, other more sophisticated and somehow less visible opportunities for online participation could not be ruled out at this stage. Rushing to overarching conclusions would have been premature, and it was instead necessary to look further into online content and website features before valid generalizations could be drawn. For these reasons, a specific variable was included in order to establish whether users were provided with opportunities to express comments and offer feedback on content posted by others. Again, findings deviated from the expectation that such tools would be more likely to feature on the websites of member-led groups (see Table 7). Instead, results revealed not only that none of the organizations under scrutiny display users' comments and feedback on their websites, but also that traditional charities and hybrid bodies are slightly more likely than membership organizations to allow users to submit their thoughts, mainly via email.

A general lack of resources, and consequently limited levels of staffing, might provide at least a partial explanation for the reluctance of memberled groups to encourage website users to provide comments and feedback. However, the fact that they do not prompt participation through basic low-cost tools such as, for example, email, constitutes additional evidence of the mono-directional nature of communication on their websites.

Results for the second section of the coding frame, appeared to be broadly in line with the general pattern outlined above, meaning that opportunities for users to engage in meaningful dialogue both with one another, and with the organizations' staff and officers, were extremely limited. A point from which it is helpful to start the analysis of this section is by looking at the provision of specific tools for cyber-participation, i.e. those features that closely resemble "classic" e-democracy elements such as online polls, epetitions, and electronic postcards.

While Table 8 provides a comprehensive summary of the results for cyber-participation tools, it is particularly interesting to focus on the issue of opinion polls on the websites of memberled groups. Although two out of three of these websites included such a feature, they cannot be considered to be truly promoting an increase in internal pluralism levels. This is because of the way in which polls were designed, which only allowed users to express their opinion by choosing from a fixed, and generally very limited, list of options. Furthermore, organizations remained in complete control of the agenda, and did not prompt or enable users to put forward topics for online polls. For these reasons, user-engagement was limited to what has been described as "push button" democracy (Lusoli & Ward, 2006, p. 61; MacIntosh et al., 2003, p. 52). The same observations are also valid for cyber-activism facilities such as online postcards and e-petitions, which prevent the initiative from being handed over to users, and which in any case only featured on two of the websites examined for this study.

Furthermore, it should be pointed out that at the time of observation some groups were explicitly prompting users to provide their thoughts on

Website	Online Polls (Type)	Cyber-activism (e-postcards, e-petitions, etc.)	Consultation Space
Inclusion Scotland	✓ (on internal issues only)	×	×
GCIL	×	×	×
GDA	1	×	✔ (Email)
Quarriers	<i>√</i>	×	✓ (Email)
Enable	×	1	✓ (Email)
SAMH	×	×	×
SSBA	×	×	×
Capability Scotland	✓	×	✔ (Email)
SIS	×	✓	x

Table 8. Cyber-participation facilities per website

relevant policy issues to be fed into consultation documents for submission to government departments. However, the only option available for contributing was via email (see Table 8), and this generated the same issues that were highlighted above with regard to facilities for the provision of general feedback and comments: users' opinions were never displayed on screen, and did not form part of any organic discussion thread. Instead, control of the process remained entirely in the hands of the staff and/or officers of the organizations, thus not challenging the traditional power differential between decision-making elites and base membership.

In light of these considerations, those organizations that provided elements of cyber-participation on their websites sought to mobilize users around a pre-determined agenda rather than to engage them in a meaningful debate. This seems to be the case irrespective of the embedded principles and organizational ethos of the groups involved. Furthermore, and especially in the case of memberled groups, this also adds to the controversial debate on whether the internet can affect the actual structure of progressive movements, making them more "democratic," or it simply represents a useful tool for elite groups to mobilize support around pre-arranged priorities (della Porta & Diani, 2006, pp. 155-6). In particular, this part of the analysis echoed the results of recent empirical work on the online presence of anti-war groups, for which agenda-setting still happens at the top, and the internet is used to gather information and organize the base (Gillan, Pickerill, & Webster, 2008). To an extent, some might argue that online polls and email feedback still constitute "minimal" forms of participation; however, it remains unclear whether this can generate real empowerment as it is not about direct involvement in decision-making and agenda setting, but rather about informing the opinion of new, alternative elites that may or may not be listening (Davey, 1999, p. 38).

Coding with regard to features enabling horizontal communication and networking amongst users, and facilitating their engagement in debates on disability policy and personal issues drew an equally negative picture. None of the organizations under scrutiny seemed to take advantage of the electronic medium to allow users to communicate with either their officers or staff beyond providing an email address or a contact form - in most cases just a generic one - let alone hosting open-ended debates on their websites. In particular, online forums and chat rooms were completely missing from the websites taken into consideration for this study, as also any other type of online space

Website	Online Contacts Details	Member Only Area	Forum	Chat Room	Peer Support Space
Inclusion Scotland	✓ (Personal)	×	×	×	×
GCIL	✓ (Personal)	×	×	×	×
GDA	✓ (Personal)	✓ (Under construction)	×	×	×
Quarriers	✓ (Generic)	×	×	×	×
Enable	✓ (Generic)	✓	×	×	×
SAMH	✓ (Generic)	×	×	×	✓ (offline only)
SSBA	✓ (Generic)	×	×	×	✓ (offline only)
Capability Scotland	✓ (Generic)	×	×	×	×
SIS	✓ (Personal)	×	×	×	✓ (offline only)

Table 9. Online discussion and community building facilities per website

for disabled people, their families, and carers to share experiences and find peer support from other users (see also Table 9).

It was especially surprising to find that websites of member-led organizations were lacking these types of facilities, since one of their primary aims has traditionally been to boost the sense of community and common identity of disabled people (Shakespeare, 2006). However, it could be argued that discussion boards and other interactive features, which are generally built into websites as an additional resource, and whose management absorbs staff time in the long run, require a financial commitment that small, loosely-tied and poorly resourced groups may not be able to afford. A valid, low-cost alternative option that might serve this purpose could be to integrate organizational web pages with readily available online social networking platforms. However, memberled groups were simply not doing this and interview data proved instrumental in shedding light upon this seemingly controversial result.

To briefly summarise the findings of content analysis, initial expectations went largely unmet, especially for the websites of membership groups. All organizations, irrespective of their embedded principles, retained strong, centralised control over their websites, which in turn resembled information boards for vertical communication typical of the internet pre-Web 2.0. Furthermore, those few organizations that have partially embraced participatory features such as online polls and epetitions have done so by avoiding delegation of agenda-setting options to their users, and without providing opportunities for open-ended dialogue and discussion. However, whilst these patterns undoubtedly cut across all websites, interviews also facilitated moving beyond these initial findings, revealing that such similar approaches to the online medium were in fact based upon different reasons depending on the type of organization concerned.

## Reaching Beyond Screens: Why So Few Participatory Features?

Similarly to previous research on the internet and the voluntary sector (Burt & Taylor, 2008), interviews were instrumental in illustrating that efforts on the part of the organizations to address specific types of online "audience" have a crucial impact on their websites and on the levels of participation that the latter promote. From the accounts of webmasters and communications executives, it became apparent that their shared preference for websites to only include very limited participatory features was strongly dependant on different perceptions of target audiences.

A first issue that emerged from interviews with communications staff from all groups was that they generally considered disabled individuals to be especially "at risk" on social networking sites. The majority of interviewees explicitly acknowledged this as a crucial problem, explaining that:

"since they [disabled people] are vulnerable people, there is a worry that somehow vulnerable people could become subject to particular attacks or exposure through this [online social networks]" (Hybrid organization interviewee);

#### and that

"If a member decided to have a personal social networking page they would need to be fully aware of the risks that come with it and be IT proficient in order to manage it adequately; members might not realise all implications of social networking pages and therefore be more at risk" (Member-led group interviewee).

Comments like these may recall some of the stereotypes of "needy" and "vulnerable" disabled people on which traditional charities and hybrid organizations conventionally based many of their fundraising campaigns (Barnett & Hammond, 1999), yet they were unexpected from member-led groups committed to the principles of the social model. Although some may argue that decisions taken on the basis of this belief could have a disempowering effect on disabled people, these remarks also need to be interpreted in connection with the vast experience that these organizations have in communicating with disabled audiences. While in fact interviewees from membership organizations constantly referred to disabled people as their main "target audience," and described them as being

"very interested in IT, above all those with mobility impairments - the internet could open new doors to the world for them [their members]" (Member-led group interviewee),

it also became clear during interviews that the decision not to engage in social networking sites was underpinned by a profound knowledge of what media are currently most effective when addressing disabled people. As such, this choice cannot be simply discarded as short-sighted or disempowering.

In particular, interviewees from member-led groups generally pointed out that it would be:

#### "pointless to try and communicate with them via the internet" (Member-led group interviewee).

The main reasons put forward to support this argument were lack of resources on the part of the organization, barriers to internet access and IT literacy for many disabled people, as well as accessibility issues. Thus, member-led groups, while generally acknowledging Web 2.0 to be potentially revolutionary, had decided to invest their limited resources in more traditional media in order to make sure that their communications effectively reached as many members as possible. Their approach to Web 2.0 could therefore be described as "pragmatic" rather than patronising or disempowering. Nevertheless, their choice not to embrace social networking sites, and other participatory features of the internet more generally, also meant that these groups traded off important opportunities to reach and engage new audiences, especially amongst young disabled people (Schur, Shields & Schriner 2005), in order to prioritise established ones.

Furthermore, it is important to point out that interviewees from traditional charities and hybrid bodies indicated social networking sites to be mainly fulfilling the role of additional marketing and PR tools, and to be particularly useful to reach young audiences. As they explained:

"[online] social networking is useful for fundraising,"

with the additional benefit of

"being more informal than the website, so people could respond better to it" (Traditional charity interviewee).

In addition to that, interviewees also seemed convinced that when traditional charities and hybrid organizations linked to social networking pages promoting campaigns for disabled people's rights, they did so only to mobilize support around pre-arranged priorities, and not to encourage democratic dialogue or internal pluralism. As one of the interviewees from hybrid organizations clearly pointed out:

"We have a position, we have a view and we need to promote and defend that. We are not here to facilitate debate, we say 'this is what we stand for'so it is not as flexible as it might be for other organizations [...] that can instead encourage debate and be the mediator, I mean, there is nothing wrong with debate but we have already taken a side."

Thus, opportunities for fundraising and perform as strong incentives for traditional charities and hybrid groups to take advantage of online social networking. Instead, while Web 2.0's democratic potential may be clear to these organizations, it is also perceived as being of no real benefit to their strategic objectives, and therefore is of no interest to them.

Broadly speaking, interviewees from charitable organizations and hybrid bodies did not expect users to aspire to contribute their own online content, and explained that they regarded the websites as "doing the best interest of disabled members by providing them with all the information they need and they are looking for" (Hybrid body interviewee),

and

"mainly [as] an information board, another way to facilitate access to important resources for disabled members" (Traditional charity interviewee).

For these reasons, they seemed to regard disabled users as simply recipients of information rather than user-producers. This, in a way, transfers the traditional perception of disabled people as "those in need of support" mentioned above into the online world to create a specific group of "information needy." Also, despite the adoption of some Web 2.0 tools, such as social networking sites, comments like the ones above revealed these organizations to be primarily interested in the internet as a medium for vertical communication. Therefore, these groups' strategy was to combine limited participatory features with a traditional, top-down approach to online communications, much like political parties have also done, resulting in what has been described as "Web 1.5" (Kalnes 2009). This system, while having the capability to enhance a given organisation's credibility in the public arena by aggregating supporters around its initiatives, also makes meaningful participation difficult to identify by blurring the distinction between participation. mobilization, and tokenistic involvement.

Finally, interviews also revealed practices of website governance shared by all types of organizations. In particular, it became apparent that paid, non-disabled members of staff were firmly in charge of both day-to-day website administration and strategic decisions. It was somewhat surprising to find that:

"as little as possible is negotiated with the board of trustees because [...] if we sought to engage them they would probably interfere too much" (Traditional charity interviewee);

and that

"trustees are generally presented with plans in a way that makes it difficult for them to say no" (Traditional charity interviewee).

For these reasons, all groups, regardless of their founding principles and overarching mission, seemed to share an "experts know best" approach to the internet, which in turn contributed to the low number of participative user-producer facilities featuring on their websites. This is also consistent with the remarks made above about the increasing influence of paid managers and declining power of elected committees within these organizations.

#### CONCLUSION

Contrary to initial expectations, Scottish disability organizations do not seem to have embraced the use of "participatory" internet features in a measure that could meaningfully support a process of internal democratization and increase their accountability and representativeness in contemporary governance processes. As a result of this, they generally seem to be missing out on important opportunities for becoming better democratic actors. However, at the root of this seemingly identical approach to Web 2.0, motivations differed depending on the type of organization involved.

While on the one hand traditional charities and hybrid bodies are slightly ahead of the game and have actually embraced social networking platforms, on the other they have chosen to do so mainly for fundraising purposes or, at best, in order to gather support around their own pre-existing campaigns and events. In this framework, it seems difficult to speak of individual empowerment through participatory ICTs. Instead, an outcome that seems more likely is that of the strengthening of the organization's own pre-determined priorities, which are not re-negotiated online. These groups' limited approach to Web 2.0 seems therefore to constitute an almost paradoxical case of using innovative media to pursue "politics as usual."

The reasons that have inspired member-led groups to avoid participatory internet features to date are, in contrast, of a completely different nature, relating to their longstanding experience in communicating with disabled members and supporters, and their lack of resources to invest in a specific online strategy. Nevertheless, these groups remain strongly committed to their participatory ethos and appear to be aware of the internet's potential for the emancipation of disabled people. For this reason, it will be crucial to keep them under scrutiny in order to understand whether they will eventually embrace more innovative functions of the online medium, especially as they seek to reach out to young disabled people.

Finally, despite a series of negative results, the empirical study carried out for this chapter not only re-affirmed the need to contextualise internet politics research in order to be able to draw meaningful conclusions in this field, but also demonstrated the additional value of qualitative research in combination with quantitative analysis. The next step in this field, and a real challenge for internet researchers, will be to look in detail at the personal experiences of disabled internet users in order to understand whether and how they can be empowered by the online medium beyond the opportunities provided by disability organizations' websites.

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## **KEY TERMS AND DEFINITIONS**

**Barriers to Participation (Disabled People):** Series of environmental factors depriving disabled people of equal opportunities to contribute to social: political, and economical aspects of the community in which they live. These include, amongst others, financial deprivation, lack of physical access, practices of cultural and institutional discrimination, disempowering attitudes, and psychological barriers.

**Citizen Participation:** Opportunities for individuals to influence, whether directly or through civic associations and voluntary organizations, public discussion and decision-making.

**Democratization (Internal):** Ability of an organization to promote dialogic exchange amongst its officers, members, and those whom it seeks to represent, and to act responsibly on the basis of such dialogue.

**Disability:** Condition of disadvantage and oppression forced upon physically or mentally impaired people as a result of societal disempowering and exclusionary practices (social model of disability).

Multi-Stakeholder (Multi-level) Governance: System of public deliberation involving consultation, discussion, and decision-making between a series of institutional and non-institutional actors including: national and local government, interest groups, voluntary sector organizations, private business enterprises, and individuals.

Voluntary (Third) Sector Organization: Not-for-profit organization that is involved at various degrees in providing services and promoting campaigns, policy, and advocacy activities in relation to a given set of social issues.

Web 2.0 (Social Media): Online platforms enabling the creation and the dissemination of user-generated content, supporting the expansion of horizontal networks, and promoting user-led innovation.

## ENDNOTE

<sup>1</sup> Given that this chapter focuses on case studies from Scotland, the language guidelines of both the United Kingdom Disabled People's Council (UKDPC), and of leading British journals in disability studies were followed. Thus, references throughout the chapter are

to "disabled people" as opposed to "people/ person(s) with disabilities." Furthermore, in accordance with the principles of the social model of disability, the term "disabled people" does not imply a distinction between people affected by different types of impairments.

# Chapter 20 A Longitudinal Study of Political Technology Use by Nonprofit Child Advocacy Organizations

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#### ABSTRACT

This chapter addresses advocacy technology use by a group of nonprofit advocacy organizations over three periods of time. The research questions for this study are: (1) what types of high technology are state level child advocacy organizations using in their policy work and how has this differed over time? (2) What technologies have been adopted and then discarded? (3) What organizational characteristics predict higher levels of adoption and institutionalization? (4) What technology characteristics predict higher levels of adoption and institutionalization? Research was conducted with three waves of questionnaires (2000, 2004, 2008). Findings included that older technology remains active in most cases while new technology begins to emerge, some change in barriers were reported, and there were slight changes in perceived effectiveness and use by other groups.

#### INTRODUCTION

The nonprofit sector has been a force for the protection of children and the advancement of policies that would ensure the right to a healthy and sustaining childhood (Imig, 1996; DeVita &

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Mosher-Williams, 2001; Gormley, & Cymrot, 2004). Children are one of our most vulnerable groups and civil society is responsible for guaranteeing their care. This is part and parcel of the third sector's mission to ensure the rights of the downtrodden, dispossessed and disenfranchised. Advocacy efforts can also be an important way to connect people with their government. This study

does not deal with the status of children or how technology affects children. It is an examination of the use of technology by those who advocate for children at the state level.

While the goals of child advocates remain much the same, techniques used by advocates have evolved. Since the early 1990s, these techniques have included methods based on high technology within the advocacy process. While a considerable literature has developed about the use of these technologies within the nonprofit sector (Krehely & Montilla, 2001; McNutt & Boland, 1999; Hick & McNutt, 2002; Cortez & Rafter, 2007), very little of it looks at children and even less looks at the issue from a longitudinal perspective. The implications of this gap are significant. Since adoption of technology is a process that takes place over time, it cannot be adequately represented by a single data point. This paper will help fill this gap by examining a group of nonprofit advocacy organizations over three periods of time. This will add to our understanding of the adoption of technology in the nonprofit sector and further enrich our understanding of nonprofit government relations.

The research questions for this study are: (1) what types of high technology are state level child advocacy organizations using in their policy work? (2) How has this differed over time? (3) What technologies have been adopted and then discarded? (4) What technology characteristics predict higher levels of adoption and institution-alization?

This research is important not only because of its long term perspective but because it follows individual state level advocacy organizations. Due to devolution, many of the policy battles are conducted at the state level. These organizations have replaced national level organizations on the front lines. Like many advocacy organizations, these are tiny organizations with very small resources pools. They are much more representative of much of the advocacy community than larger national organizations that are the subject of much of the interest group literature.

## BACKGROUND

The issues considered in this research cover three major lines of inquiry and a number of complex issues. They deal with the state of nonprofit advocacy, nonprofit informatics, organizational change and the overall mission and nature of the nonprofit sector and civil society. First, there is the literature on nonprofit advocacy and the growth of political technology. This is a growing literature and one that is mostly a product of the past few years. Second, there is the related literature on the adoption of technology in nonprofit organizations. These are complementary but distinct bodies of literature. This is also supported and united by the overall literature in organizational change and development. The literature on nonprofit informatics is also of relatively recent vintage and is rather sparse in places (see Cortez & Rafter, 2007). Fortunately, there is applicable material from other sectors that can be used. We will consider each of these areas in turn. We will also attempt to bridge and synthesize the available literature.

# The Growth of Nonprofit Advocacy and Technology

Advocacy has a long and honorable tradition in the nonprofit sector (Salamon, 1994). It represents the sector's ability to protect itself, to deal with social problems and protect society's most vulnerable populations. There is also a need to protect programs that nonprofits offer for children and their families. Having said that, it is also true that advocacy is often controversial and that many nonprofit leaders feel slightly queasy when the topic of political advocacy comes up (Berry & Arons, 2002).

The tactics that nonprofit advocates employ parallels that used by those in other areas of the

public affairs industry. These methods include lobbying, organizing, issues education; conducting marketing campaigns, advocacy related research and so forth (See Haynes & Mickleson, 2003; Smucker, 1999). While there is a less than satisfying body of research attesting to the effectiveness of these techniques (Gerber & Green, 2007 provide an interesting alternative view of what is possible), this is the received wisdom of the nonprofit advocacy arena.

The move toward technology in advocacy began in the late 1980s and early 1990s and was, at first, a primitive analog to traditional forms of advocacy practice (see McNutt & Appenzeller, 2004; Hick & McNutt, 2002). It is helpful to look at the use of advocacy technology as two interrelated spheres-the technological sphere and the corresponding social sphere. Many if not most, nonprofits have access to rudimentary e-mail for their staff. E-mail is used for a host of organizational tasks. It is used in advocacy work because someone adapted this common tool for tasks like gathering information, informing and educating the public, coordinating activities and pressuring decision makers. This requires knowledge beyond what is generally needed to use the tool in other contexts. In order for all of this to work successfully, the organization must not only acquire and adopt the technology; it must develop a system for using that technology to advance organizational goals.

Following McNutt and Appenzeller (2004), we divide the development into the Nascent Phase, the Flowering Phase and the Institutional Phase. Each of these phases is considered in turn.

The Nascent Phase: Early organizations used a combination of technology tools that included Bulletin Boards, Newsgroups and gopher spaces, as well as a variety of off-line technologies. Many were community based organizations and a small number were more formal advocacy organizations (Downing, Fasano, Friedland, McCollough, Mizrahi & Shapiro, 1991; Schwartz, 1996; Wittig & Schmitz, 1996; Yerxa & Moll, 1994). These were primitive approaches that provided very little improvement over traditional methods. In many ways they were considered less than serious approaches to advocacy.

The Flowering Phase: The development of increasingly more powerful and inexpensive ITC technologies fueled the development of the second stage (Bennett & Fielding, 1999; Price, 2000;). There was also a move toward ever more sophisticated approaches to political practice. While acceptance was long in coming, the methodology was beginning to develop. Gradually, technology evolved to the point where it became more viable as an organizing, research and coordination tool.

Aparallel development with technology for issue advocacy is technology for political campaigns (Cornfield, 2004). This also developed slowly and acceptance was long in coming. Many early campaign websites reflected only the offline literature of the campaign (Brochureware). The Internet's abilities to provide interactivity, personalization and 24/7 access were almost completely ignored.

In many ways, these earlier technologies were used as an extension of the mass media that interest groups and political parties had used in the past. This limited the use of some of the obvious advantages of technology.

The Institutional Phase: The end of this stage left electronic advocacy as a supplemental technique to traditional advocacy efforts. Most nonprofit advocacy was conducted by traditional means such as lobbying, campaigns, organizing, research and the media. On balance, it was an expected part of the nonprofit advocacy sector and one that was commonly found in nonprofit advocacy efforts.

The third phase began in the early part of the new millennium. Several developments fueled this transformation. Technology change and the eventual growth of Web 2.0 were certainly a factor. This made other developments possible and desirable. These included the development of virtual advocacy groups (like Move On), on-line campaigns (such as the Million Mouse March), mass infusion oftechnology into political campaigns (such as the Dean and Obama Campaigns) and the development of a cadre of Internet political professions (Cornfield, 2004; Trippi, 2004; McNutt & Menon, 2007). The research base, scarce at first, began to expand with a range of materials in political science, sociology, social work, nonprofit studies, communications and so forth. While the research base is still contradictory in parts, it appears to be growing and evolving. It is much more extensive than it was only a few years ago and important theoretical and methodological innovations are in the developmental stage.

There were also a number of parallel developments. The professionalization of politics played an interesting role in these developments. This includes the movement away from traditional membership based advocacy efforts to professionally staffed and managed advocacy groups (Berry, 1999). It also meant the significant role of consultant and professional political operatives. This coincided with a mass media and direct mail approach to advocacy and political campaigns.

These forces promoted technology in the beginning, but eventually may see it as their undoing. Older technology was used almost as a form of mass media or direct mail and supported this changing regime. The use of technology augured extremely well with the assumptions of the professional political operative. On balance, technology can turn the tables on the managed and controlled political system. What we have come to call Web 2.0 represent a major challenge to earlier technology.

While it is probably premature to say that Blogs, YouTube and Social Networking Sites are a challenge to American mass media, they can definitely frustrate an organization or candidate's attempts to manage and control the message. The fate of Governor George Allen in the infamous Macaca Incident is certainly a cautionary tale about the power of the new Internet.

Another set of forces are the development of open organizing or collaborative development

modalities. This includes Rheingold's (2002) notion of smart mobs, discussion of the open source software movement and the organization of Howard Dean's presidential campaign (Trippi, 2004). The principle here is that people, working via technology, can pool their collective intelligence and abilities to build new and exciting things. Overall direction is at a minimum, if at all. The creation of Wikipedia is one example. Smart mobs have created political protests in a matter of minutes without real leadership. One of these actions is credited with bringing down the President of the Republic of the Philippines (Rheingold, 2002). Much of this analysis lacks a solid empirical backing and subsequent research might yield very different results.

There were also changes in the corresponding e-government arrangements that interface with advocacy (West, 2005; Noveck, 2009). Electronic government that saw people as citizens and encouraged democratic dialog could change the nature of the interaction. The emergence of Web 2.0 as an e-government tool cemented this emerging relationship. Again, much of the research base needed to support these contentions has not yet developed.

Where all of this is leading is a transformational phase for nonprofit advocacy in which cyberspace or the virtual public sphere becomes an arena for action. Already the outlines of this development are being felt, both in the United States and overseas. The movement toward public deliberation in cyberspace is difficult to deny. What we have seen is a progression of technologies and accompanying social practices that have shaped this part of nonprofit advocacy in profound and evolving ways. Eventually, the entire enterprise will change to accommodate these transitions.

From this discussion, we would expect to see new technologies adopted and others fall by the wayside. Newsgroups, for example, were a hot technology in the mid 1990s and are much less used today. This does not explain what happens in individual organizations however. To illuminate these processes, other approaches are needed.

### **Diffusion of Innovations**

The issue of how people accept new ideas is one of the chief concerns of social scientists and has been for many years. One of the most enduring and respected is Roger's diffusion of innovation theory (Rogers, 2003; See also Dillon & Morris, 1996; Robinson, Swan & Newell, 1996; Strang & Soule, 1998). Diffusion of innovation theory is the product of many studies of innovation in a variety of sectors. While it is not without its detractors, Diffusion of Innovation theory has created a relatively comprehensive track record. It is also one of the most comprehensive theories of social change.

Diffusion of innovation theory argues that any innovation is communicated to different population groups through communications networks that exist in organizations and communities. Opinion leaders are key players in this approach as they facilitate or retard acceptance.

Rogers divides the target population into a series of segments that have varying degrees of propensity to accept an innovation. Innovators and early adopters are usually the first to try a new tool and adopt it. They bring in the early majority. The early majority brings in the late majority and the final group, the laggards, may never adopt. In each instance, adopters bring in future adopters via communication mechanisms. This means that implementation is not immediate and rarely is it uniform.

Different organizations adopt innovations at different rates. Certain factors influence how readily organizations take on new innovations. Rogers argues that size (larger organizations were more likely to be innovative), structure, leader characteristics, centralization, formalization, interconnectedness, slack resources and system openness are associated with innovation (Rogers 1995, 380). He observes that many of these dimensions are related to size. Much of the research that attempted to relate these factors to subsequent innovations has demonstrated little relationship with innovation adoption (Rogers, 1995). It is difficult to ignore that size is probably related to innovation potential. Greater slack resources alone can account for this. Organizations with fewer barriers might be more innovative and those with more of a focus on advocacy would be more prone to adopt advocacy technology. Having a consultant would also be important because it would argue for access to networks outside the organization.

Innovations vary in their ability to be diffused. According to Rogers (2003) the critical factors are relative advantage (the innovation works better than what we are using today), Complexity (if it is less complex it is easier to adopt), Compatibility (works with our system). Trialability (we can try a part without the entire piece) and observability (results can be seen). We would assume that innovations that were less complex, offered real improvement in results, more compatible with current technologies, were trialable and could be observed would be more readily adopted.

This is not to say that diffusion of innovation theory is without its critics. One example is that the theory has a pro innovation bias (Rogers, 2003, 105-112). Since some innovations have proved to be bad ideas (an obvious example are drugs that have turned out to have unexpected side effects), this is a serious concern. Those who believe that we are headed toward a technologically driven nightmare are probably not reassured that many in the innovation process have the best of intentions. Then there is the problem of promoting individual blame in diffusion research (Rogers, 2003, 118). The focus of diffusion of innovation research is on individuals so a likely conclusion is that individuals are to blame for many issues. There are also a series of methodological issues that plague research in this area. Still and all, it remains a substantial and well respected framework.

## **Research Objectives**

Considering our research questions and in light of the available literature and theoretical approaches, we can offer the following research objectives:

- 1. To identify what types of high technology are state level child advocacy organizations using in their policy work
- 2. To determine how the use of technology has this differed over time.
- 3. To determine what technologies have been adopted and then discarded.
- 4. To determine what technology characteristics predict higher levels of adoption and institutionalization.

## MAIN FOCUS OF THE CHAPTER<sup>1</sup>

Methodology: This is a descriptive/exploratory study of adoption of political technology by a group of child advocacy programs for the period 2000-2008. Data was collected in 2000, 2004 and 2008. Data was principally captured with a series of surveys, the individual results of which are published elsewhere. The unit of analysis is the individual organization.

Subjects: The sample is comprised of members and former members of Voices for America's Children. This is an umbrella organization formally called the National Association of State Child Advocacy Organizations. The original group (n=62) was supplemented with four additional cases (n=66) and the last group grew to 69 cases. Some of these organizations have dropped out of the Voices network. One organization in the last set was removed because it was clearly a state agency and one had apparently ceased operations (Mail Returned). Each of the organizations was verified with a website or Guidestar entry or both. There were some name changes and other issues as well.

The use of the Voices network as a sampling frame has a number of advantages. It differentiates the organizations concerned with policy matters

from the ones that are concerned with providing representation for individual children. The latter comprise most of the organizations identified in a standard search. Another issue is that most of these organizations are only concerned with children, not children as part of a larger collective.

Methods: Data was collected via mailed questionnaire. The original questionnaire was adapted from an instrument used in another study. Subsequent questionnaires used the original instrument as a base and added additional items for emerging technologies and additional issues. The second questionnaire included items about the beginnings of the Web 2.0 revolution and the last questionnaire asked about those Web 2.0 technologies that have emerged in the past few years. In the last round, we also did a separate investigation of YouTube and Social Networking Sites. Some of these sites are created by friends of the organization and, in many cases, are not linked to the organization's website. A quantitative approach is common in the diffusion of innovation literature and augers well with our goals and intents.

## Results

In the last round we received responses from 42 of the 68 viable organizations for a 61.76% response rate. This is lower than the last two rounds (both around 75%) but is still within acceptable social science standards. There was a moderate amount of missing data, as in the other two rounds.

## **Organizational Characteristics**

These are small organizations. Most have less than ten employees and a few are one or two person programs. Table 1 presents the staff size results for the three periods.

The changes in the staff size are minor. It is reasonable to argue that there is a minimal staff size and most of these organizations are probably at or near that size.

Staff Type	2000	2004	2008	2000-2008 Change
Professional Staff PT FT	1.4186 5.2559	1.413 5.782	1.29 5.95	1286.6941
Support Staff PT FT	.7558 1.5581	.5652 1.304	.83 .52	.07 -1.038

Table 1. Mean reported staff size for three periods

#### Policy Activity

These organizations provide a variety of advocacy and policy-related activities on behalf of children. Some are principally data and information providers doing policy research on children's issues. Others have substantial involvement in lobbying, community organizing and similar advocacy efforts. In Table 2, the self reported time spent on policy is presented.

The table portrays a situation that is essentially similar for all three periods. There are some minor changes but around 40% of the organizations report spending over 75% of their time on policy matters.

#### Technology

This study is principally about technology and its adoption by nonprofit advocacy organizations. In the three rounds, we asked about organizational use of technology for advocacy. Technology underwent a major change during this time period and this is reflected in the ever increasing choices of technology. Many of the techniques that we use today were not developed when the first survey was undertaken in 2000. While some of the underlying technology was developed, much of the Web 2.0 technology had yet to be created.

Table 3 presents much of the older technology that advocates used in the beginning and continue to use today.

This data suggests that most of the traditional arsenal of electronic advocacy is still in place. The exception is in the fax area, where declines can be seen. Some traditional technologies (like newsgroups) have apparently survived [but at a low level of adoption] and some (such as chat) have never enjoyed wide adoption. A similar story is seen in Table 4, where most traditional systems increased modestly and others

Table 5 reviews a large range of both new and more accepted technologies. Fundraising on-line has been a growing part of the political Internet and the data in Table 5 demonstrates that almost all of the responding organizations now do some sort of Internet based or on-line fundraising. In 2000, less than a quarter of the responding organizations reported having this capacity. The growth in on-line fundraising was apparently in secure credit card transactions, not in shop for a cause fundraising. Videoteleconferencing has become far less expensive in the past few years but adoption, in this group, has not increased.

Table 2. Percentage time spent on policy work by year of survey

Year	2000 %	2004 %	2008 %
25% or Less	17.82	13	11.9
26%-50%	13.3	26.1	19.0
51%-75%	26.7	19.6	31.0
76%-100%	42.2	41.3	38.1

Technique	2000 N %	2004 N %	2008 N %	Percent Change 2000- 2008
Electronic Mail [E-Mail] to Coordinate Policy Influ- ence Efforts within your organization	41 89.1	45 95.7	39 92.9	2.8
Electronic Mail [E-Mail] to Coordinate Policy Influ- ence Efforts outside of your organization	34 77.3	44 93.6	37 88.1	10.8
Electronic Mail [E-Mail] to Decision-Makers	22 60	39 83.0	34 81.0	21
Electronic Mail Discussion List About Policy Issues (List serve)	15 33.3	23 48.9	21 50.0	16.7
Newsgroups	8 17.8	9 19.1	8 19.0	1,2
Chat Rooms	2 4.4	3 6.4	2.4.8	.4
Standard Fax	41 89.1	39 83.0	33 78.6	-10.5
Broadcast Fax	34 73.8	23 48.9	14 33.3	40.5
Fax on Demand	7 15.2	3 6.4	7 16.7	-1.5
Distribution Lists [Mass E-Mail Distribution]	11 23.9	39 83.0	41 97.6	73.7
Conference Calls	35 76.1	41 87.2	39 92.9	16.8

#### Table 3. Older electronic advocacy techniques reported

#### Table 4. Reported website characteristics

Technique	2000 N %	2004 N %	2008 N %	Percent Change 2000-2008
Copies of legislation	15 32.6	19 40.4	31 73.8	41.2
Case Studies	6 13.3	7 14.9	16 38.1	24.8
Statistics	33 71.7	35 74.5	40 95.2	23.5
Links to Important Policy Sites	30 65.2	35 74.5	37 88.1	22.9
Advocacy Technique How to's	18 38.1	33 70.2	28 66.7	28.6
Banner Ads on other's websites	4 8.9	6 12.8	6 14.1	5.2
Streaming Video	2 4.3	4 8.5	12 28.6	24.3

<sup>1</sup> All current members of Voices have a website

(Such as Banner Ads) have never taken off. The growth of video in the Internet as a whole is represented to some extent by some growth in streaming video.

There have been major increases in on-line survey research, on-line volunteer recruiting and comprehensive advocacy software. Many of the newer techniques, largely from Web 2.0 and related paradigms, have modest adoption experience with this group. The final group of technologies is essentially techniques for issue research (Table 6). These technologies show modest growth and there is evidence that the newer technologies are being implemented. In sum, this represents a stable picture of technology use. Contrary to what might be assumed, older technology continues to soldier on along with newer technologies. Some technologies never achieved wide adoption. Two examples are Chat and Banner ads. These never became popular with most of the organizations in our sample.

Technique	2000 N %	2004 N %	2008 N %	Percent Change 2000-2008
On-line Fund Raising	10 21.7	21 44.7	28 66.7	45
Secure Donation Site	5 10.9	17 36.2	29 69.0	47.3
Shop for A Cause Site	5 10.9	5 10.6	3 7.1	-2.9
VideoTeleconferencing	1 2.2	4 8.5	2 4.8	2.6
Databases		31 66	9 21.4	
On-line Survey Research	5 10.9	11 23.4	34 81.0	70.1
On-line Volunteer Recruiting	9 19.6	15 31.9	18 42.9	32
Geographic Information Systems	4 8.7	13 27.7	10 23.8	15.1
On-line Mapping			10 23.8	
Secure Intranet	6 13	10 21.3	9 21.4	8.4
Meet ups		2 4.3	1 2.4	
Wireless Applications and Tools		8 17.0	11 26.2	
Instant Messaging and Short Message Systems		1 2.1	11 26.2	
Blog/Weblogs		2 4.3	6 14.3	
Wiki			4 9.8	
Podcasting			2 4.8	
Video Sharing			5 11.9	
Image Sharing			4 9.8	
Social Networking Site			6 14.3	
Virtual Reality Simulation			1 2.4	
On-Line Petitions		4 8.5	10 23.8	
Comprehensive Advocacy Software		5 10.6	18 42.9	
Web-based Conferencing			5 11.9	

Table 5. General electronic advocacy techniques reported

#### Table 6. Issue research techniques

Technique	2000	2004	2008	Percent Change 2000-2008
Policy Related Listservs	29 63	27 57.5	26 61.9	-1.1
Policy Related Web Sites	30 65.2	25 53.2	29 69	3.8
Social Bookmarking Sites			3 7.1	
RSS Feeds/Tagging/Sharing			9 21.4	

## Barriers to Technology Use

One of the major factors in adoption of new technology is the nature of barriers to adoption. We asked respondents about a range of barriers that covered organizational, societal, interpersonal and economic barriers. Table 7 presents this data for an eight year period.

Expertise was the most frequently cited barrier. In 2000, 69.6% of the respondents identified

Barrier	N	%	N	%	N	%	Percent Change 2000-2008
		2000	20	004	20	008	
Expertise	32	69.6	30	65.2	32	76.2	6.6
Expense	29	63	34	73.9	24	57.1	-5.1
Equipment	20	43.5	19	41.3	24	57.1	13.6
Access (Universal)	13	28.3	16	34.8	5	11.3	-17
Awareness	8	17.4	15	32.6	12	29.3	11.9
External Resistance	5	10.9	5	10.9	3	7.1	-3.8
Internal Resistance	2	4.3	1	2.2	5	11.9	7.6
Staff Resistance	2	4.3	5	10.9	2	4.8	.5
Management Approval	2	4.3	1	2.2	5	11.9	7.6

Table 7. Reported barriers to technology adoption 2000-2008

expertise as a barrier, followed by expense and equipment. In 2008 expertise remained the most frequently named barrier.

Equipment has increased by the largest percentage, followed by awareness, while access has declined the most. Resistance continued to be a minor issue, at least according to this data, as does management approval.

## Perceived Effectiveness and Use of Electronic Advocacy Techniques by other Groups

These items ask about the perceived level of use of electronic advocacy techniques by other groups and perceived effectiveness of electronic advocacy techniques. Use by other groups is a rough measure of local usage. The summary statistics for the three periods are presented below. While 2008 is lower than the other two (although very close to the 2000 figure), it is still well above the midpoint. We also asked about the perceived effectiveness of electronic advocacy techniques. The results are presented in Table 8. Again, the score was lower than in 2004, but higher than in 2000. Still, all values were substantially above the midpoint and the differences in the two ranges are very modest.

## **Technical Support**

The type of technical support an organization has often determines the potential technology that can be used. It can also provide new ideas and serve as a conduit for innovation. We asked if organizations had either an internal support person or a consultant or both to provide technical support. There was a small increase in both possibilities

Table 8. Perceived use	by other groups an	d perceived effectiveness	for three periods
	of one groups and		<i>for the periods</i>

	2000	2004	2008
Perceived Use by other Groups	5.0395 SD 1.6373	M=5.4225 SD 1.7253	M=5.0000 SD=1.638
Perceived Effectiveness	M=4.6250 SD=2.0716	M=5.7073 SD=1.66	M=4.85 SD=1.395

Support Type	2000	2004	2008	Percent Change
Internal Support	58.7%	55.6%	61%	2.3
Consultant	54.3%	73.3%	61%	6.7

Table 9. Technical assistance resources reported

over the three waves in the study (Table 9). This is a pattern that changes little.

We do not account for volunteer technical support people.

#### CONCLUSION

This study has examined the use of political or advocacy technology in a group of state level child advocacy organizations over an eight year period. We will organize our discussion around the four research objectives. Our first two objectives, To identify what types of high technology are state level child advocacy organizations using in their policy work and To determine how the use of technology has differed over time are explored in the section entitled technology and Tables 3-6. These tables display a pattern that is difficult to ignore. Older technology was adopted in most organizations either before or during the period between 2000 and 2004. E-mail, websites, discussion lists and so forth are still popular among this group. Very little of this technology has been abandoned. Even technologies like newsgroups have not changed much in user share. Some technologies (like Chat and Banner Ads) clearly did not catch on. These two technologies would have issues in terms of complexity and compatibility, so diffusion of innovation theory would tend to predict difficulty in adopting these systems. Others, such as Geographic Information Systems, grew in usage over the three data points, starting out slow and moving toward more wide spread acceptance. The latter pattern is more consistent with diffusion of innovation theory.

The newer, Web 2.0 technologies have not enjoyed the adoption experience that is enjoyed by the older technologies. It may be that they just have not had the time to reach their adoption potential. Most of these technologies are products of the past ten years. There are certainly other explanations that are possible. It may be that advocacy applications weren't apparent or that the technology did not support advocacy strategy.

Our third objective, *To determine what technologies have been adopted and then discarded*. In the aggregate, this is a rare event. There are organizations that have reported using a technology at one point and then stopped using it. The various forms of fax appear to be declining in usage. Geographic Information Systems have declined slightly, but that might be due to the emergence of web based systems like Google Maps.

Discussion of our last objective, *To determine what technology characteristics predict higher levels of adoption and institutionalization, is* informed by Rogers (2003) ideas about adoption and innovation characteristics. Older technology is widely adopted in these organizations. E-mail, Websites, Discussion Groups and On-line Fundraising enjoy considerable popularity. These are technologies that score well on most of the criteria and that have had a long period of time to diffuse. Others, such as Banner Ads and chat would evaluate poorly on most of the criteria and the outcomes of this research validate this conclusion.

Our findings tend to be supportive of diffusion of innovation theory. Both the criteria for adoption and the adoption process seem supported, to an extent, by the data. The Barriers to technology use seem to be stable over time with expertise, equipment and expense as the largest contributors.

This research should be considered in light of its limitations. There are some dangers inherent in the survey method (return rate, misperceived questions, social desirability effect and so forth) that generally apply to all research of this type. The response rate varies from survey to survey. The sample creates some problems for generalizability. The sample (and the population) are both small. This period was also problematic for many child advocates. The combination of a conservative federal government and challenging economic conditions pushed many organizations to their limits. These rounds also roughly corresponded with national elections. A qualitative dimension is lacking from this study and could become part of subsequent studies if resources permit.

This research has looked at technology adoption in a group of state-level child advocacy organizations over an eight year period. Technology has created new opportunities for nonprofit organizations to realize their missions and advance social goals. The present population is probably more successful at doing that than many comparable advocates.

Nonprofit advocacy organizations should take heed of not only this group's experience but the recent experience of the winners of the 2008 US Presidential Campaign. The success of the Obama Campaign in using the Internet and technology allowed a candidate with little initial chance of winning to prevail in the face of much more traditionally organized campaigns. Society and the political system are changing and changing quickly. If child advocacy organizations are to survive, they must adapt to changing techniques and evolving policy arenas.

## FUTURE RESEARCH DIRECTIONS

This research has implications for theory building in public and nonprofit management. It demonstrates that technologies are adopted at different rates and that some technologies never achieve widespread adoption. It also provides a baseline for future studies of the adoption of technology in nonprofit organizations.

Additional studies of the general trends in advocacy technology will clearly be needed. Since the last survey was undertaken there have been major technological developments (such as Twitter) that need to be explored. Studies of individual technologies are also needed. This could add an additional dimension to the analysis. More qualitative research is needed to flesh out the overall trends.

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## **KEY TERMS AND DEFINITIONS**

Adoption of an Innovation: This means that an innovation has been through the Diffusion of Innovation process and has been put into use within the organization.

Advocacy Technology: This means information and communications technology applied to political action and political processes. Other names for this process are Cyberactivism, electronic advocacy and on-line advocacy.

**Child Advocacy:** Means advocating for children's rights and conditions. This can include legislative and community action, research and media interventions. Another understanding of child advocacy is conducting efforts for an individual child. While these are different terms, the fact that they describe different activities is often confusing.

**Flash Mob:** This is Howard Rheingold's term to describe a spontaneous self-organized action group created with information technology.

**Innovation:** An innovation is something new to a person or organization. It need not be new to everyone.

**Macaca Incident:** This is a famous occurrence in the 2006 campaign of U.S. Senator George Allen where he was reported to refer to S.R. Sidarth (an American of Indian decent) who was a tracker for Allen's opponent as Macaca. A wave of internet-led negative publicity ensued which is widely credited for ending Allen's political career.

**Nonprofit Advocacy:** A general term used to describe political action by nonprofit organizations. This might include lobbying, research, community organizing, creating political action committees and so forth.

Web 2.0: is a general term for new technology that interactive, allows for combining collective intelligence, using the Internet as platform and user generated content. Applications that are part of Web 2.0 are blogs, Wikis, Social Networking Sites, Social Bookmarking and virtual worlds. Social Media and Social Software cover similar ground.

## Section 7 Young People and Use of ICT

## Chapter 21 How Young People are Using Communication Technologies as Platforms and Pathways to Engagement: What the Research Tells Us

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#### ABSTRACT

This chapter is an assessment of what we know empirically about how communication technologies are being used by young people (typically defined as those between the ages of 18 and 29) as both platforms and pathways for civic and political engagement. An overview of the current research concerning the relationship between communication technologies and civic and political engagement is used as the basis for this investigation. Previous research fails to acknowledge the difference between individuals who are engaged only by using communication technologies (technology as a platform for participation) versus those who are engaged beyond the exclusive use of communication technologies (technology as a pathway for participation). This distinction will better enable government officials, agencies, and practitioners to develop comprehensive strategies for engaging young people based on what we know about how technology is being utilized. The analysis reveals that technology can serve as both a platform and pathway for political engagement. Whether the same is true for civic engagement is unclear. The authors also provide recommendations to policy and decision makers based on the results of their analysis of the extant literature.

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#### INTRODUCTION

Scholars continue to examine how communication technologies such as the telephone, television, and Internet affect the way citizens interact with each other, civic organizations, and the government. Each new invention raises the same question in the extant literature: are the latest communication technologies complementing, enhancing, or detracting from civic and political life? The investigation of the potential impact of communication technologies on levels of engagement has been prompted by falling rates of political participation and the decline of involvement in civic organizations especially among young people (Delli Carpini, 2001; Levine, 2007; Putnam, 1995, 2001). Robert Putnam (2001) argues that this phenomenon is connected to a decline in social capital, which he defines as "the features of social organization such as networks, norms, and trust that facilitate coordination and cooperation for mutual benefit" (p. 66). This approach assumes that engagement, whether civic or political, will enhance levels of social trust and efficacy in citizenship, thereby strengthening our democracy.

Since the arrival of the World Wide Web in the late 1990s, the "Millennial Generation," or "Generation Z" (Gambone, 2001; Leonard, 2000), has been at the center of the technological landscape. This generation of young people has been at the ground floor concerning the use of new technology such as instant messaging, peer-to-peer file swapping, and social networking. As increasing numbers of young people use communication technologies to express themselves creatively and to connect with others, the likelihood of increasing their levels of engagement strengthens. These activities are part of what is called "Web 2.0." This includes online applications that facilitate interactive information sharing and user-centered design such as blogs and social networking sites (Harrison and Barthel, 2009). Some recent evidence from the 2006 and 2008 campaigns suggests that youth engagement may be improving (Kirby and Marcelo, 2006; Marcelo and Kirby, 2008). The potential of communication technologies to affect the civic and political engagement of young people is at a tipping point and is ready for closer examination.

## BACKGROUND

There is general agreement that the unprecedented growth in society's use of communication technologies has the potential to transform our civic and political existence (Polat, 2005; Ward, Gibson and Lusoli, 2003), but few researchers agree about the nature of this change (Davis, 2005; Katz and Rice, 2002; Norris, 2001). One group believes that communication technologies have a positive impact on civic engagement (Lin, Cook, and Burt, 2001; Gibson, Howard, and Ward, 2000; Hampton and Wellman, 2001, 2003) and political engagement (Barber, 2001; Hagen and Mayer, 2000; Krueger, 2002; Vettehen, Hagemann and Van Snippenburg, 2004). This theory is based on technology lowering the costs of communication, association, and participation; and the potential of "wired" communities to strengthen civil society (Franzen, 2000; Howard, Rainie and Jones, 2001) and mobilize inactive populations (Barber, 2001; Krueger, 2002; Weber, Loumakis and Bergman, 2003). One of the strongest arguments to support this position focuses on the potential of these communication technologies to increase young people's levels of civic and political engagement (Delli Carpini, 2000). This demographic group has been found to be the most likely of all age groups to use such technologies (Kaiser, 2010; Xenos and Foot, 2008).

A second view contends that communication technologies will not have a substantive impact on levels of civic engagement (Gross, Juvonen and Gable, 2002; Katz and Aspden, 1997; Kohut, 2000) and political engagement (Bimber and Davis, 2003; Ward et al., 2003; Gibson et al., 2000). This view assumes that the present composition of civic and political life will not be greatly impacted positively or negatively by such technologies. Some research has determined that individuals who were already engaged were more likely to use technology to enhance this behavior (Delli Carpini, 2000; Gibson and Ward, 1999; Resnick, 1999), while those not engaged already are not motivated by technology to begin participating. Communication technologies in this more cautious view are seen as malleable, adapting to preexisting civic and political power structures.

Finally, a third group believes that communication technologies will detract from a person's civic engagement (Kraut, Patterson, Lundmark, Kiesler, Mukophadhyay and Scherlis, 1998; Nie and Erbring, 2000; Katz, Rice, and Aspden, 2001; Putnam, 2001; Thompson and Nadler, 2002) and political engagement (Johnson and Kaye, 1998; Scheufele and Nisbet, 2002; Sunstein, 2001, 2005). They argue that the use of such communication technologies promotes an increased level of mistrust, erosion of psychological well-being, and the depersonalization of existing relationships. Putnam (1995) points out that there are advantages to face-to-face forms of interaction that simply cannot be achieved through technology-based forms of interaction. Some early studies have also concluded that such communication technologies have negative impacts on political participation (Davis, 1994; Cappella and Jamieson, 1997).

Boulianne's (2009) meta-analysis of the literature concerning the effects of technology on civic and political participation reinforces this lack of consensus in the literature. While some studies report no effect of the various technologies examined, a majority of studies do find a positive correlation between these technologies and political engagement. Boulianne's analysis also finds that the impact of technology is greater in the most recent studies. Our survey of the literature forms the foundation for a more precise and inclusive understanding of the relationship between communication technologies and the levels of civic and political engagement by young people. At the same time, we highlight empirical findings regarding the connection between technology and political and civic engagement to guide policy and decision makers in their choices about how to deploy technology for civic and political participation and to guide researchers to more fruitful avenues of investigation.

## LIMITATIONS OF PREVIOUS RESEARCH

#### **Changing Nature of Technology**

Understanding the impact of technology on political and civic engagement has proven to be difficult for a number of reasons (Bimber, 2000). One reason is that technology and the patterns of its uses are constantly changing. Studying the impact of communication technologies on civic and political life has moved from "unjustifiable euphoria, abrupt and equally unjustifiable skepticism, and the gradual realization that web-based human interaction really does have unique [civic] and politically significant properties" (DiMaggio, Hargittai, Neumann and Robinson, 2001). Althaus and Tewksbury (2000) therefore argue that "any study of the ... population's [technology] use will be extremely time bound" and that the impact of communication technologies "may change dramatically as use of ... technologies becomes more widespread in the ... population" (p. 22). At the same time, we are at the point where the numbers of people acquiring and using these technologies have reached a threshold for analysis (Kaiser, 2010). This means that we have reached the minimum number of individuals who are using these technologies to provide enough information for study.

#### The Digital Divide

Another limitation of the literature concerns access to communication technologies. This is an

important consideration because rapid growth in communication technologies has had the residual effect of creating a technological divide between segments of the population. Without access, use of communication technologies for engagement is a moot point. The concept known as the "digital divide" initially referred to the mere ownership of a computer, but later was expanded to include differences in basic access (Davison and Cotton, 2003; Hargittai, 2002), online literacy and skills (Robinson, Kestnbaum, Neustadtl and Alverez 2003; Wilson, 2000), socio-economic status (McLaren and Zappalà, 2002; Attewell and Battle 1999), education (Robinson et al., 2003; Katz and Aspden, 1997), race and ethnicity (Hoffman, Novak and Schlosser, 2000; Neu, Anderson and Bikson 1999), culture (Drori and Jang, 2003), nationalities (Guillen and Suarez, 2005) and age (DiMaggio et al., 2004; Kruat et al., 1996).

A number of studies have shown a trend towards decreasing the gap in a number of areas including gender (Bimber 2000); political parties (Ward and Gibson, 2003; Norris, 2001), race (Walsh, Gazala and Ham, 2001; Latimer, 2001) education and age (Clemente, 1998), and socioeconomic status (Howard et al., 2001; Katz et al., 2001). Even though the digital divide is still a concern, there has been considerable success in bridging the gap, especially in the United States. For example, Internet World Stats (2010; data estimates for December 31, 2009) estimates that globally nearly 27% of the world's population has Internet access. In the United States, Internet access is considerably higher than that and has been expanding for more than a decade. In 1997, 64% of the members of the "younger generation" had access to the Internet, as compared to 50% of those in their parents' age bracket (Jennings and Zeitner, 2003; data collected in 1997). Nielsen/ NetRatings reported in March 2004 that 75% of American young people ages 18 to 24 had Internet access at home. Access is slightly higher among those in the next age bracket (25 to 34), and Nielsen estimated that 75% of all residents of the U.S. had Internet access. Nielsen's estimates were based on projections from 2000 Census Data. Pew Internet, looking at American young adults ages 18 to 29, found Internet use to be even higher -93% (Lenhart, et al., 2010; data collected July 26 to December 27, 2009).

The laptop is the computer of choice for young adults, with two-thirds of young adults (18 to 29 years old) owning laptops or notebooks. In addition, 81% of young adults use wireless Internet services. Most young adults (93%) also have cell phones, and 55% say they use them (or some other handheld devices) to access the Internet (Lenhart, Purcell, Smith and Zickuhr, 2010). While wireless use varies somewhat by gender (men are a little more likely to use wireless services than women) and race (Blacks are more likely to use wireless than Whites or Hispanics), age and income play a larger part in wireless Internet use by Americans. Young adults are much more likely to be wireless users than others and wireless use increases as income goes up - 42% of those earning less than \$30,000 are wireless users, compared to 73% of those earning more than \$75,000 (Lenhart, et al., 2010). It appears that young people, particularly those in the United States, have widespread access to communication technologies.

## Hours of Use Needs to be Separated from Patterns of Use

The current literature does not provide an adequate framework for analyzing the relationship between technology and the strength of civic and political engagement. This failure is based on scholars oversimplifying the influence of technology by only focusing on hours of use rather than patterns of use (Nie and Erbring, 2000; Norris and Jones, 1998). This is an important distinction to recognize because people can use technology in a variety of ways and for differing reasons. For example, scholars have shown that the most frequent use of technology is for social interaction such as e-mail (Day, Janus and Davis, 2005; National Telecommunications and Information Administration, 2008). The second most common use is searching for information (NTIA, 2008). Concerning social networking sites, Pew Internet reports that 72% of those American young adults (18- to 29-year olds) with Internet access are using social networking Web sites; and Facebook is the most popular social networking site for this group (Pew, 2010). Young adults are also more likely to use Twitter than are teens or older adults, with one-third of young adults reporting that they are Twitter users, as compared to 19% of older adults and 10% of teenagers (Lenhart, et al., 2010).

Including patterns of use has important implications for young people. One example is that technology is more likely to be used by young people for its social assets, not its potential for greater engagement in public issues and concerns. Simply pointing out that young people are spending more time using technology fails to make this important distinction. This may help to explain why making online opportunities available for engagement may be unsuccessful. This preliminary survey of the research includes a broader characterization of engagement that takes into account patterns of use.

## Unclear Distinctions between Civic and Political Engagement

Another limitation is that previous research blurred the lines between civic and political engagement. This could diminish the reliability of previous conclusions. Clear distinctions need to be made between what constitutes civic and political engagement. Civic engagement (Bennett, 2008), broadly understood, focuses on the public good through sustained commitment in an association and can be related to both political participation and community involvement. Our definition separates the types of engagement exclusively related to political activity from those that are purely community centered. Specifically, political engagement consists of involvement in activities directly related to party and electoral politics, including learning and deliberating about public issues, donating money to a campaign, registering to vote, voting, and participating in party politics such as obtaining signatures for candidates or displaying signs or stickers in support of and volunteering to work for candidates and political organizations.

Civic engagement consists of involvement in activities related to advocacy on behalf of public issues, aside from electoral or party politics. This could include working together to solve a community problem; corresponding with elected officials and others on public issues; responding to requests for input on public issues (e.g., attending hearings on a proposed local, state, or federal regulations, or providing suggestions online to proposed changes in local, state, or federal policies), active membership in a nonpartisan group or association; donating money or participating in fundraising for a charitable cause, or volunteering for a nonpartisan organization. Both types of engagement, civic and political, can be affected through the use of communication technologies in unique ways and should therefore be studied individually.

# Need to Distinguish Between Platforms and Pathways

Finally, earlier research failed to move beyond the rudimentary understanding of technology as a pathway for young people's civic and political engagement. What transpires between young people in these new spaces is deemed unimportant by many scholars because certain activities do not fit into the traditional models of youth engagement (Bennett, 2006). However, communication technologies represent a new and unique space (Pettingill, 2008) for youth engagement which needs to be considered when developing a new model. The traditional models suffer from three central deficiencies: [A]n inflexible model of organizational commitment, an antiquated understanding of contemporary group membership, and the assumption that nearly all forms of engagement are equal in the sense of the efficacy they convey to participants. (Pettingill, 2008, p. 157)

These models measure the impact of communication technologies on civic and political engagement as an all or nothing sum game, which has been criticized as being too rigid (Bucey and Gregson, 2001). This method is based on the erroneous assumption that communication technologies only offer one type of experience, for one type of audience, rather than multiple motives and practices with various types of users. Gibson, Lusoli and Ward (2005) addresses this concern by describing a more encompassing model of technology-based participation as one that "takes into account a wider range of online participatory behaviors and incorporates the various new forms of stimuli present in the new media that can kick-start those behaviors" (p. 10). Based on this broader conception, participation includes discussing politics online in a chat group or via e-mail, viewing campaign ads and other video at sites like YouTube, visiting a campaign Web site to learn about the issues, or donating time or money online.

The importance of increased knowledge and conversation (Kim, 2001; Niemi and Junn, 1998) is particularly significant when studying engagement by young people. Communication technologies provide a source of information and a sphere for expression (Dahlgren, 2000), both of which support civic and political engagement. We refer to these forms of participation as "platforms" for engagement, in which individuals participate exclusively through technological interactions – via the Internet, blogs, and social networks and so on. Take for example the more recent phenomenon of blogging. A blog is a Web site that is updated frequently and maintained by an individual with regular entries of commentary, descriptions of

events, or other material such as graphics or video. The significance of blogging has been realized through a series of high profile cases. For example, bloggers kept alive the account of Senate Majority Leader Trent Lott's racist public comments. They discovered and continued to blog about similar occurrences in his past, ultimately costing Senator Lott his leadership position (Shachtman, 2002).

The Lott example shows that individual bloggers can make their voices heard and contribute to the public discourse. Even if their investigations did not have such a dramatic impact on the political world, their expression would still be a form of engagement which should be acknowledged. Scholars must not continue to ignore technologybased conversations, especially those that encourage learning and dialogue because any level of civic and political knowledge has the potential to reinforce our democratic principles and the importance of citizenship (Galston, 2001; Milner, 2002). It is important to note that the use of blogging by young people has decreased 9% from 2007 and 2009 (Lenhart, et al., 2010). There is speculation that the decrease in blogging among teens and young adults may be attributed to increased use of Facebook, which has a blogging feature. As new technologies emerge this type of displacement may continue. We cannot, therefore, adhere to traditional models of engagement, neglect to understand the ways that technology changes, and ignore how young people adapt to changing technology environments

Forms of engagement that use social media as platforms for participation may be the most difficult to assess. It is easy to catalog the various ways that technology might facilitate public discourse. However, it is much more difficult to assess whether they have the intended effect of fostering online conversation and interaction - and among which age groups - because they are private acts on the part of individuals. (Even though they occur in the ostensibly "public" realm of Internet communication, they are not readily observed by the "public" as one sits alone in his/her room blogging with a few others sitting alone in their rooms.) In spite of this difficulty, these technology-based acts of engagement can sometimes be assessed in terms of outcomes (as in the Lott example) or in terms of successful solicitations of participation (for example, if the Internet is used to solicit campaign contributions that can be made over the Internet).

A second possibility for participation concerns the potential of technology to promote activities that are conducive to democracy, such as mobilization. We refer to these forms of participation as "pathways" to engagement - technology is used to instigate face-to-face interactions and involvement. The technology candidate of 2004 was Governor Howard Dean, who, with the help of thousands of bloggers and Meetup.com, developed an online community that decentralized his campaign structure. As a result, Dean was able to bypass the existing party infrastructure and create his own online network of supporters. This Internet strategy led to more than 800 monthly meetings throughout the country as well as to his win in the MoveOn.org online primary. Joe Trippi, Dean's campaign manager, summarized the effect of a technology-based participatory culture: "There is no way to understate the importance of what MoveOn.org and its members proved - that the net can be used to mobilize huge numbers of [people at the] grassroots to take local action beyond their monitors" (2003). Trippi acknowledged that communication technologies such as the Internet can be powerful tools that engage young, grassroots coalitions for a cause or campaign.

There are many more examples of communication technologies being successfully used to promote engagement among young people. These outcomes of technology are somewhat easier to assess – have new technologies cause anyone to do anything – attend a meeting; make phone calls on behalf of a candidate; go door-to-door distributing campaign literature. One reason for this is that these are public acts and therefore more easily observed.

To address these previous limitations, this review of existing literature concerning the impact of communication technologies on civic and political engagement of young people will focus on post-2002 research; it will clearly separate what constitutes civic from political engagement, and, finally, it will distinguish between whether the communication technology is being used as a platform or as a pathway to civic and political engagement. This will broaden our understanding by acknowledging activities such as use of e-mail and of social networking sites. We need to consider how these communication technologies can support engagement both as platforms and as pathways, thereby creating conditions that allow young people to participate in a meaningful way.

#### SCOPE AND METHODOLOGY

How are communication technologies being used by young people? To what extent are the communication technologies a platform for civic and political participation? Is there evidence that young people are engaging one another in political conversations through these technologies? These communication technologies may be pathways to engagement. They may be motivating young people to participate in more traditional forms of face-to-face civic and political interaction, whether it is in the electoral process, party politics, social movements, or other forms of political activity. Finally, what are the implications of this analysis for those seeking to further involve young people in civic and political life?

We examined a total of 26 research articles as the basis for this analysis. This new approach to conceptualization of the research will enhance the ability of government officials, agencies and practitioners to develop comprehensive strategies for engaging young people because it will encourage them to think more carefully about what they are trying to achieve and what evidence shows about its likelihood of success. If there is no evidence, then perhaps policy- and decision makers will investigate the possibility of funding research to discover in what ways technology is being used and what motivates those who are not currently participating in civic and political affairs.

Our analysis seeks to expand the understanding of how communication technologies impact the levels of civic and political engagement by young people. We will not comment on the methodological differences of the studies we review because this is outside the scope of our project. Our analysis incorporates the relevant criteria from the traditional model of youth engagement with new criteria that take into account the unique qualities of communication technologies. There is relatively little systematic research on this relationship with young people. This means we had to include studies that focused on the effect of communication technologies on engagement across all age groups. Since we are generalizing partially from all age groups and not just young people, we must acknowledge that the accuracy of our analysis is diminished because technology usage rates are not consistent across age groups. Younger people are more likely to use the types of communication technologies examined in this study. The age variations are listed in the discussion section where appropriate.

We have also separated civic from political forms of engagement. Weissberg (2005) argues that conventional inquiries on political participation are conceptually vague and thus fail to capture the varieties of engagement in the real world. Our classification divides the kinds of engagement solely related to political activity from those that are only community centered, such as volunteering to raise money for a charity as opposed to raising money for a partisan campaign. In particular, political engagement includes actions unequivocally linked to party and electoral politics such as learning and deliberating about public issues as an advocate for a political party, donating money to a campaign, registering to vote, voting, and participating in party politics (such as obtaining signatures for candidates, wearing buttons or displaying signs or stickers in support of a candidate or a political organization).

Civic engagement consists of participation in activities connected to advocacy on behalf of public issues, aside from electoral or party politics. This includes working with others to resolve a community problem, corresponding with elected officials and others concerning public issues, participating in the deliberations pertaining to public policy and local state and federal regulations, active membership in a nonpolitical group or association, donating money or participating in fundraising for a charitable cause, and volunteering for a non-electoral organization. Some of the studies were used for both civic and political engagement when the analysis treated each as an independent variable. Several studies were excluded due to the blurring of civic and political engagement in their analysis. The studies are also not entirely focused on the United States. This decision reflected the limited research examining the relationship between engagement and communication technologies.

## TECHNOLOGY AS PLATFORMS AND PATHWAYS

If we see the potential of technology as both a platform and a pathway for participation, then we should also be able to see that technology can be a platform for civic and political engagement, and it can be a pathway for both forms of engagement, too – political and civic. In the next two sections, we provide illustrations of how technology can function in these capacities.

## Technology as a Platform for Political or Civic Engagement

Technology serves as a platform when people use it as a medium to share information and/or resources. Related to politics, this can include

obtaining information from a campaign Web site, viewing an online political video, signing an online petition, sending a contribution to a candidate or party, participating in an online town hall or engaging with others politically on a blog or social networking site. In terms of civic engagement, this can consist of viewing a podcast providing information about an environmental issue impacting a local community. e-mailing friends and acquaintances about a social issue, making a charitable contribution, reading a newsletter from a civic organization or engaging with others civically on a blog or social networking site. The purpose here is not to evaluate the quality of engagement or determine its veracity, but to describe ways in which technology acted as a platform which directed the individual to engage politically or civically at some additional level.

## Technology as a Pathway for Political and Civic Engagement

Technology serves as a pathway when people use it to spark or coordinate activity (usually non-electronic). Again, the level of engagement was not considered in this preliminary review. Concerning politics, the technology would be considered a pathway if the individual or group went to a campaign event, posted a political sign in their yard, participated in a fundraiser for a candidate, or voted in an election. Associated with civic engagement, a technological pathway would include volunteer service at a non-profit agency, advocacy on specific social issues, raising money for a social cause, attending a local town hall forum, or serving on a neighborhood association. Again, the purpose here is not to evaluate the quality of engagement or determine its value. The idea is that the technology acted as a pathway which directed the individual to become politically engaged at some additional level. There were several instances in which a determination had to be made about whether a particular activity would be considered a platform or a pathway. For example, an individual who contributed money online was classified as using the Internet as a platform. The same individual who went online to a campaign Web site and then decided to contribute money through the mail is also described as using the technology as a platform.

## FINDINGS

## Political Engagement

Communication technologies played a significant role during the 2008 Presidential campaign between Barack Obama and John McCain. Obama's use of technology during the 2008 campaign has some scholars characterizing him as the first Internet president. Compared to his opponent, Obama had four times the number of Facebook followers, 24 times the Twitter fans, and three times the number of visitors to his site in the final campaign week (Ratliff, 2009). The Obama campaign also used online platforms such as the Neighbor-to-Neighbor tool on My.BarackObama. com. This allowed the campaign to reach a larger number of young people in a short time for social activities, such as sign making and door-to-door petitioning. Obama even announced his selection for Vice President over text message (Latimer, 2008). Modern political campaigns have incorporated technology as part of an overall strategy to engage the electorate. A preliminary survey of the literature will help us to better understand whether the technology available is impacting young people's level of engagement.

In terms of voter turnout, almost two million more young Americans under 30 voted in the 2008 presidential elections as compared to the 2004 elections. (CIRCLE, 2008). Between 22 and 24 million young Americans ages 18–29 voted, resulting in an estimated youth voter turnout of between 49.3 and 54.5 percent. The youth turnout was 11 percentage points higher than in 1996, which was a low point after several decades of decline. The all-time highest youth turnout was 55.4 percent in 1972, the first year that 18-yearolds could vote in a presidential election. While young people increased their turnout significantly in 2008, older adults voted at lower rates than in 2004 and only slightly above their 2000 level. Sixty-six percent of young people voted for Barack Obama, the greatest level of support for a presidential candidate in this age group. Many scholars believe that this surge in youth voter turnout is due at least in part to Obama using technology such as Twitter and social networking sites such as Facebook to organize support.

## What We Know about Technology as a Platform for Political Engagement

We examined a total of seven articles for the section on platforms and eight articles concerning pathways. The information was broken down by the type of technology and type of online application. In this section, we are using the term, Internet, in a more general sense. Some of the studies we read focused on the use of the Internet as an independent variable and included activities ranging from viewing news online and surfing to visiting campaign Web sites. If there was a study available relating to the effect of a specific technology on Internet use in any form, it was included as part of the analysis.

A number of studies found evidence to support the claim that students' use of the Internet as a platform increased their political engagement. In particular, when the Internet use measure includes online news or information related to public affairs or political campaigns, the effects are positively related. Examining the impact of Internet users in Great Britain during the 2005 election, Loader (2007) found that there was an increase in online political engagement by young people. This included involvement in political discussions and accessing political information about the election and specific candidates from a wide range of campaign Web sites. Loader also found that young people would use e-mail almost exclusively to keep in contact with activities and events of the campaign.

The results by Kwak, Poor and Skoric (2006) and Moy, Stamm and Dunsmore (2005) also support the positive relationship between Internet use and political engagement such as exposure to political information and political discussion, particularly for the young. In these instances, the communication technology examined was a clear platform to political engagement. These conditional effects were also reinforced by McDonald (2008) and Lupia and Phipot (2005) concerning exposure to political information and news. They found that when communication technologies such as the Internet were used as a platform for this type of information, online engagement increased which was measured as knowledge, interest, and political discussion, particularly for young people under the age of twenty-five.

Internet availability and the skills to use it are also closely related to online political participation. DiGennaro and Dutton (2006) concluded that Internet use and political participation in the United Kingdom were strongly related. They found that fifty-six percent of highly proficient Internet users participated in at least one online political function, compared with 33% of moderate experts, and 19% of the novices. They base their findings on the 2003 and 2005 Oxford Internet Studies, a national telephone survey of Internet use in Britain. This study demonstrates the importance of technological literacy and its connection to increased engagement online. This information can be used to develop new policies related to these skills and compliment existing policies concerning e-governance.

The use of blogs has also been shown to be a platform to engagement. De Huniga et al. (2009) show the impact of communication technologies in their study of how reading blogs impacts engagement. They discover that blog usage considerably enhances online political participation and discus-

sion, but has no impact on offline participation. Blogs are strictly platforms of participation, not pathways. The definition of blog usage is very broad and, as the authors admit, there is no distinction made for intensity of blog traffic or blog content. Therefore, the relationship between blog use and participation could have been underestimated.

Finally, Kim and Kim (2007) indicated a positive relationship between young adults' Internet use and their political interest and knowledge. Political engagement was separated to include: political interest, political knowledge, political discussion, and political participation. Results indicated that use of the Internet had a positive impact on political interest, political talk, political knowledge and political discussion. This led them to conclude that arguing that new media are attracting younger individuals to the political world. Thus, the survey of the literature shows a positive relationship between young adults' use of communication technologies and their online political engagement.

Based on this evidence, it is clear that online political information is being accessed. Making information available online seems to be one way that policy- and decision makers can assist with the political engagement of young people. This finding is consistent with a general characteristic of the Millennial Generation-they are looking for dispassionate analysis, not ideological attempts to influence them to take one position or another. It also seems likely that we can increase the use of technology as a pathway to political engagement by creating a more knowledgeable cohort of young people by emphasizing civic education in high schools and colleges. Then, informed use of technology may lead to additional forms of participation. Certainly this is an area ripe for further research and exploration.

## What We Know about Technology as a Pathway to Political Engagement

A number of studies have found that Internet use also acts as a pathway to political engagement. Internet use has been found to increase the propensity to vote, even after controlling for several other predictors. Kenski and Stroud (2005) found that use of the Internet and exposure to political information were positively correlated with political participation during the 2000 U.S. presidential campaign. Tolbert and McNeal (2003) also found those who utilized the Internet and could access online election news were significantly more likely to report voting in the 1996 and 2000 presidential elections (using National Election Studies data), even after controlling for partisanship, attitudes, traditional media use, and state environmental factors.

Weber et al. (2003) and Krueger (2002) report positive effects of Internet use in the United States on other forms of political participation, such as contacting politicians and signing petitions. Mossbacher, Tolbert and McNeal (2008) empirically showed that using political chat rooms and e-mail also was significantly related to voter turnout. They found that the probability of voting increases between 21 and 39 percent when they compared individuals who regularly send and receive political e-mail versus those who do not. Xenos and Moy (2007) also found positive effects among young people who used the Internet and political participation more broadly. Shah, Eveland and Kwak (2005) had similar results examining whether online news information seeking and political discussion were related to political participation. They found that using the Internet as a resource for information and messaging leads to political participation.

Feezell, Conroy, and Guerrero (2009) examined how social networking sites and social capital had an effect on offline participation and engagement. They studied Facebook users to measure their level of offline political engagement. They surveyed political science students who were active on Facebook and found a positive linkage between Facebook use and offline participation. Using linear least squares regression and an aggregate measure of participation as the dependent variable, they found that membership on Facebook is associated with offline political participation. The use of political science students in all likelihood diminishes the impact of their results, but the investigation gives a strong preliminary understanding of the potential impact of social networking sites on engagement. It reinforces the finding discussed in the previous section - among those motivated for participation; technology may act as a pathway for participation. It may be that, in the search for information, one may uncover pathways to participation that inspire one to move from technological to face-to-face interactions. However, an essential ingredient in this model may be the development of prior interest in political issues.

## **Civic Engagement**

Civic engagement is central to democratic citizenship and helps individuals, especially our young people, to understand their personal interests in relation to public issues and public interests. This type of engagement also benefits those who are involved by connecting them with other people who agree and disagree with their own points of view. This type of deliberation is important because it allows for serious reflection. Communication technologies have changed the way we can gather information about public issues and has the potential to improve the levels of civic engagement of young people at a relatively low cost. We examined a total of six articles for the section on platforms and five articles concerning pathways. Again, we separated the type of technology and online application. We use the term, Internet, in a more general sense as we did in the previous section, as some of the studies that focused on the use of the Internet as an independent variable considered a variety of forms of its use.

# What We Know about Technology as a Platform for Civic Engagement

Moy et al. (2005) found that Internet activities such as searching for information, e-mailing, and community based activity were positively related to levels of civic engagement. In particular, Internet users were likely to participate in their community's activities and social interactions, and individuals who used the Internet in their everyday lives incorporated it more often for communication, their work, and volunteering. Moy et al. found that other uses, such as chatting socially, were not connected to civic involvement. Weber, Loumakis and Bergman (2003) also found a positive relationship between engagement on the Internet and civic participation. However, this study suffers from self-selection bias in the sampling procedure because they used an online survey, which used a non-probability, self-selected sample.

Shah, Kwak and Holbert (2001) found that the use of the Internet for information exchange was positively related to engagement in civic activities, trust in other people, and life contentment. Internet use for information searching was found to have a positive impact on an individual's mobility and civic participation because individuals receive empowering information. They also highlighted the coordination possibilities of e-mail to impact individual levels of social engagement.

Jennings and Zeitner (2003) concluded that the Internet had positive effects on several indicators of civic engagement, including group involvement. They used a quasi-experimental design employing a panel design to examine, longitudinally, changes in civic engagement. Xenos and Moy (2007) also examined the relationship between individuals who use the Internet to receive information and the effects their civic engagement. Xenos and Moy demonstrated that the Internet has varied impacts on individuals independently of their motives. These later studies suggest that we need to look at the way that an individual uses the Internet, and how that particular use can predict an individual's overall level of civic engagement. This is why further examination of the uses of communication technologies needs to continue.

There is very little research concerning social networking sites and their relationship to young people's civic engagement. Bers and Chau (2006) explored the use of virtual spaces and the development of civic engagement of young people under the age of 18 using an online gaming site. A multiuser game, Zora, was used to examine the communication among young participants with one another in a virtual world. Their conclusions suggested that civic engagement can be fostered in virtual communities. This study, although not scientifically rigorous, still provides limited evidence that individuals can use communication technologies as a platform for engagement.

The results of these studies provide useful information related to e-democracy. When individuals are involved in one set of socially-connected online activities, then these studies support the theory that they are more likely to use the Internet and other technologies for civic or politically based activities. Using technology in one domain potentially leads to using it in others, and this finding has important policy implications. For example, providing free Internet access through a number of public places such as libraries and technology "cafes" could have a positive impact for successful implementation of programs related to e-democracy. More research needs to be conducted that examines Internet use at the individual level and how that particular use can predict their overall level of civic engagement.

#### What We Know about Technology as a Pathway to Civic Engagement

Mesch (2010) found that Internet connectivity and attitudes toward technology provide more opportunities for local civic participation. This analysis employed a longitudinal design to observe the effects of Internet connectivity and participation in a local electronic bulletin board on local community involvement and participation. The development and dynamic participation in local community electronic networks not only supplements but also strengthens civic participation and an elevated sense of community attachment.

Katz and Rice (2002) tracked civic involvement and social interactions of Internet users and compared them with nonusers. As part of their analysis, the authors rely on several surveys conducted between 1995 and 2001to examine multivariate relationships of demographic and other factors to better understand the reasons for an individual's Internet use and its influence on sociability. They discovered that Internet use was associated with increased community involvement and significantly increased online and offline social interactions. For example, they explain that communication with a family member by electronic mail was moderately correlated with visiting and phoning that person. This study is a good case of how the Internet can be used as both a platform and a pathway to impact levels of engagement.

Sander (2005) discovered that social capital was being generated through interactions using Meetup.com, which correlated with the in-person interactions produced by the Web site. There is additional evidence that the conditions necessary to produce social capital are present in other virtual realms of the Internet as well. For instance, Bennett and Givens (2006) found that 60 per cent of members of organizations who use face-to-face interactions to coordinate efforts also report using e-mail. Other studies have discovered long-term Internet use is associated with more, not less, frequent sociability offline (Katz, Rice, and Aspden 2001). Though this is a more indirect association, they suggest the presence of both online and face-to-face interactions leading to a higher level of civic engagement. It is highly probable that both contexts are also being created through social networking sites, such as Facebook, even though research in this area is almost non-existent. Consequently, it is important to conduct more research to understand the interactive effects of face-to-face interaction, reinforced through technological interactions (e.g., Facebook, e-mail), which may then lead to higher levels of face-to-face interaction. It may be that there are some forms of technological reinforcements of face-to-face interactions that work better than others at motivating participants to use technology as a pathway and not just a platform of interaction.

## DISCUSSION

The goal of this chapter is to provide an assessment of how communication technologies are being used by young people as both platforms and pathways for civic and political engagement. We examined a total of 26 research articles as the basis for this analysis. There is much more literature concerning the impact that technology is having on our politics. Our review of the current literature confirms that communication technologies are having an impact on young people's levels of political engagement. Other related studies examining the impact of political campaigns using the Internet also support these conclusions.

Concerning political candidates reaching young people, issue-oriented communication and communication that young people can choose to read (or not) are more likely to capture their attention (Lake, Snell, Perry, 2004). For example, sponsoring online chat rooms in which young people can ask questions of candidates appears to be a successful mechanism for reaching young people. Partisan young people are also more receptive to political communication than are others (Lake et al., 2004), suggesting that candidates who can target their messages will be more successful. In a survey of young people, respondents reacted more positively than negatively to online chat rooms, e-mails on issues, Weblogs geared to issues, and notifications of campaign events. It seems that using the Internet as a platform for participation would be a more successful mechanism for reaching young people, particularly those who have not yet made up their minds.

The results concerning the impact on civic engagement are less clear. This is due in part to the limited number of studies that specifically examine the impact of communication technologies on levels of civic engagement either as platforms or as pathways. The preliminary evidence has been focused mostly on e-mail and Internet use in general. The results of our analysis indicate a generally positive relationship in these two areas. The separation of civic from political engagement is key to better understanding the impact that young people's use of communication technologies has on their level of engagement. As more research is completed on the other various technologies, we will have a better understanding of this relationship. These preliminary findings can be used by government officials, agencies and practitioners as a starting point to develop comprehensive strategies for engaging young people.

## **Recommendations for Policymakers**

Based on our analysis of the existing literature, we have a number of recommendations that can help policy and decision makers enhance levels of engagement through systems of e-democracy by young people. These recommendations are based on three broad principles implicated by the literature, including access, technological skills, and cultivating interest.

#### Access

- The government should continue to work towards universal connectivity including
  - Libraries
  - Public schools and universities

- Shopping malls
- Community centers
- Churches
- The government should expand access to wireless technology including
  - Making hardware more available
  - Increasing public access to wireless hot spots
  - Tax breaks to discourage fees for wireless access in public spaces

#### Skills

- The government should continue to develop and provide technological curriculum for
  - Public schools and universities
  - Community learning centers
- The government should continue to develop online tools to provide the necessary foundation to use technologies, including
  - Government portals
  - Search engines

## **Cultivating Interest**

- The government must gather aggregate data and use those data to institute policy measures that promote
  - Visibility to inform young people about technology use
  - An understanding concerning the impact of civic education on technological participation
  - Use of technology based tools such as YouTube, Twitter and emerging tools to engage young people on an individual level

## FUTURE RESEARCH DIRECTIONS

Previous research does not explicitly acknowledge the distinction between individuals who are engaged by only using communication technologies (platform) versus those who are engaged beyond the exclusive use of communication technologies (pathway). This preliminary overview of the literature has attempted to develop a new way of thinking about the relationship between communication technologies and the levels of engagement by young people. We take a broader view of the research by recognizing both forms of technology-based engagement. There are a number of areas, however, that need to be studied further.

One area includes studying the types of technologies and applications. There is little to no research available that examines the impact of YouTube, podcasting, Twittering, cell phone applications, and other more recent technologies. In addition, just as soon as we have research on one technology, another technology is developed. The target is moving quickly. As individuals use these communication technologies more often, we need to be prepared methodologically to respond. We need a standardized method for studying, assessing, and applying the information concerning young people's use of these technologies. We also need to develop some type of rapid response methodology that keeps pace with the changes. This is also true for those areas of research examining social networking sites, the impact and use of e-mail and blogs. We must also be prepared to accept the situation that as these new technologies become more popular, their impact on civic and political life might also change.

As scholars prepare to examine these communication technologies, a number of areas need to be addressed. First, there needs to be a better distinction made in the literature between civic and political engagement. We have attempted here to separate these two forms of engagement. This distinction will further clarify the relationship between communication technologies and young people's levels of engagement. Second, there needs to be a continuing dialogue concerning the efficacy of online dialogues and the exposure to civic and political information. Even though our survey did not include a method of determining the value of such conversations, future research must at a minimum acknowledge that civic and political engagement can occur with varying degrees of quality in these virtual spaces. This continuing research will better enable government agencies and practitioners to develop policies that will reach the greatest number of young people.

## CONCLUSION

Communication technologies are creating virtual spaces where young people can discuss civic and political issues. Our technological environment increases the speed with which information can be gathered and transmitted, increases the volume of information that can be easily accessible, creates online virtual associations with the ability to interact, and shifts the nature of community from geographic to interest-based. All of these characteristics have potential implications for civic and political engagement for young people, although the strength of the impact is debated.

Do communication technologies simply offer those who are already inclined to pay attention to public issues another way to do so? Or do they inspire interest among those who may not otherwise be engaged? Whether these technologies are acting as platforms or as pathways to civic or political engagement, policy makers must continue to develop regulations that enhance their use in a more comprehensive way. If governments are seeking to use communication technologies to inspire interest, then different approaches may be required than if they are interested in just tapping into pre-existing interest in participation (which appears to be declining). We need to think about how communication technologies might be used as platforms for participation in which the communication technologies are, themselves, a means of participation or as pathways to participation in which the communication technologies are used to mobilize young people to face-to-face forms of participation.

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## **KEY TERMS AND DEFINITIONS**

**Civic Engagement:** An individual or group of people working to identify and address issues of public concern in ways outside of traditional party and electoral politics.

**Internet:** A global system of interconnected academic, commercial, and government networks allowing for unlimited exchanges of information.

**Millennial Generation:** Also known as Generation Y explains the demographic of individuals who came of age in around the turn of the 21<sup>st</sup> Century.

**Pathway:** Individuals and groups of people who are engaged beyond the exclusive use of communication technologies.

**Platform:** Individuals or groups of people who are engaged only by using communication technologies.

**Political Engagement:** An individual or group of people working in activities directly related to political parties and electoral politics.

**Social Networking Site:** A virtual community in which individuals and groups of people communicate.

**Twitter:** A technology portal that combines social networking and micro blogging that enables its users to send and read text messages known as tweets of up to 140 characters.

## Chapter 22 E-Democracy Postponed: Public Policy Design the Key to UK E-Voting

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#### ABSTRACT

This chapter discusses the UK government strategy to promote e-democracy through the ballot box arguing that the design of the UK electoral modernisation policy, introducing e-voting, inhibits the development of e-democracy. The UK government proposed to introduce e-voting through the public policy process as part of the strategy to enhance participation in representative democracy. This author argues that weaknesses and omissions in the design of the public policy influence e-voting adoption decisions of local authorities. Their reluctance to adopt e-voting limits its availability to the public.

This chapter draws on prior research and interviews with Election Officers to analyse stages in the policy process to identify variables impacting on the policy's effectiveness to promote e-democracy. The conclusion recommends measures to address policy weaknesses and the suggestion for future research discusses the need to evaluate Citizenship Education as a strategy to boost civic engagement.

#### INTRODUCTION

The former UK Labour government proposed a number of measures to bolster democracy and enhance civic engagement, among which were the implementation of e-government by which government services are available electronically, pilot schemes of e-voting and the inclusion of Citizenship Education as a statutory subject in the National Curriculum. The policy to implement electronic government services has been largely successful, however the aim of enhancing civic engagement through policies introducing voting by electronic means and Citizenship Education appear to have failed. This chapter specifically discusses reasons for the failure of the public policy to introduce voting by electronic means. The final section proposes further research to identify reasons that Citizenship Education has

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Date	Number	Type of pilot
May 2000 English local elections	38	All-postal, on demand postal, early voting.
May 2002 English local elections	30	All-postal, remote electronic voting.
May 2003 English local elections	59	E-voting,telephone,text messaging, DTV, kiosk, all postal
June 2004 European Parliamentary and English local elections	4 European Parliamentary regions	All-postal
May 2006 English local elections	15	Postal vote signature checking, signing for ballot papers, advanced voting, e-counting, selection of admin measure included in <i>Electoral Administration Act</i> 2006
May 2007 English local elections	12	E-voting, e-counting, advanced voting, sign- ing for ballot papers.

Table 1. Electoral pilot schemes since 2000

failed to inculcate the notion of civic engagement in young people.

Since 2000 the UK government has invited English local authorities to participate in the pilot programme introducing e-voting to be conducted in conjunction with a traditional ballot. Table 1, below, shows the numbers of English local authorities volunteering for the pilot schemes from the almost 400 eligible to apply. UK local government has a clear structure comprising local authorities responsible for their own defined areas and able to manage the voting system for the area. Local authorities act as agencies for central government implementing directives and legislation (Byrne, 2000). They are key to the success of this policy; if they do not adopt e-voting it will be unavailable to the public.

2003 saw the largest pilot scheme with 59 out of almost 400 English local authorities taking part. By 2007 the number of English local authorities volunteering to conduct a pilot had fallen to twelve, mainly trialing administrative functions with five including the Internet (DCA, 2007). Piloting has allowed a process of evaluation particularly of certain administrative measures included in the 2006 *Electoral Administration Act*. Following concerns expressed by the Electoral Commission (2007) and the Committee on Standards in Public Life (2007) regarding evoting security, there is to be a hiatus in the pilot programme.

The author suggests that the design of the UK electoral modernisation policy introducing evoting has a number of weaknesses resulting in its failure to enhance civic engagement. Identification of the reasons that local authorities are rejecting e-voting will enable the UK central government policy makers to better inform policy formulation and implementation. The analysis draws on Anderson's policy process model, Figure 1 below, to explore the complexities of the policy process.

Conclusions are based on normative literature, and qualitative research into e-voting pilot adoption decision-making by Election Officers in English authorities that had declined to participate in the 2003 e-voting pilot programme, and officers in authorities which had participated in the 2003 pilot, but declined further participation in the 2007 pilot. Interviews with Election Officers were based on semi-structured interviews maintaining their anonymity and allowing the respondents to speak openly. The results of these enquiries identified variables influencing local authority decisionmaking regarding e-voting pilot participation which in turn allowed the identification of weaknesses in the design of the policy.

The chapter is structured as follows, the next section discusses the rationale for introducing

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
Policy Agenda	Policy	Policy Adoption	Policy	Policy Evaluation
	Formulation		Implementation	
Government decision for	Development of proposed	Development of support for a	Application of the policy	Assessment of policy's
action on a problem	courses of action to address the	specific proposal		effectiveness
P.4	policy problem	150 - 556		

Figure 1. The stages of the policy process (adapted from Anderson, 2002)

e-voting emphasising the importance of citizens' participation in the political sphere and the danger of their non-participation. The third section discusses Anderson's (2002) policy model and the fourth section uses this model as a lens to identify flaws in the design of the policy to introduce e-voting. The fifth section discusses challenges presented by this policy. The sixth section proposes measures to address the policy's failings and the penultimate section offers conclusions. The final section suggests further research based on the UK government's strategy to introduce Citizenship Education to inculcate civic engagement into the behaviour of young people.

## THE UK CONTEXT

During the past thirty years there have been substantial changes in the UK local government sector and during that time participation in elections has been falling from a high of 83.6% in the 1951 General Election to a low of 59.4% in 2001, with a turnout of 61.3%, in 2005 and 64% in 2010 (Electoral Commission, 2005; 2010). Concern over falling turnouts resulted in the Representation of the People Act (2000) which began the process of pilot schemes trialing new voting procedures. Local authorities were invited to volunteer for the trials and if they did, they ceded authority to central government and became agents, as they were not necessarily granted the type of pilot they requested. It was envisaged that e-voting was to be part of the UK e-government strategy to en-

hance citizens' engagement with central and local government through electronic means, however the provision of electronic services was separated from the provision of e-voting. Central government targeted the end of 2005 for the implementation of e-government by which government services should be available electronically, but did not set a definite date for the nationwide implementation of e-voting (Fairweather and Rogerson, 2002). The introduction of Citizenship Education was a further strategy to boost civic engagement by addressing the issue of young people's alienation from the political sphere. Although the introduction of electronic local and national government services has been successful, neither the e-voting pilot programme nor Citizenship Education has vielded similar results.

The former UK government introduced the new voting methods to be used in addition to traditional voting methods. There was to be no sudden switch to e-voting. In adopting this incrementalist approach gradually the government could become familiar with the problems and formulate politically feasible options. In a pluralist society it is easier for the government to continue with existing policies than to plan completely new ones and decisions at the design phase of a policy influence the way in which a policy is implemented which in turn influences the outcomes of the policy (Dye, 2002;Birkland, 2005). Lindblom and Woodhouse (1993) recommend complementing incrementalism with a "trials, errors and revised trials programme" so policy-making becomes a never-ending process

(p29). Evaluation of the e-voting trials is conducted by the Electoral Commission to recommend policy adjustments prior to subsequent pilot schemes.

A key driver for the pilot programme is the assumption in democratic theory that increasing citizen involvement and active participation in democracy will increase civic understanding and enhance belief in the democratic process (Trechsel, 2003). Voting is understood to be the prime indicator of democratic participation and is linked to higher levels of affluence. It is disquieting to note that, as the UK population has become more affluent and educated, voting in elections has declined (ICAVM, 2002). Low turnouts threaten legitimate democracy, and it is argued citizens who do not participate in the process of selecting public officials who are responsible for compiling rules and law, are less likely to voluntarily obey those rules (Byrne, 2000).

One reason that UK citizens are not voting appears to be disaffection with, and distrust of governments and politicians (Nixon and Koutrakou, 2008). The UK MP's expenses scandal has reinforced this distrust of politicians and, although elector turnout in the 2010 General Election rose slightly, many citizens believe that the formal machinery of democracy no longer offers them the opportunity to influence government decisions (Wark, 2010). As this disillusionment with the political sphere has grown, citizens believe that politicians are only interested in holding on to power and will promise anything to achieve the required number of votes. There is a fear that citizens are becoming self-interested and the traditional 'tribal' loyalties no longer apply, citizens are more interested in the nuances of politics, they now vote when they feel strongly about an issue (Roberts, 2010).

Recognition of the importance of citizens' political engagement is not limited to the UK. The strategy to promote aspects of e-democracy is broadly in accordance with views expressed by the World Bank to ensure that the interaction between governments and citizens (G2C) is more friendly, convenient, transparent and

inexpensive. The European Union also recognises that the growth of ICT will shape perceptions of government throughout the Union and the implementation of e-government is regarded as essential to modernise public administration to provide new forms of service delivery and to stimulate participation (Nixon and Koutrakou, 2008). On March 31st 2010, as a result of the Lisbon Treaty, the EU adopted the European Citizen Initiative enabling the public to call on the Commission to bring forward legislation with the aim of strengthening democracy and enhancing voter participation in elections to the European Union. Plan D introduced by Wallstrom, Vice President of the European Commission, has also been expanded to establish Political Foundations to promote debate on European issues. Wallstrom (2007) said "I firmly believe that communication, dialogue and active involvement of the citizens is crucial for the Union's ability to achieve its objectives...... We need to make it clear to the citizens that their political choice matters" (p1).

### ANDERSON'S MODEL OF THE POLICY PROCESS

Anderson (1975) views the policy process as a linear progression involving "functional categories of activity that can be analytically distinguished" (p19). Similar claims have been made by among others Simon, (1957), Lasswell (1956), Rose (1973), and Hogwood and Gunn, (1984). However, there is a debate regarding whether the policy process follows a set of stages. Dye (2002) argues that policy-making decisions rarely occur in sequence in fact they often occur simultaneously and Lindblom and Woodhouse (1993) draw on Kingdon's description of the policy process as a "primeval soup" with action occurring when problems are matched with policy ideas which are in the political interests of the policy decision makers (p10). Nevertheless the "stages heuristic is a widely used general framework for the study of the policy process" (Hill and Hupe, 2009, p120) and can be used either in the normative sense of prescribing what should happen in the policy process or in the descriptive sense of what actually happens during the policy process (Hogwood and Gunn, 1988).

This chapter uses the heuristic policy process as a lens to give a sense of direction to the actions of the actors at each stage in order to identify variables influencing e-voting adoption decisions of local authorities. Figure 1, below, illustrates Anderson's (2002) linear stages of the policy process which he stresses, is flexible so that the stages do not necessarily take place separately.

# THE UK E-VOTING POLICY

Drawing on the above framework of the policy process, it would appear that the e-voting policy devised by the former UK government has weaknesses at all stages. The issues appear to centre on the government's inability to recognise the correct causal theory, a lack of resources, failure to develop support for the policy, strategies of policy implementation and the type of pilot evaluation.

## **Policy Agenda**

The electoral modernisation policy introducing e-voting was formulated as a response to falling voter turnouts at elections which was recognised in 2001 by the Public Administration Select Committee and in 2002 by the Electoral Reform Society as a threat to democracy. As officials usually instigate new policies at a time of crisis they may not conclusively be able to identify the actual policy problem (Lindblom and Woodhouse, 1993). The design of a policy will not impact on the policy problem if the designers do not identify the correct cause of that problem. Thus the importance of an accurate causal theory is key to designing a policy that delivers the required outcomes (Birkland, 2005). The former government had not recognised the reasons that citizens are reluctant to vote, as discussed above. It believed that modernising the electoral process by offering an increased choice of voting methods would encourage a higher turnout at elections thereby increasing civic activity. However, it has been recognised that only those individuals already engaged in the political process who would have voted will use the new technology to cast their vote (Norris, 1999). If individuals do not wish to vote, and are not interested in participating, the fact they could do it online will make no difference (Work Foundation, 2002).

# **Policy Formulation**

At this stage of the policy process decisions are made within government to address the policy problem; details are usually formulated by officials who are guided by government strategy (Dye, 2002).

In formulating the policy, the UK government failed to take due regard of its research commissioned to secure the successful introduction of e-voting. Fairweather and Rogerson (2002) established that the most influential actor in the conduct of local elections is the Election Officer often in conjunction with the Chief Executive. In theory councillors make policy and officers administer it, in practice many responsibilities are delegated to the officers. These officers can act as Champions and gatekeepers filtering information and persuading local authority members to agree with the officers' decisions. As one Election Officer in 2003 explained "I make the decision in consultation with the Chief Executive whether we think there's any merit in doing it (e-voting). If we do not it stops at that point. We act as gatekeepers."

However, central government formulated the policy without input from these Officers. Prior to the 2003 voting trials Election Officers attended formal and informal meetings held by, among others, the Association of Electoral Administrators and the Local Government Association where evoting was on the agenda *after* central government had decided to introduce it. Following each pilot programme the participating authorities reported to the Electoral Commission, but there was no input from authorities explaining their reasons for non-participation.

# **Policy Adoption**

At this stage of the process, policy-makers garner support for the policy to aid its implementation. It is necessary to consider the amount of change and the level of consensus among policy implementers as implementation will be most successful where change is marginal and policy goal consensus is high (Van Meter and Van Horn, 1975).

The former UK government decided to adopt e-voting without consultation with the implementers, in this case the local authorities, and it failed to initiate a strategy to encourage them to support this policy. The effect of central government introducing a policy to almost 400 local authorities would, according to Wrong (1993), test the limits of central government's power and influence on so many autonomous authorities, as the greater the number of individuals subjected to power, the wider the variety of attitudes towards the power holder which results in varying levels of compliance. His work reflects earlier studies arguing that if policy action relies on a number of links in an implementation chain then there needs to be a high degree of co-operation between the agencies to secure successful policy outcomes (Pressman and Wildavsky, 1984).

## **Policy Implementation**

Implementation involves putting the policy into practice to achieve specified objectives and it is suggested that implementation is the key element in the public policy process (Minogue, 1993). There are several flaws in the e-voting policy implementation strategy, namely the approach, a lack of policy tools and the absence of a promotional strategy.

### Implementation Approach

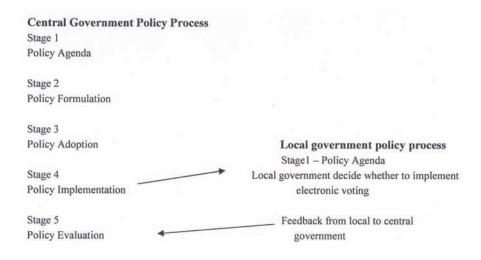
Figure 2, below, illustrates the stage at which local government became involved in the e-voting policy. It shows the 'choke-point' when central government invited local government to implement the policy. As local authorities considered whether to accept the invitation to join the pilot schemes they passed through stages in the policy process, as participation in the pilots was for them a new policy. If local authorities decided to accept the invitation they detailed the type of pilot they wished to conduct, but they did not necessarily receive permission for the type of pilot they requested. Prior to the 2003 pilot the necessary draft orders were not issued until close to the elections causing one Election Officer to remark that "the Parliamentary process means that we do not get enough notice if we have been accepted for a pilot, everything is on the last minute." Further concern was expressed by another Election Officer "There is a lot of preparation and election days are strange days, but it all comes down to me. It's me that could end up in court."

Even though adoption of the e-voting policy was voluntary its introduction was a "top-down" implementation where policy decisions are taken by central government with scant consultation with lower level bureaucrats. The difficulty for the management of a "top-down" strategy lies in the need to balance the demands of that strategy with the current consultative management style and the top-down approach does not allow for local bureaucrats whose aims do not align with those of central government (Sabatier, 1993;Maddock, 2002).

Prior to both the 2003 and 2007 pilots Election Officers' decisions to decline participation in the pilot programme were influenced by risks to ballot security and the financial implications of the vot-

#### E-Democracy Postponed

*Figure 2. The local authorities decision-making stage of public policy process (adapted from M. Liptrott, 7th European Conference of E Government, Den Haag, The Netherlands, June 21-22, 2007)* 



ing trials rather than supporting the government's aim of promoting new voting methods.

### Policy Tools

An essential part of the design of a policy is the provision of the necessary policy tools, including adequate resources, to enable local administrative staff to implement it, as high volumes of work and changing government expectations affect local receptivity to, and the management of new policies (Baehler and Bryson, 2008). There were no tangible incentives to join the e-voting pilot scheme and the non-pilot Election Officers in 2003 and 2007 stated that neither they nor their organisations benefited from e-voting, explaining that the increased workload put further pressure on Election Departments which during a conventional election are fully committed.

In 2003 Election Officers were influenced against pilot participation by the lack of resources. They commented on the increase in central directives and legislation, which had to be administered without a complementary increase in funding or staff. The Officers who declined further pilot participation in 2007 also commented on the increased

workload imposed on electoral administration staff by central directives and legislation, adding that the obligations imposed by the *Electoral* Administration Act (2006) were most onerous. They were not willing to commit their authorities to extra expenditure as central government would only fund the electronic element of a pilot scheme and these officers considered that their authorities had higher priorities for local finance. They recognised that electronic transactions were part of every day life, but believed that the traditional polling station was the most cost effective way of conducting an election. One Officer had already experienced pressure when conducting traditional elections, as his authority had only two members of staff to organise ballots and he believed that they could not cope with the extra work as they already worked hard to "get it right." He emphasised that the council was not attempting to avoid e-voting, but the final decision whether to join the trials "comes down to funding".

## Promotional Strategy

The e-voting policy design failed to incorporate marketing elements designed to promote its adop-

tion among local authorities. Prior research suggests myriad approaches for introducing change into an organisation such as a local authority, and most focus on communication to allay uncertainty and to inform about the change (Pettigrew et al, 1994). Each local authority has its own characteristics and while it may not be possible for the government to tailor an individual campaign to each local authority, Leader (1989) recommends that there should be an attempt to segment the target audience.

The most effective influence to adopt an innovation such as e-voting, is personal contact (Schudson, 1993). Peer pressure and opinion leaders are most effective in persuading potential adopters. An innovation need only be communicated to a small number of opinion leaders for the innovation to spread, and those opinion leaders will be effective as long as they favour the innovation and others positively identify them with the innovation (Dearing, 2004; Valente, 1995). Their approval is "crucial" for introducing new ideas and giving them credibility (Dearing, 2004, p27). However, so few local authorities joined the trials of e-voting that there was no peer influence between Election Officers or local authority members to increase pilot participation, nor has there been any use of opinion leaders drawn from the public sector.

Within an organisation management support for change is often manifested through the role of the Champion. Wilson (1992) describes the Champion as the internal change agent, "the intrapreneur" who initiates action (p80). This individual can be regarded as a 'gatekeeper' who derives power from an industry, association or government and can lead or inhibit technological innovation. As discussed above, the UK central government did not harness the influence of local Chief Executives or Election Officers to act as Champions promoting e-voting.

### **Policy Evaluation**

Local authorities that have trialed e-voting are obligated to report to the Electoral Commission within three months of the election. The Commission appears to have adopted the most common research technique, the before and after comparisons of voter turnout, using data from the voting returns and contextual reports from pilot authorities. Election Officers confirmed that they were not asked for reasons that their authorities declined pilot participation with the result that the evaluation strategy failed to establish reasons that the majority of authorities refused pilot participation.

Election Officers in authorities that participated in the 2003 trials and declined further participation in 2007 were influenced by their experiences during the 2003 pilots. These officers were not opposed to e-voting, but considered that the negligible increase in voter numbers, + 2% in 2003, did not justify the extra workload and expenditure imposed on their authorities (Electoral Commission, 2003).

The second inhibiting aspect of the 2003 pilots focused on the issue of security. During the 2003 pilots in one area the Internet stopped working, and other areas experienced breakdowns in the security of the software and problems with e-counting, which one officer believed raised "question marks against the ballot results". There was a consensus that the contractors had not realised the obligations of electoral legislation and that individuals who had used the new voting methods would have voted in the traditional way. Consequently, in 2007, these Election Officers believed that there were risks to the integrity of an e-ballot and that the results could be challenged.

### DISCUSSION

The former UK government did not appear to appreciate the importance of addressing the real reasons that local authorities did not join the pilot scheme. Its proposal to introduce e-voting to make the procedure more convenient and reverse the fall in numbers of people casting their votes at elections was not effective. The public's increasing lack of trust in the political sphere may be reflected in local government decision-making, as members and officers view problems with the new voting methods and become unwilling to further alienate their constituents. The 2010 UK General Election brought this matter into sharp focus as prior to the election opinion polls showed the public's lack of trust in, and disillusionment with the behaviour of politicians (Yougov, 2010).

The new voting methods were intended to be trialed by local authorities before being eventually introduced throughout England (Electoral Commission Briefing, 2003). However, central government's attitude to local government may have impacted on local government's attitude to yet more innovation introduced from the centre. UK local government has been subjected to "a frenetic succession of changes to the institutions of local government" resulting in the weakening of local government powers (Hill, 2009, p137). Central government departments have become more powerful at the expense of local government and White and Green Papers drive the agenda to change local government (RFT, 2006). This attack on local discretion appears to justify Maddock's (2002) claim that government is "good at knowing what needs to change, but poor at working out what this involves or how to go about it" (p1).

Further strategies to limit local authority discretion can be seen in the growth of governance which shifts the responsibility of service delivery from local authorities. As a result of this shift to market conditions local authorities no longer operate in their traditional role of service providers, but facilitate, support and regulate enabling other agencies to act on their behalf (Sorgaard,2004). This loss of their traditional role is coupled with the growth of supra-national bodies such as the EU and the UK government's commitment to bring new participants into the policy process, as it directs communications to neighbourhoods and communities thus by-passing local authorities (Hill, 2005).

During the formulation of the policy to introduce e-voting, the UK central government did not draw on recognised strategies to enhance the likelihood of voluntary policy adoption. It did not provide incentives or instigate an information strategy or seek local support from Election Officers. There were no tangible incentives to join the pilot schemes and central government had not used opinion leaders drawn from the public administration sphere to promote the adoption of e-voting. Despite evidence that Election Officers hold a pivotal role in local decision-making regarding pilot participation, there was no attempt by central government to promote their role as Champions, rather evidence suggests that prior to the 2003 and 2007 pilot schemes Election Officers acted as "anti-innovation" Champions preventing local participation in the trials (Rogers, 2003, p414).

The evaluation approach did not pursue reasons for local authority decision-making regarding pilot participation. Local authorities that did not join the e-voting pilots were not asked the reasons for their decisions. Central government's incrementalist approach to the policy design mirrors Lindblom's (1993) approach of disjointed incrementalism which expounds that it is rational to learn from experience and adjust policy, but Rose (1989) argues that this model can produce a lasting policy, but it can also result in never ending trials with no policy solution.

Even though there were weaknesses in the UK government's evaluation approach, it appeared to recognise the need for evaluation to understand, identify and manage risks posed by the new voting methods. Prior to the 2003 pilot programme there were warnings from government researchers, Fairweather and Rogerson (2002), and Watt (2002) centring upon the need to address issues of personation, coercion and the integrity of the system. Secrecy is judged to be "the underlying principle of modern democracy" embodied in Article 25 of the Universal Declaration of Human Rights, the International Covenant on Civil and Political Rights and the European Convention on Human Rights which declares that governments "undertake to hold free elections at reasonable intervals by secret ballot, under conditions which will ensure the free expression of the opinion of the people in the choice of the legislature" (Protocol 1. Article 3). Watt (2002) believes that there is a balance to be struck between the convenience offered by e-voting and the possibility of undue influence in the home or work place.

Vociferous warnings of the inherent dangers of e-voting come from the USA, Mercuri's Statement on Electronic Voting (2001) warns "the computer industry does not have the capability to assure a safe reliable election using only electronic devices" and she remains of the same opinion to-day (Mercuri, 2010). Her fears were echoed by Rubin (2001) who maintains, "the importance of security in elections cannot be overstated" and the "any process which has the potential to threaten the integrity of the system....should be treated with the utmost caution and suspicion" (p21). Indeed many commentators have reached the conclusion that there should be no remote voting using the Internet (Mason, 2004). Evidence from Election Officers shows they recognise these risks, but as one stated, the purpose of the trials is to discover the faults in the system and correct them.

In 2009 as a result of reports issued by the Electoral Commission warning of the threats to the integrity of the electoral system posed by e-voting, and the damming report from Committee on Standards in Public Life (2007) which analysed instances of fraud reported in the media concluding "systems currently in place in Great Britain to deter fraud are not particularly effective", the pilot programme has been halted (p85). The Committee for Standards in Public Life (2007) regarded the judgement of a fraud trial in Birmingham in April 2005 as a "turning point in the public perception of electoral fraud" (p85). At the trial Judge Rich-

ard Mawrey pronounced that the systems to deal with fraud were not working and, as he found six Birmingham councillors guilty of vote rigging, he said that the fraud would "disgrace a banana republic". Indeed some experts now consider that fraud is endemic and the whole system is open to abuse (Newell et al, 2007, p4).

# RECOMMENDATIONS FOR POLICY REVISIONS

This section suggests revisions to the design of the UK public policy introducing e-voting to strengthen e-democracy by enhancing the likelihood that when the pilots restart local authorities will adopt the new voting practices. These policy revisions would address the root cause of the decline in voter numbers at elections, instigate effective promotion strategies within policy formulation, adopt an alternative implementation approach, expand policy consultation and clarify policy direction.

### Address the Correct Causal Theory

The introduction of electronic voting was underpinned by a belief that there needed to be a greater choice regarding the methods of voting in order to enhance e-democracy by encouraging more citizens to vote. That was the wrong causal theory on which to base the electoral modernisation policy, as it is recognised that electronic voting "is unlikely to stimulate democratic engagement" (Fairweather and Rogerson, 2002 p6). There is an over emphasis on the use of the Internet to promote political participation, as e-voting will be mainly used by those already politically engaged (Pleace, 2008).

The former UK government began an attempt to address the real cause of the public's alienation from politics. During 2009 and 2010 the scandal of MP's expenses exacerbated public disgust of politicians and it appears that this mistrust has expanded to all aspects of the political sphere. As early as 2006 the Committee for Standards in Public Life expressed concern about the system of payments and allowances to Members of Parliament. In 2009 it published a set of principles that it believed should underpin a revised payments system and the Independent Parliamentary Standards Authority published detailed recommendations on the future system of expenses centring on supporting Parliament and being fair to the taxpayer. The Chairman, Sir Christopher Kelly (2009) said

Revelations about the expenses system have caused considerable damage. I do not believe that trust in those who govern us will be restored unless those in authority show leadership and determination in putting the abuses of the past behind them, however uncomfortable that may be for some. We are clear that the three tests set for us by the leaders of the main parties - increased accountability, transparency and reduced cost - have been met. This report should now be handed over to the regulatory body for implementation in full, with the changes introduced from the beginning of the next Parliament. My Committee will continue to take a close interest.

The incoming UK coalition government modified the system of allowances and expenses for the current Parliament, but the provision for employing family members remains, and the public continue to be convinced that politicians will act for the benefit of society, rather than as Downs (1957) and the Power Report (2006) argue, for themselves. This year the Coalition government established an enquiry to review the operation of the Parliamentary Standards Act (2009) to enhance public confidence in the conduct of Parliament and MPs. It has also appointed a new Chairman, Adam Afrivie, to the Committee on Members' Expenses. The public will need to see affirmative action to prevent future abuse of the expenses system, as they no longer trust assurances.

# Instigate Effective Change and Promotional Strategies

E-voting was introduced without an effective strategy to promote its adoption. Election Officers confirmed that e-voting was on the agenda at formal and informal meetings, but there was no strategy to "sell" it. In 2003 a meeting was held in London for authorities that had volunteered for the scheme, but those authorities that did not wish to join were not contacted. Promotional strategies to support new services need to create awareness, educate in usage and persuade individuals within that social system to try the new product. Drawing on research by Davis (1989) and Kamal (2006) the new technology should be perceived as easy to use and there should be a systematic framework for its introduction led by senior management, in the case of e-voting, Election Officers and Chief Executives. Recommendations to accommodate change include rating the locality of the change on a continuum from high to low (Pettigrew et al, 1994). Authorities receptive to change and can be left alone while others may need efforts of persuasion to adopt the change.

In the case of e-voting, information passed from central to local government so did not involve open marketing campaigns in the media. The limited amount of government information was to encourage local authorities to accept the new voting methods. However, the theory of cognitive dissonance assumes that in a situation where an individual has to choose between two incompatible beliefs there is a tendency to maintain a consistent stand (Festinger, 1957). Hence, if council members and officers do not feel comfortable with the new technology, they will maintain the status quo so rejecting e-voting.

### **Revise the Implementation Approach**

As discussed above, e-voting is a 'top-down' policy, rather than relying on the this approach central government should consider alternatives,

either the "bottom-up" approach involving consultation with the target policy administrators, the Election Officers (Elmore, 1979), or as suggested by American researchers, Goggin et al (1990), the Communications Model. That model synthesises the "top-down" and "bottom-up" approaches in order to develop a more reliable implementation strategy. Although their approach is based on the three tier system of federal, state and local government and concentrates on the pressure from above and below on the state level of government, it is relevant to the UK central/local government relationship in that it recognises that policy decisions depend on national and local influences and assumes that there is no single factor influencing policy implementation. This model acknowledges the importance of communications theory as elites communicate within their own sphere. The UK central government elite devised this policy relying on the local government elite for implementation. There seems little joint consultation: an effective implementation approach relies on effective twoway communication rather than commands.

Local government will not implement policies without adequate resources. However, in the UK, central government does not fully fund policy programmes which local government is expected to implement (Hill, 2005). Adequate resources are essential to secure voluntary policy adoption to provide money and personnel, and the parallel provisions of the training of officers, the development of administrative procedures to integrate the new programme and the delivery system linking the agencies with the end users (Rose, 2005). Prior research notes that in considering the design of a policy central government fails to appreciate the patterns of policy delivery at the local level (Hogwood and Gunn, 1988;Lindblom and Woodhouse, 1993).

### Expand the Scope of Policy Feedback

In addition to outlining the effects of a policy, an evaluation strategy can be used as a feasibility exercise to determine future policy design (Gordon et al, 1993). However, each Election Officer stated that following each pilot programme, authorities that refused pilot participation were not asked to explain their reasons for rejecting the scheme.

The Electoral Commission should expand its role to investigate both the conduct of the pilots and the reasons for non-participation by local authorities. Issues impacting on pilot participation could then be addressed in policy revisions.

### **Target Policy Direction**

This incremental e-voting policy appears to lack direction. The Public Administration Select Committee in their First Report (2001) highlighted the difference in government attitude as they contrasted the targets for e-government with the lack of a target date for the use of the Internet to "increase participation in the democratic process", as there is merely an aspiration that there will be an e-enabled general election "sometime after 2006" (Electoral Commission, 2002, p2). The lack of a firm target date may have affected the way in which local authorities viewed the status of electronic voting since there was a lack of impetus from central government to encourage the use of the new voting methods. Schein (2004) recognises the potential danger of a lack of a timetable, as he notes that any organisation needs direction in order to achieve its aims. In 2002 the Electoral Commission advocated that the pilot programme needed a "clearly articulated strategic direction" (p8). This recommendation was reiterated a year later when the Electoral Commission (2003) recommended "as a priority" a detailed road map towards its stated goal (p7). However, at this time there is a hiatus in the pilot programme to address security and secrecy issues (GR, 2007). Once the security

issues are addressed it is envisaged that further trials will take place and the articulation of a clear target date by which the new voting methods will be either adopted nationally or abandoned, may enhance local authorities' perception of the new voting methods.

## CONCLUSION

The design of a public policy intended for voluntary adoption by local authorities impacts on its acceptability to local authorities that act as agents for central government, and the identification of weaknesses in the policy design provides the rationale for innovative policy revisions. Drawing on Anderson's (2002) public policy process framework the author suggests that UK public policy makers should acknowledge the real reason citizens are not willing to exercise their right to vote, consider alternative implementation strategies, including providing adequate policy tools and an effective information strategy to allay uncertainty. This chapter emphasises that central policy makers fail to recognise the pivotal role of Election Officers.

The former UK government had not considered the context into which the new voting methods were to be introduced, as it had not considered factors within the agency organisations which influence decision-making by staff working at the 'street level' particularly the dearth of resources. Revisions to the design of the electoral modernisation policy in England addressing those factors may result in an increase in the numbers of local authorities joining any future pilot schemes thereby bolstering e-democracy by increasing the scope for citizens' interaction with government.

Since 2003 numbers of local authorities volunteering for pilot participation have fallen as central government maintained control of the discretionary power to introduce e-voting by not necessarily granting the type of pilot local authorities requested and withholding adequate funding. Although the implementation of the evoting policy draws on the Weberian concept of bureaucratic hierarchy, it depends on individual local authority discretion and attempts to control discretion are linked to policy failure (Lukes, 1993;Hill, 2005). Election Officers appeared to reject pilot participation as they did not trust the UK central government to fully fund all aspects of e-voting, and their concerns over ballot security and threats to voter security in an unsupervised voting environment, had not been fully addressed. The new voting methods must offer at least the same levels of security as the traditional method to ensure confidence in the new system (ICAVM, 2002).

Threats to the integrity of an e-ballot have been recognised and there is to be a hiatus in the UK pilot programme; similar moratoria pertain in the Netherlands and the Irish Republic. However, given the exponential growth in electronic services it may be reasonable to expect that the future of e-voting will be revisited affording an opportunity to address the policy weaknesses outlined above, as one Election Officer in 2003 recommended

They should have started afresh. They should have said that in two years time we will have a draft bill for you to consider, instead of just adding on and tailoring an old piece of legislation. It's not working.

During the 2010 UK General Election, due to inadequate planning processes, particularly unrealistic assumptions regarding the numbers of individuals who would wish to vote late in the evening, queues of voters were turned away at ten o'clock when the polling stations closed. This situation presents an opportunity to revisit the potential for e-voting to enhance e-democracy by allowing choices in the methods of voting. However, at present the UK central government does not appear to be grasping this opportunity, as the recommended solution is to amend current legislation to allow any elector in the queue at

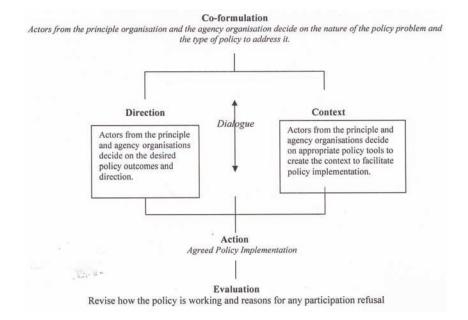


Figure 3. A revised policy process framework

close of poll to vote, and to consider a role for advanced voting (Electoral Commission, 2010).

This chapter demonstrates reasons why the UK policy to introduce new voting methods has failed. Where a voluntary policy is introduced by an over-arching organisation, in this case the UK central government, to an agency organisation, local government, the approach to policy design should be consultative, as illustrated in figure 3, below. The revised policy process approach should begin with policy co-formation where during collective deliberation actors from the principle organisation and the agency organisations decide on the nature of the policy problem and the type of policy to address it. Agreements could then be reached regarding both the direction of the policy, detailing the required policy outcomes, and appropriate resources to create the context to facilitate policy implementation. Action to implement the policy should follow while maintaining dialogue between the principle and the agents. Evaluation could then explore how the policy is working and reasons for any non-participation could be addressed.

Should e-voting be introduced nationally, prior to revising this policy, it is possible that there will be a new set of problems presented by those authorities that have not conducted a trial. Reporting these problems may have a consequent effect on the attitude of citizens to the new technology and may prove to be a deterrent to their using evoting. Citizens are already politically disengaged and distrustful of the political environment so may refuse to cast their vote leading to falls in the numbers voting in elections.

### **FUTURE RESEARCH**

A further UK government measure designed to foster interest in democracy was to promote civic activity among young people through the provision of Citizenship Education which would, it was hoped, increase the likelihood that young people would vote at elections (Halstead and Pike, 2006; Ward, 2009). This measure complemented the e-democracy strategy allowing citizens to cast their vote using a variety of channels, which it was expected would appeal to the disproportionate section of the community, the 18–24 year olds, who are least inclined to vote (Fairweather and Rogerson, 2002).

Recently new forms of participation have caused young people to divert from conventional forms of political participation as practised by older members of the population, preferring to join local community groups and social movements concentrating on single issues (Quintelier, 2007). Young people's civil participation is now growing through Internet sites such as Facebook or protest purchases such as Rage against the Machine. Research suggests that acceptance of new technology such as e-voting is generational (O'Callaghan,1998). Accordingly young people may be more inclined to participate in e-democracy.

The establishment of the Advisory Group on Education for Citizenship and the Teaching of Democracy in 1997 under the chairmanship of Crick was regarded as a turning point for the teaching of Citizenship in England (Halstead and Pike, 2006). The report in 1998 reflected on growing levels of apathy, ignorance and cynicism about political and public life and growing involvement in neighbourhood and community affairs (Crick, 1998). The principles of Citizen Education derive from the nature of democracy. The objectives are to develop young people who are willing to take responsibility for themselves and their communities and are willing to contribute to the political sphere (Citizenship Foundation, 2010). In 2002 Citizenship became a statutory foundation subject in English secondary schools for 11-16 year olds.

However, there is a need to re-evaluate the potential for Citizenship Education. It does not appear to have succeeded in inculcating civic engagement into the behaviour of young people aged 18-24, as they do not appear to be inclined to vote, as shown by the turnout in the 2010 General Election of 44% and in Table 2, below (ipsos-mori, 2010).

Year	Age 18-24 %
1964	11
1966	33
1970	28
1974	21
1974	27
1979	27
1983	28
1987	23
1992	24
1997	38
2001	46
2005	55
Change	+44

*Table 2. Young people who claimed not to vote at General Elections between 1964-2005* 

(adapted from Electoral Commission, 2005)

Future research would establish the extent to which UK Citizenship Education succeeds in bolstering e-democracy through inculcating political participation into the behaviour of young people. Citizenship Education focuses on local activity perpetuating the continuing growth of single and specific issue politics resulting in the likelihood of a decrease in the number of young voters at elections. There are aspects of the pedagogical approach to Citizenship Education that leaves students and parents with the notion that the subject lacks importance (Ofsted, 2005).

The research would survey a sample of 18-year-old people who voted and compare the results with a sample of those who did not vote to analyse whether Citizenship Education influenced their voting intentions. This would establish the impact of Citizenship Education, identify weaknesses in the pedagogical approach and establish whether there was a "carry through" effect, as at the time of writing Citizenship Education ceases to be compulsory at 16 years of age, two years before young people can vote. On completion of the research it may be possible to modify the Citizenship Education Curriculum to enhance the likelihood that young people would be willing to engage in national and global politics so strengthening democracy.

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## **KEY TERMS AND DEFINITIONS**

**E-Democracy:** The use of ICT to increase citizens' engagement in the democratic process.

**Green Paper:** A UK government consultation document proposing a strategy to address an issue of concern inviting public comment.

Model: A simple view of a complex reality.

**MPs Expenses Scandal:** Expose led by the Telegraph Group in 2009 of expense claims made by members of the UK Parliament exploiting the system of parliamentary allowances to subsidise their lifestyles and multiple homes. The most noticeable claims include ones for clearing a moat, maintaining swimming pools, and a £1,645 'duck island.' In May 2009 the Independent Parliamentary Standards Authority, was created ending self-policing by MPs of their expenses.

**Personation:** Pretending to be another person in order to vote.

White Paper: AUK government commitment indicating an intention to introduce new policy legislation.

467

# Chapter 23 The Internet as the Public Sphere: Deliberative Democracy and Civic Engagement

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## ABSTRACT

The Internet has often been heralded as a tool for e-governance and public action because of its ubiquity, accessibility, and the ability for users to participate in online expressions of opinion. In this chapter we discuss the potential for the Internet to function as a public space for facilitating civic engagement. While we draw from the seminal work of Jurgen Habermas to identify the preconditions for the functioning of a "public sphere," we address four distinctly different approaches to the discussion of the Internet's role as an effective tool for deliberative democracy by highlighting the contributions of scholars and practitioners who engaged in a dialog on the topic at a symposium held at Temple University in Philadelphia, Pennsylvania, on March 25, 2010.

#### INTRODUCTION

The topic of electronic governance often prompts scholars and pundits to theorize about, or offer anecdotal predictions about the impact of the Internet on democratic practices. Optimists claim that the Internet enhances civic participation as it provides open access to information and meaningful deliberation. Skeptics see the Internet as merely another commercial medium, where content is rather dictated by profit than public interest. On March 25, 2010, distinguished scholars, university faculty and students, and members of the public

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participated in a symposium at Temple University in Philadelphia, Pennsylvania, to explore the impact thus far, of the potential of the Internet to facilitate civic engagement.<sup>1</sup>

This chapter summarizes some of the key perspectives of the notable speakers at the "Deliberative Democracy: The Internet and Civic Engagement Conference", including Dr. Todd Gitlin,<sup>2</sup> Dr. Michael X. Delli Carpini,<sup>3</sup> Dr. Sina Odugbemi,<sup>4</sup> and James MacMillan.<sup>5</sup> We then draw from the perspectives of these scholars and practitioners to examine the potential for the Internet to fulfill a critical role as an active agent in allowing the public to form opinions that may facilitate civic discourse and the shaping of public opinion. Our chapter thus attempts to overcome the dichotomy of optimism vs. skepticism, and instead points to the structural preconditions which have to be given in order for the Internet to function as a positive tool for deliberative democracy. We take the role of interpreters of the presentations of the above-named scholars, and filter their insights through a prism of examining the role and potential of the Internet to address the following research questions:

- 1. What are the possible structural impediments to deliberative democracy via the Internet?
- 2. Which role does the use of the Internet play for deliberative discourse?
- 3. What is the Internet's current and future potential for facilitating, modifying, or distorting the mission and purpose of deliberative democracy and the resulting impact of the Internet on e-democracy and e-government?

We then apply these questions to two experiences of attempts to use the "deliberative democracy and the Internet" model in two diametrically opposed contexts. The first one is the experience of post-communist Romania, where communism fostered a period of censorship for 45 years and where the population has now to grapple with the extremes of press freedom in a digital era while the state has fallen into a crisis of legitimacy. The second one is the impact of the Internet fora on the mobilization of social movements in the United States, a country that prides itself as founded on democracy and a commitment to freedom of the press and freedom of expression.

# BACKGROUND

Deliberative democracy is a theory that emphasizes "the communicative processes of opinion and will formation" (Chambers, 2003, p. 308), which precede political action (e.g. voting). Therefore, the deliberative model focuses on discourse and negotiation, with the normative argument that the space for such deliberation should allow the power of the better argument to prevail over all other considerations. It maintains that such discourse can find solutions to problems through agreements, which are based on yes/no decisions. In this vein, freedom of expression is essential to aiding the type of public debate that shapes opinion formation in a public sphere of debate where reciprocal views are made known. The precondition for an ideal public sphere is that this deliberation is accessible to everyone, and that it shapes binding (though temporary) agreements of finding a solution to inherently incommensurate views of the consequences of political action. These deliberations have a moral component that respects different views (Guttman and Thompson, 2004, pp. 64-94) and that legitimizes subjects considered important and valuable for the public good (Fishkin, 1992, pp. 117-124).

Deliberative democracy takes place in a public arena best defined and delineated by Jurgen Habermas in his seminal text, *The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society* (1991). While Habermas did not have the Internet in mind when he wrote his original treatise, many of his themes lend themselves nicely toward thinking of the Internet as a type of "public sphere" with many of the same potential characteristics as the place-based public sphere of which Habermas wrote. According to Habermas, "deliberation is a demanding form of communication, though it grows out of inconspicuous *daily routines* of asking and giving reasons" (2006, p. 413). Such reasoning can happen in the public sphere, which thereby becomes the place where much of deliberative politics takes place. Habermas (1991) articulated a description of the *public sphere* as a place where "private people come together as a public...to engage...in a debate over the general rules governing relations..." (p. 27).

The central point of Habermas's critical theory of society (Habermas, 1996) is the concept of communicative action, which refers to the communication aimed to understanding that furthermore leads to action: "I shall speak of communicative action whenever the actions of agents involved are coordinated not through egocentric calculations of success but through acts of reaching understanding" (Habermas, 1984, p. 285 - 286). The conditions for communicative action allow for a common agreement to be found by means of argumentation and thus only a public sphere that allows for debates aiming at reaching an agreement, followed by action, can provide legitimacy to the political system. The public sphere within the context of deliberative politics functions as a liaison between the individuals and the institutions. Instead of being faced with a public authority to which one simply has to obey, formation of public will allows citizens to directly decide on governance. The public sphere is thus described as the place where people meet as equals, discuss, bring arguments and finally make informed decisions.

In his later work, Habermas (2006) addressed the potential of the Internet to introduce deliberative elements in electronic communication, but noted that the merit of new technologies is sometimes overestimated: "computer mediated communication in the web can claim unequivocal *democratic* merits only for a special context: It can undermine the censorship of authoritarian regimes that try to control and repress opinion" (p. 423; italics – Habermas). Although Habermas attributed only limited qualities to the electronic communication in relation to deliberative democracy, we contend that the Internet *can* be still envisioned as a place in which private individuals can have the same access and rights to posting their opinions as politicians and pundits. The freedom of information supplied by the Internet is one of the key features of conceptualizing the Internet's potential to be a tool for deliberative democracy, and the public space provided by chat-rooms, blogs, social networks, and political action groups can be imagined to be a cyber-space for public expression.

Undoubtedly, there are many approaches and interpretations of the Internet as a public sphere, ranging from Howard Rheingold's utopian vision of the Internet as the essence of the public sphere (1993), and Henry Jenkins' concept of Internet space as a unique public sphere inhabited by "netizens" who demonstrate characteristics of a large, important sub-culture (2006, p. 27), to dystopian visions of the web as a place in which cultural relativism and economic assimilation have robbed our culture of any pretense of original thought and intellectual expression of opinion (Siegel, 2008, p. 34). The late Neil Postman predicted that increased computerization would have unintended effects on behavior that shifts public discourse into a mediated space in which rumor and innuendo supplant truthful information and authoritative opinion (Postman, 1993, pp. 56-57).

Because of the range of opinions about how the Internet may or may not function as a public sphere, and how deliberative democracy might be manifested on the Internet, the authors of this paper convened a symposium on this topic at Temple University. We asked four distinguished individuals, all of whom had a range of scholarly and practical experiences with deliberative democracy principles and activities, and all of whom were activists in civic matters, to articulate their views on how the Internet could be used for deliberative democracy, specifically with regard to helping young people become more civically engaged. Because young people often lead in terms of experimenting with and mastering the web, we wondered if new concepts or understanding of the Internet as a public sphere could be adopted for deliberative democracy practices by those who are most adept with applications of the Internet. What comes after is a review of the main arguments regarding the Internet and deliberation, followed by a brief summary of the contributions of the four noted panelists at the "Deliberative Democracy: The Internet and Civic Engagement Conference".

## The Internet and Deliberation

Communication scholars, in particular, have examined the intersections of social practice, cultural influence, and the Internet. Some contemporary academics have explored the role of the Internet as a means of publicly expressing private thoughts, and how the medium facilitates opinion formation and political action. Jacobs, Cook and Delli Carpini (2009) raised the question of whether the Internet breeds toleration by "broadening understanding of different perspectives," or "generat(ing) disrespect of neglect of the perspectives of minorities" (p. 77). John Gastil (2008) inquired into the potential of the Internet to be used as a means of social capital, defined as "the network of personal associations and mutual trust that are essential for democratic society" (2008, p. 32), and examined the medium as both a tool and a "place" for deliberation.

Dahlberg (2004) built on Habermas's theory of communicative action and identified the normative conditions for an idealized public sphere to critically evaluate online communicative practice. These criteria include: thematisation and reasoned critique of problematic validity claims (reciprocity and justification), reflexivity, ideal role taking (empathetic listening), sincerity, inclusion and discursive equality, and autonomy from state and economic power (external impact) (Dahlberg, 2004, pp. 29-30). What is critical to deliberative democracy then, is the connotation that deliberation is a mutually-reflective experience, in which the individuals share a sincere desire to listen, talk, and change one's own previously-held opinion(s) in a manner that has rational respect for both other views, in the process of communication. In other words, deliberative democracy requires a public sphere that has multiple active dynamics; one in which thought, reflection, and perhaps empathy and trust, all act on a person's beliefs, and which imbues the technology (the Internet) with a quality that facilitates respect of those who use the technology in lieu of a public sphere in geographical space, where body language, proxemics, and emotion, might all influence the quality of interaction.

One of Fishkin's primary tenets is that deliberative democracy provides a "trilemma" which incorporates problems of deliberation, mass participation, and political equality (2009, p. 60). He wrote, "Our actual practices of political participation suffer from 'participatory distortion'— the people who choose to participate are unrepresentative of the entire electorate" (p. 50). For example, some people, who are eligible to vote, choose not to register to vote, and some registered voters do not exercise their right to vote. It could be said that this is true of Internet participation too; some people lurk, some people selectively choose what to attend to, and some avoid political participation in any form on the Internet. Still, the act of deliberative democracy is similarly complicated by those who choose to be active, and those who participate in a more limited, or passive manner. Equality can only be measured if the participants take a stand and articulate their positions-whether in real life, or in fora on the Internet.

Papacharissi (2004) took the perspective that the Internet has the potential to revive the public sphere (in the Habermasian sense) and to offer some additional benefits due to the possibility for the participants in online debates to remain anonymous: "Anonymity online obliterates reallife identity boundaries and enhances free and

open communication, thus promoting a more enlightened exchange of ideas" (p.267). The advantage of anonymous communication becomes clearer in the case of social movements, when the risks associated with activism are buffered (see Rohlinger and Brown, 2009). Although some scholars noted that online discussions are often characterized by rude interaction, Papacharissi (2004) made the distinction between impoliteness and incivility. Civility is understood as collective politeness, or "respect for the collective traditions of democracy" (p.260), while politeness is only etiquette-related. Papacharissi argued that rude online behavior is not necessarily uncivil, and that lack of civility, rather than impoliteness, can undermine the democratic potential of online political debate: "It is when people demonstrate offensive behavior toward social groups that their behavior becomes undemocratic; anything less has not lasting repercussions on democracy" (2004, p. 267).

The range of perspectives in literature on the topic of public sphere, the Internet, and public space, demonstrates that the characteristics of the Internet could limit class participation, exacerbate extreme political views, or have social, behavioral and moral strictures that could influence the use of the Internet for civic engagement and deliberative democracy. More positive interpretations are often found in context-specific circumstances, and we later examine some specific examples to learn whether the guidelines provided by those above and the speakers in the symposium at Temple University offer an interpretive framework for our three research questions.

# Conference Speakers: Defining the Problem, Proposing Answers

The speakers at the "Deliberative Democracy: The Internet and Civic Engagement Conference" brought distinct interpretations and perspectives to the question of the Internet as a public sphere, and whether deliberative democracy can be achieved through the Internet. Their perspectives might be summarized as the views of a "sociological pragmatist" (Gitlin); a "political theorist" (Delli Carpini); a "structural political reformer" (Odugbemi); and a "sympathetic practitioner" (MacMillan).<sup>6</sup> In each case, however, the speakers shared a common view that the Internet cannot create, or be responsible for creating a public sphere for deliberative democracy *at this time*. They did, however, contribute different interpretations of the role that the Internet could play in some components of deliberation and democratic discourse, of which some were more optimistic than others.

# Todd Gitlin: "Creating a Culture of Democracy"

For over 50 years, Todd Gitlin's name has been synonymous with thoughtful critique of politics, activism and democratic practices. Since the 1960s, as an organizer of Students for a Democratic Society (SDS), and of the first anti-Viet Nam protest in the United States, his work as an activist and public intellectual has focused on political parties and cultural constructions of values that influence how and why people chose to do what they do. In his keynote address, Gitlin discussed how American visions of the relationship of technology and democracy became so deeply intertwined and deeply embedded in the culture. His remarks served as a backdrop for understanding social evolution, with regard to factors that have shaped the distinctly unique, broadly conceived public sphere in the U.S.

Gitlin described historic approaches to visions of technology as "the technological sublime," counterposed with the dystopian interpretation, "the technological monstrous," thereby providing theoretical background that encompasses the wide range of utopian and dystopian perspectives shared by so many contemporary authors. The competing visions, he stated, became a part of the American experience in the 18<sup>th</sup> and 19<sup>th</sup> centuries when art and literature met science, and as technology "inspired a longing for the overcoming of human limitations." In his description of the "technological sublime," he cited evidence of how the ability to create and use technology seemed to be a part of God's favor of the United States and how the destiny of technology was entwined in the myth of democracy and technological progress as God-given to the emerging nation. In contrast (and crediting Leo Marx, 1964) the "technological monstrous" provided a series of warnings about how technology could be a disturbance to the culture. Against these evolving myths of America, democracy, and destiny, institutions like the press and other forms of media wove narratives of progress into the social fabric of the culture through the stories they told, and the social functions they provided.

In the 20<sup>th</sup> century, according to Gitlin, the penny press succeeded in presenting the relationship of news and the public's knowledge of current events with democracy, precisely because the penny press gave the public the emotional experience (calling this an "aha" moment) of participating in the public experience. The result might be what Habermas could call a vicarious experience of the public sphere. This had an unintended effect, according to Gitlin, of allowing the public to think that information was the same thing as political knowledge, and that knowledge was equated with activity. As more media gained popularity (particularly radio and television, and their special news genres and formats) the public continued to think of democratic practice as mediated discourse.

In terms of the democratic culture, Gitlin cited the period of 1955 through 1975 as the time in which news and information actually appeared to be providing a common agenda for the peoples of the United States, and gave them a reason to come together with a mission of knowing what was going on in American culture. The Civil Rights era, starting with the activities in Montgomery Alabama, through the televised Kennedy/Nixon Presidential debate, and the Pentagon Papers created a new American myth, supported by other media forms that compelled people to pay attention to the currency of news, and to the relationship of the press and public.<sup>7</sup> The difference, Gitlin said, was that when there was a scarcity of information channels (only 3 television networks, and no Internet), the importance of knowing what was going on was greater than it is today, when the abundance of information allows for some people to seek out opinions that support their own opinions—but more importantly created a situation in which we had an "increasingly bifurcated audience; the attentive and the inattentive."

His presentation outlined how and when access to information became a "24/7 torrent of material" which "provided a clamor of activity for people's attention" which started with the Penny Press, and proliferated throughout the growth of all media forms, including advertising. The precedents for understanding the impact of "clutter" serves as the metaphor for information "glut" or, "abundance" depending on the chosen interpretation. In his summation, Gitlin opined that a culture of democracy cannot be created by technology, but only by those who want a culture of democracy. This interpretation views the Internet as a mode of communication, rather than a catalyst or facilitator of democratic practices, and clearly situates deliberative discourse in the public sphere of the social polis, rather than in the metaphorical public sphere cyberspace. Worse even, the Internet might just present another source in the torrent of information, separating the public into those willing to inform themselves from those unwilling.

# Michael X. Delli Carpini: Theorizing Deliberative Democracy

The task of outlining competing theories of deliberative democracy fell to Delli Carpini, who spoke of the difficulty in attaining the ideal that is inherent in the concept of deliberative democracy theory. A political scientist by training and a prolific author on the subject, Delli Carpini clarified his perspective in this way:

There is a difference between deliberative democracy and democratic deliberation. ... Deliberative democracies do not exist, I would hold. That a democracy based on the notion that deliberation is the way in which we make collective decisions about local, state and national and internal affairs, a cultural notion of culturally rich, thick democracy is a very difficult thing to achieve and I can certainly make the case that we do not have anything like that in the United States. (March 25, 2010).

Delli Carpini qualified the problematic of the "incompleteness" of deliberation discussed by Fishkin(1995) who claimed that incomplete deliberation "can actually be worse than no deliberation at all". According to Fishkin, deliberation as ideal speech situation is not possible given that such a model ignores decision costs - e.g. "the time and effort required to reach an agreement" (p. 40). Deliberation in realistic situations is incomplete. For instance, not all the arguments advanced in the deliberative process are answered, not all the participants have access to sufficient information to fully understand particular claims, and not all the participants are ready to accept competing arguments. Therefore, "improving deliberation... is a matter of *improving* the completeness of the debate and the public's engagement with it, not a matter of perfecting it because this would be virtually impossible under realistic conditions" (Fishkin, 1995, p. 41). Delli Carpini emphasized that "discursive talk is just political talk focused on formal or informal discourse about local, national, international issues of public concern (2010)," and is therefore different than purposive talk. Deliberative democracy has characteristics of the type of talk that is intended to influence opinion as a by-product of typical social interaction around topics of political importance, or as Gitlin identified the process, as "incidental learning (2010)." In other words, deliberative democracy is based on communicative action rather than strategic action, and matters of public concern are discussed in such a manner that the best solution arises from deliberation.

Delli Carpini was providing a more optimistic take on the potential of the Internet as a means of exchanging views and contributing to public opinion formation. While not equivocating on the subject, Delli Carpini held out for greater hope that the Internet could play a role in contributing to greater deliberation. A closer analysis of how these deliberations play out needs to focus on the environments within which they occur and whether these allow for deliberation to reach greater completeness.

# Sina Odugbemi: Structures of Deliberation

Sina Odugbemi's presentation was complementary to the theoretical focus and focused on the role of new media in developing countries. He took a decidedly structuralist view of the ideological philosophies that dominated media ownership and government control in developing nations. His approach examined deliberation as communication that needed to be transparent and capable of interpretation within specific cultures, and mindful of each nation's history, economic infrastructure, belief system and record of development.

One of the biggest impediments to developing democracies is the problem of governmental transparency, according to Odugbemi: "The first level of the work is the effort to increase the shared flow of information." For many of the nations in the developing world, media systems have traditionally been under control of the government, and therefore, the motives for providing information are suspect. Thus, it could be interpreted that the Internet, for the way it subverts direct governmental control and operates at a global level, might have an extraordinary impact in nations that have traditionally had a citizenry that was skeptical of government control of information.<sup>8</sup> As the later study of Romania will show, such optimism is not necessarily warranted.

Also citing the pioneering work of Fishkin, Odugbemi offered a vision of installing teams of individuals which would form a base to,create the conditions for deliberative democracy. In this vein, Odugbemi identified attempts to combine teams of journalists and researchers, specialists, and others who can enrich public debates. The Gates Foundation, for example, has funded efforts to train experts in economic matters how to speak to the public, and how to present information in useful terms that can be easily understood in nations where there is less of a tradition of understanding, or having access to trained interpreters of information, like the press in the United States and other industrialized nations.

In situations where the Internet is still limited or non-existent, Odugbemi advocated for deliberative processes that would operate in a variety of forms to further the goals of democracy, and to explore new modes of communication in an increasingly digital environment. While optimistic that there may be a promising democratic future for those nations that find a way to integrate media and interpersonal dynamics into the social structures, he was reticent to see the Internet as a component that would have a significant impact in the developing world in the near future.

### James MacMillan: The Practitioner's View

James MacMillan, whose views reflect his experience as a practicing journalist as well as an academic specializing in media convergence, was by far the most optimistic of the four speakers, and based remarks on the public nature of news and information in opposition to the traditional economic model of news media where content is bought and sold. Citing the generational attitudes and acceptance of different forms of news production and dissemination, he claimed that: ...if news is important it will find us quite likely on our Facebook feeds or Twitter streams and in general that information is now shared and not sold. In other words, the trust is in the messenger, the last person associated perhaps to a distributed content rather than to the legitimacy of the individual journalist or the institution from which the report originated. This is an enormous shift. (March 25, 2010)

The use of Facebook, Twitter, and other social networks creates a method of distribution that reaches audiences that have some similar characteristics, and returns the act of political communication to the theory of the two-step flow identified in early studies of the power of media (Lazarsfeld, Berelson, and Gaudet, 1944; Katz and Lazarsfeld, 1955) in which important matters of public opinion come from the media, but are also passed on to other individuals through "opinion leaders." The notion of personal influence was a popular theoretical construct in the early days of formal communication studies, but lost favor as the discipline moved more toward theories that favored limited, or even indirect effects. Now, however, the importance of who voices an opinion and the esteem in which they are held is sometimes greater than the sum of the facts that exist about an issue. For example, an article in a recent issue of the Columbia Journalism Review, authored by Alissa Quart, makes the case that the new "expert" on a topic is one who can share their own experiences, regardless of facts documenting contrary opinions. She claims that; "with the rise of the Web, as well as changing ideas of authority in general, "the expert" has come to mean something different than it once did" (2010, p. 17).

MacMillan also pointed to the practice of news media corporations to use content from open sources, and especially from "accidental journalists" (people who happened to witness and record events, like the passenger on the January, 2009 US Air plane that was landed in the Hudson River by Captain "Sully" Sullenberger, or the authors of cell phone feeds from the 2005 London Underground bombings). When media outlets exploit "individual content and providing producers," the audience becomes free labor. The solution to this problem, according to MacMillan, would be to create a new structure, such as a new meritocracy in which the best content of the day is rewarded instead of maintaining the old salary structures in the traditional newsroom. However, the change in using non-traditional paid journalists whose authority might be underwritten by the quality of the news outlet for which they work raises the question of interpretation and newsroom ideology.

Considering both the distribution of information and the audience's engagement with media content, the organization of information, and not the participation, becomes the biggest dilemma with respect to journalism, technology and democracy. In a similar vein to Gitlin and Delli Carpini, but with a specific focus on journalism, MacMillan downplayed any perspective that offers technology as a savior of journalistic practice: "Technology will not save journalism, journalism will save journalism, but I think that getting at the top of technology is an important first step." MacMillan was also optimistic that young people would lead the way in exploring the nature of the Internet and that they would be the ones to test deliberative democracy theory and practice.

To summarize the perspectives of the four speakers at the conference, deliberative democracy can take place only in the socio-political public sphere of people committed to democratic (or non-hierarchical) practices, with the Internet rather being shaped than shaping these practices (Gitlin). One of the constructive roles of the Internet might reside in envisioning it as a forum for discourse about how deliberative democracy could be implemented (Delli Carpini). In less developed countries, there is a need to train people in the debate for public discourse, accountability, and transparency, which might itself not necessarily require the Internet (Odugbemi), although the Internet can function to teach deliberative democracy through experiments with verbal and visual cues (MacMillan).

The Internet does not inherently create the type of public sphere that guarantees, or even encourages public deliberation, though it does open a space for public expressions of opinion that could therefore, influence the deliberative democracy model. Thus, the Internet can be a "public sphere" in some circumstances. Especially in countries where traditional media have often been under extreme government control, the Internet can be an agent of change. This however, depends on the structures of communication existing in these countries, which might be enhanced by the Internet. Both history and social practices will influence the contexts in which deliberative democracy may take place.

The next section focuses on two attempts to foster democratic discourse and deliberative democracy in two specific contexts to better situate both the range of theoretical positions on how, when, and under what conditions the Internet can possibly function as a public sphere for purposes of deliberative democracy.

## Contexts and Cases in Deliberative Democracy

While we specifically omit the question of whether young people may change the status quo as the Internet matures at this point, we will return to this issue in summary comments. To illuminate the various perspectives of the conference speakers and other scholars in examining specific contexts of deliberative democracy (or potential deliberative democracy) it is useful to realize that the speakers and authors mentioned thus far two different scenarios for how and where deliberative democracy might be made manifest on the Internet. If we separate Internet news from political discourse on the Internet, we travel two distinctly different roads and reach quite different destinations. Traditional news refers to the type of timely information that is available to the public, either by traditional media, such as newspapers, radio, and television (each of which has unique history and structures that influence what constitutes news, news gathering, and news dissemination), but on the Internet, traditional forms may open a channel for reader/user commentary. In this case, we can assume that the integrity of the news organization has vetted the information, and that unless the information is specifically categorized as "opinion" the information will carry the bias of the news organization, which dedicated viewers/ users will recognize. The structures and biases of this type of news are more transparent to users, because they have formed relationships with the news organizations. We examine a case of usergenerated discourse in Romania, which may or may not lead to the principle of deliberative democracy in the following section. This case study allows us to investigate the preconditions to be given for deliberative democracy to work within the realm of the Internet.

The other road one could follow, involves social media, which may be created and shared differently than traditional news on the Internet. Instead of messages that are created with the "one to many" model, social media can be viewed by individuals or small groups, in addition to having the potential for a large group of consumers. "News" that spreads through Facebook might be just as persuasive as news in the more traditional vein, but might be generated by individuals who choose this mode to express their opinions far more than backing up their assertions with research and facts. Often this type of information is created to further the goals of a specific social movement, such as the efforts of the group, MoveOn, which forms the basis for our second case study.

# Case Study: Romania's Public Debates

Romania provides an example in which social, communicative, and political structures abound. Romania switched from a one-party system during the communist regime to a multi-party democracy, and once isolated even in the former communist bloc in Eastern Europe has made efforts to integrate in regional and international alliances.9 The attainment of freedom of speech and freedom of the press was one of the biggest accomplishments of Romania after 1989. However, as Odugbemi noted, the main challenges for developing countries are the reforms in both governmental and media sectors: "the efforts to increase the shared flow of information, to have transparency of governance, and to pass the laws about freedom of information (2010)," and to have more independent (less controlled by the state) mass media. Under these circumstances a public sphere that serves as the space of deliberative politics could emerge and further generate "legitimacy through a procedure of opinion and will formation" (Habermas, 2006, p. 413). A closer look at the online discussions on three websites of Romanian media showed that the above mentioned normative conditions are themselves insufficient to generate a constructive political discourse.

The Romanian media landscape went through different stages of transformations during the last two decades, becoming an attractive market in Eastern Europe, and trying to adapt to new technologies. Most of the traditional media outlets are now present on the Internet, granting free access to their digital content. The most common way to engage citizens on topics of interest was to create commentary sections on the media websites, where people could express their opinions and thoughts. Although Romania is still among the states in the European Union with a low rate of Internet penetration (only 38% of the households had direct access to the Internet in 2009), the exponential growth of the Internet users cannot be ignored (from 14% in 2006 to 38% in 2009).<sup>10</sup> In this context, the online participation on websites hosted by traditional media suggests that the Internet might be used as a democratic tool, but our analysis revealed that some people in Romania rather engaged in rude

and uncivil online talk ("cheap talk" – see Kies, 2010, p. 3), than in meaningful debates.

Our study consisted of a qualitative analysis of comments posted on three digital media outlets (a news portal - HotNews, and two newspapers -Gândul and Evenimentul Zilei)<sup>11</sup> on October 31, 2008 - the first day of the political campaign for the latest parliamentary elections in Romania. Three media stories about the electoral campaign and with high visibility on the websites generated a total of 196 online comments, distributed as follows: Evenimentul Zilei (57), Gândul (75) and HotNews (64). While many comments (42, 3%) were posted on October 31, 2008, some people joined the online discussions several days later, a fact that points to the active behavior of the online audience, searching for older media content on topics of interest.

The *HotNews* story focused on the statements of the Social Democrat leader Ion Iliescu who was promoting his party, while attacking the president.<sup>12</sup> He declared that Romania has gone through a nightmare since Traian Basescu became president, as the latter "*lives in and through scandal*" instead of "*guaranteeing social equilibrium and dialogue*."<sup>13</sup> Everybody was free to post online comments, although a short notice warned the participants that they are "the only responsible for the content of the messages." This warning did not hinder some of the users from posting offensive comments.

*Gândul* described the first day of the political campaign, focusing on two political actors: Ion Iliescu and Elena Udrea, a contested female politician of the Democrat Party.<sup>14</sup> The news item in *Evenimentul Zilei* referred to the results of a survey about the political preferences in Romania, which indicated that 41% of Romanians would accept a corrupted government if this implied a better life for citizens. The news also included the statements of President Basescu and the American ambassador in Romania with respect to state of affairs in this country. The latter claimed that everybody in Romania is corrupted, while the former replied

that the ambassador should first look at his country and the causes of the financial crisis before talking about Romania.15 The websites of both Gândul and Evenimentul Zilei had neither moderation nor registration requirements for online participation. The lack of discursive rules such as moderation, registration, and identification might be perceived as a positive factor as regards the criteria of inclusion in the online discussions: anyone with access to technology (including computer ownership, connection to Internet and ICT skills) is free to express opinions and suggestions (see also Kies, 2010, pp. 40-57, about deliberative criteria). However, some potential participants might refuse to engage in online debates if no moderation is in place and a rude online behavior proliferates.

Our findings indicated that a significant percentage of the online comments were characterized by both impoliteness (39.3%) and incivility (11%). The comments included in the first category contained offensive words addressed either to political actors or to other participants at the forum, while the second category consisted of those comments showing offensive behavior toward different social groups (e.g. Roma or Hungarian minorities, pensioners, and women). Most of the opinions were justified solely on the basis of internal arguments (personal values or narratives) without reference to external facts. HotNews registered the highest rate of rude comments (38 out of 64), while Evenimentul Zilei had the highest number of uncivil comments (8 out of 57). The choice of expressing disapproval with political leaders/ parties in an aggressive language usually generated more impolite or uncivil reactions from other participants with divergent opinions. Moreover, the participants focused mostly on political figures and their characteristics, instead of debating the political positions of these actors or their own. This occurrence is an example of "personality politics", which is a global phenomenon, triggered by the interplay between media (especially television) and politics, making the character of the political actor, as portrayed in media, become

more important than his political platforms (see Castells, 2007).

Although the participants to online discussions were aware that a debate implies arguments, they took refuge in communicating about the debate rules/ conditions. A reply to a comment calling President Basescu neo-communist (a highly offensive label in post-communist Romania), suggested that the online space should be used for an exchange of ideas and not for name-calling, but the force of the argument was endangered when the author closed his commentary by a personal attack (*"in fact, you are the neo-communist"*).

Gândul registered the highest number of comments compared with the other two websites, but 28% of them were unrelated to the topic (e.g. advertisements for blogs and commercial announcements). Moreover, the comments posted on this website can be described as monologues rather than dialogues. One possible explanation relates to the architecture of the website. The commentary section of Gândul was organized chronologically, different than HotNews and Evenimentul Zilei, where the participants could directly answer to a specific post under the same thread, even days after the initial comment was made. Thus, the website architecture might enhance, or on the contrary, hinder deliberation (on this topic see also Scott and Street, 2007).

One exchange of opinions posted on *Evenimentul Zilei* website deserves attention. A participant questioned the survey about political preferences in Romania, doubting the reasons to conduct such a survey, the accuracy of the results (*"competence implies correctness, too. How could then people say that they prefer an incompetent, but correct government?* "), and the decision of *Evenimentul Zilei* to make the findings of the survey public. Other comments implicitly agreed with the findings of the survey, but the agreement came with cynicism:

"If I get an advantage, I don't care if somebody is unfair;" this is the authentic Romanian mentality; ...all (government officials – A.H.,) are initially incompetent, but after they worked in the system for a while, they become competent, unless they have a mental handicap. Once they are competent, they have problems with being honest. Anyway, the system is the same, it is just a contingent communist system controlled by 'Securitate' (the former secret police – A.H.); ...the members of the actual government are educated, which implies that they are competent, but they are stealing, and that's why people prefer something different now.

The disappointment with the intellectual ability of Romanians, "if the findings of the survey are right," as expressed by one participant led to the direct reaction of three other people. One focused on the potential strategic action of the newspaper, invoking media deception; the second one explained the survey results as a reaction to the political reality of the last four years in Romania, when the educated political elite enriched itself and thereby discredited the notion that educated people are righteous and reliable; and the third one approved of the first two explanations and added a theory regarding the generation of competence in the office, which however then led officials to stray from the righteous path. The initiator of the thread then tried to back up his/her initial comment, stating that whatever the circumstances (as elaborated by the the other participants), they cannot justify the survey's findings:

This type of attitude (preferring an incompetent government - A.H.) cannot be tolerated, no matter of circumstances. Would this be possible in Germany or America? Only the idea that people could accept an incompetent Government is hilarious. An incompetent person cannot be allowed to govern, while honesty and correctness should be understood as normal qualities for political actors. It is true that there are problems with politicians all over the world. Although power corrupts, there are sanctioning systems in place. First, public opinion, and second, mass media can directly oppose deviant behavior. The public pressure should oblige those who broke the law to quit government as soon as possible and they should be 'politically' punished so that they quit any idea of getting into politics anymore.

This exchange of opinions is perhaps the best example that a civil rational debate is possible and that the online discussions might aim to communicative action, which furthermore turns into a corrective process to solve the legitimacy crisis of the Romanian state. The participants engaged at least partially with the arguments of the others, no personal accusations were exchanged and in this sense everybody was welcomed to participate in the discussion. However, this example was an exception given that most of the postings were rather characterized by short attention spans and personal digressions than by deliberation in which the better argument prevails. Although there was a symmetrical distribution of opportunities for participants to contribute to the discourse by technical default, the behavior of several participants aimed at disqualifying other online users trying to reduce the validity of their statements and thus to exclude them from the discussion.

The case of the online participation on the three mass media websites in Romania points to several issues. First, neither the Internet, nor the freedom of expression is a sufficient condition for deliberative discourse to take place. As Gitlin suggested, a culture of democracy cannot be created by technology but by people who want to commit to discursive practices. Second, the architecture of the website influences the quality of deliberation as it might enhance or, on the contrary, hinder discussion. Third, the introduction of moderation in the online discussions on the media websites might be beneficial to the discursive process. We do not claim that with moderation or declaration of clear rules of online behavior, all the legitimacy problems of the political system in Romania could be solved and that the political system would automatically turn into the ideal

model of deliberative politics, but the online comments might become a force in the deliberative debate once they respect the discourse principles. As Odugbemi noted, sometimes people need to be trained on the elements of debate for public discourse, as it is often the case of the developing countries that switched from an authoritative system to a more democratic one. Fourth, if the quality of online debates can be improved, this also increases the chances that these comments would later be integrated into the mainstream discourse of media, providing a feedback loop.

## The Case for Anonymity

Before addressing the specific case of the political organization, *MoveOn*, we feel it necessary to comment on a similar situation in the U.S., as described in the Romanian case, above. In a *Boston Globe Magazine* article, Neil Swidey wrote about the rare, but important decision at the *Boston Globe* to turn off the commentary function of its online service (2010) when: "News websites from across the country struggle to maintain civility in their online comments forums. But given their anonymous nature and anything-goes ethos, these forums can sometimes feel as ungovernable as the tribal lands of Pakistan" (p. 1).

Swidey's article comes down on the side of standards for monitoring unrestricted public commentary, but discusses the problem moderators (mods) incur when they attempt to deal with the complaints that arise in the simultaneous postings of users. With an average of more than 6,000 comments posted each day the moderators watch for "abuse reports" that commentators post against each other. The problem, he states, is that when people can post comments anonymously, they often feel free to engage in verbal "combat" and inflammatory posts. The result is that: "The pros of hosting a robust, freewheeling conversation had become outweighed by the cons of all the venom and nastiness, by people who are allowed to name-call without any obligation to

reveal their own names." His message is clear; the commentary sections hosted by traditional media may well be a passing practice. Even after many years of allowing anonymous posts, some news organizations like *The Washington Post*, and the *Cleveland Plain Dealer* are modifying their policies; "The goal is to take the playground back from anonymous bullies and give greater weight to those willing to offer, in addition to strong views, their real names" (p. 2).

In summary, Swidey discusses the problem of anonymous posters and the "push and pull between privacy and trust" (p. 2). The U.S. experience described in Swidey's article reflects the problems inherent in the Romanian situation.

# Case Study: The MoveOn Political Movement

Many social movement scholars advocate for the potential of the Internet to serve as a public sphere for deliberative democracy. McCaughey and Avers (2003) outlined the conditions by which this happens by identifying the participants as people with a "collective identity [that] shares common concerns, a common enemy, and, typically, a common space" (p. 8). Their description, while grounded in activist description, resembles the "Culture of Democracy" discussed by Gitlin, and identifies many of the same characteristics put forth in the theories of deliberative democracy and the public sphere, in that people who share these characteristics are more likely to participate in political deliberation and share values and moral positions. And, in this case, the Internet as a metaphorical space where deliberation takes place, negates traditional boundary definitions or traditional structures of control and authority.

The political organization *America's MoveOn* originally served as a model of social network media that exemplified deliberative democracy in both theory and practice. Started in September, 1998, by two Silicon Valley software designers who were fed up with media attention given to

the impeachment of President Clinton because of the Monica Lewinsky scandal, the original website was established for the cost of \$89, and asked citizens to sign an online petition requesting Congress pass a censure motion and "move on" to other policy issues (Chadwick, 2006, p; 122). The topic so energized political affiliates that within a month, the petition had accumulated a quarter million signatories, and two thousand volunteers had signed on to distribute twenty thousand paper comments to politicians (p. 122).

Since 1998, MoveOn.org has become somewhat of a paragon of deliberative democracy. The number of members increased dramatically in the wake of the events of 9/11, when MoveOn tried to fill a vacuum and became a venue for anti-war activists and challengers to Bush administration. The organization was especially appealing because it allowed anonymous activism at a time when many people were not willing to publicly express their political dissent because of the fear to be labeled as unpatriotic and further suffer consequences: "the Internet provided a critical free space for respondents to articulate their dissent and, for many, to connect this challenge to intermediary action" (Rohlinger and Brown, 2009, p. 141). As MoveOn has evolved, so has its mission.

Now known as MoveOn.org Political Action, this organization provides individuals, who normally have little political power, an opportunity to aggregate their contributions with others to gain a greater voice in the political process, and brings people together to take important stands on the most important issues facing our country. (2010)

Now functioning both as a political action committee (PAC) and as a 501(c)(4) nonprofit dedicated to civic action, the organization's model has been exported around the world for purposes of political organizing and activism, and has incorporated the unique characteristics of the Internet to further the goals and aims of deliberative democracy. In the early days, postings to the site were unrestricted, but the volume of messages and the number of causes supported by *MoveOn* has resulted in a system of postings that are now, more moderated by members of the organization. Additionally, as the organization has grown, it has adopted some traditional forms of civic involvement by establishing a lobbying group in Washington DC.

What makes MoveOn a good example of the Internet and civic engagement, following the model of deliberative democracy? In simple terms, the organization has fostered a culture that reflects Todd Gitlin's message about the practice of deliberative democracy: "A culture of democracy thrives by people who choose to live in a democracy" (2010). More specifically, it has created a dynamic public sphere on the Internet that uses formal membership as well as an open forum for people who remain unaffiliated, but wish to make their opinions known to the moderators of MoveOn; and the special topics the organization fosters support additional websites and affiliations with other groups that sponsor open commentary sections on their websites. While the political ideology is clearly to support progressive politics, anyone can post to the open comment section on affiliated websites. Topics for action are "voted" on by members and anyone who chooses to participate in voting on the MoveOn website, and standards of civil discourse are monitored, practiced, and encouraged.

The organization utilizes ActionForum software that allows members and non-members to post questions, engage in political talk, offer suggestions, and post opinions, but most notably, the topics and issues that *MoveOn* features have both historic specificity as well as an on-going commitment to new ideas and reactions to cultural milestones. Participants have a high level of control as they can rate comments on the basis of their quality, and thus the comments are structured according to the participants' preferences, rather than chronologically. What we learn from the specific case of *MoveOn* is that structures that inherent to the evolving Internet can justifiably support deliberative democracy ideas and ideals. No doubt, the software developed specifically for this type of public involvement has a lot to do with the success of the organization and its fast-paced growth, but it also gives us the idea that deliberative democracy can and may take place if and when the appropriate structures for the Internet emerge.

### FUTURE RESEARCH DIRECTIONS

While the perspectives identified in this chapter show that the Internet has great potential for facilitating civic engagement, it currently serves as a tool for deliberative democracy only some of the time. Perhaps this should not be considered a negative attribute. The Internet is still in its adolescence and future uses will likely contribute to both positive and negative aspects of deliberative democracy and civic engagement. Perhaps the most promising aspect of the Internet as a source of information and public exchange of ideas is the age group of consumers who frequent the Internet, and younger consumers for whom the Internet will be considered a logical extension of all social life.

Already the U.S. government has become one of the major repositories of public information, and the Obama Administration has taken great pains to encourage citizens to contact the White House and other branches of government. The White House Blog, open messages to the public, and the public agenda of key governmental actors invite comment and exchanges of ideas. While these measures of government to reach out to the public are growing, special interest groups, citizen organizations, and various institutions are becoming more aware of some of the ways the Internet can provide a critical, and necessary link between those in power and those who wish to engage in deliberation. As the case studies indicate, social movements are attempting to use the Internet for a variety of purposes, with varying degrees of success. The future of deliberative democracy and the Internet as a public sphere will undoubtedly go through many incarnations of linking social causes and the public. Some of those experiments will have greater success than others, but as long as attempts toward linking the public and governmental organizations remain a viable possibility, there is hope for greater levels of success.

### SUMMARY AND CONCLUSION

The "Deliberative Democracy: The Internet and Civic Engagement Conference" addressed specific questions that we have examined within certain contexts, and deal with the three questions we posed at the beginning of this chapter. The possible structural impediments to deliberative democracy via the Internet are many, though not insurmountable. In particular, Gitlin's assertions of technology as spanning the poles of the "sublime" to "the monstrous" are represented by perspectives of authors who either discount, or fear issues of anonymity, communicative style (including hostile expressions and name-calling), and "un-civil" discourse that does take place on the Internet in certain places.

More importantly, the conference speakers and other authors agree, as do we, that the Internet is not a natural public sphere, but under certain conditions, it can function as a public sphere. It is important, however, to realize that the conditions under which it functions as a public sphere are fragile, and subject to change. Both the structures of traditional media that migrates to the web, and the software that can allow user-participation in a truly deliberative democratic way are subject to abuse, and policies and practices can be changed over time. The potential for the Internet to function as a public sphere is still largely untapped, though it does exist in some current forms, like *MoveOn.org* and in some of the examples specifically articulated by MacMillan.

The Internet may someday become an excellent venue for deliberative discourse, but probably not in the context of adapting traditional media to the Internet distribution form. It is far more likely that unique attempts to use Internet space for deliberative democracy will appear, as did MoveOn, to emerge as an answer (or partial answer) to a specific political problem, rather than as an evolution to democratic discourse. It is also likely that the theory underscoring deliberative democracy as a principle (as discussed by Delli Carpini), will evolve as new software developments and new Internet-based organizations emerge in response to those political problems. The citizens/netizens who participate in deliberative democracy on the Internet will share some common characteristics as political groups, and that affiliations with other like-minded individuals will occur. Human conflict that results in hostile interaction may not further the goals of deliberative democracy (as in the Romanian case discussed above), but will still emerge as a challenge to open fora for public expression.

The Internet has the potential to create a public sphere for deliberative discourse, but structures that burden older, traditional forms of media and social conventions toward interpreting news and public affairs intervene in the dynamic of siding with the issues of "deliberative discourse" or "deliberative democracy." The institutional problems identified by Odugbemi are myriad, and will influence who participates in civic engagement.

This leads to our ultimate question: can the Internet be used to engage young people in civic life, and subsequently, will they be the leaders in find a way to engage in deliberative democracy on the Internet? While Gitlin's perspective suggests that the young can become active participants if they so choose, Delli Carpini reminds us that deliberative discourse is an ideal, and therefore can only be something to strive for, rather than to be attained. The traditional structures within specific countries (Odugbemi) may influence who, among the generations of nations, are more likely to attempt to use the Internet for civic engagement, and the situation in Romania shows that where the structures are insufficiently democratic and the Internet is not ubiquitous, there may be a tendency to fall back on past beliefs and attitudes that affect the ability of people to examine the information offered and to explore discourse about the common problems that they are faced with.

MacMillan, the "sympathetic practitioner" remains the most optimistic about the involvement of young people with deliberative democracy ideas primarily because the young have been leaders in establishing a "different relationship" with news and opinion, especially because of the use of Facebook. Twitter: and other social networks. The future of deliberative democracy as an ideal, and in practice, may best then, be found in the emerging experiments with political activity on the Internet, as traditional social ideas of what constitute "news," "opinion," and "expertise" change. What seems of utmost importance to the future of the Internet as a public sphere that furthers deliberative democracy is not just the cultural attitudes of the many, but perhaps the cultural attitudes of the few who have the potential to become opinion leaders. To paraphrase MacMillan, our relationships to news and public opinion will change, and the people most likely to adopt and embrace these changes, are the young.

Therefore, deliberative democracy as an ideal may yet become a practice that can be sustained on the Internet, though we must understand that our traditional definitions of discourse, opinion, and authority may well undergo many changes as we strive to create a public sphere on the Internet.

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## **KEY TERMS AND DEFINITIONS**

**Deliberative Democracy:** The process by which opinions are expressed and shared in a respectful environment in which discourse and negotiation take place for the purpose of reaching mutually-agreed upon decisions.

**Public Sphere:** A place (literal or figurative) in which deliberative politics and deliberative actions take place, where private people come together to engage in decision-making regarding rules of governance.

**Social Capital:** Actions that build trust, such as empathetic listening, allowing other participants to express themselves fully, and being mindful of the possibility for compromise.

**Social Networking:** The ability of individuals and groups to reach audiences of one or many, by using the interactive characteristics of the Internet.

**Two-Step Flow:** An early theory about personal influence and the media posited that media were good at providing information, which individuals whom other people considered "opinion leaders" then exercised. Information then flowed from the media to select, key individuals who were more powerful in shaping public opinion for others, than the media.

### **ENDNOTES**

<sup>1</sup> The "Deliberative Democracy: The Internet and Civic Engagement Conference" was supported by an endowment by the Verizon Corporation, and Temple's School of Communications and Theater.

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- <sup>3</sup> Dean of the Annenberg School for Communication at the University of Pennsylvania
- <sup>4</sup> Program Head of the Communication for Governance and Accountability Program (COMMGAP) of the World Bank
- <sup>5</sup> Professor of Convergence Journalism at the University of Missouri
- <sup>6</sup> It is important to note that these "labels" are our own, and were not agreed upon, or chosen by the speakers themselves.
- <sup>7</sup> Gitlin discussed the film, *Three Days of the Condor* as a specific artifact that told how unless the New York Times covered a story—the story did not exist.
- <sup>8</sup> The practical approach to the veracity, authenticity, and transparency of news that reflects governmental politics and social values can be easily seen in the current controversy involving Google's challenge to government opposition of Internet freedom in China (MacMillan and Alpeyev, 2010) as well as how Google has decimated traditional news outlets in the United States (Fallows, 2010, pp. 44-56).
- <sup>9</sup> The country became a member of NATO in 2004 and of the European Union in 2007.
- Data provided by Eurostat (the statistical office of the European Union) and available at http://epp.eurostat.ec.europa.eu/tgm/table. do?tab=table&init=1&language=en&pcod e=tsiir040&plugin=1.
- <sup>11</sup> Mass media outlets were chosen based on their prominence (distribution and circula-

tion numbers/ online traffic) within the Romanian media landscape.

- <sup>12</sup> The news item and the comments are available at http://www.hotnews.ro/stiri-politic-5007893-iliescu-basescu-vrut-daramepropriul-guvern-pentru-viziune-bolnava. htm
- <sup>13</sup> All quotes from the Romanian websites are translated by A.H.
- <sup>14</sup> The news item and the comments are available at http://www.gandul.info/politica/ iliescu-si-udrea-dau-startul-campaniei-pestil-nou-si-vechi-galerie-foto-3409364
- <sup>15</sup> The media story and the comments are available at http://www.evz.ro/articole/ detalii-articol/826700/Romanii-preferaguvern-incompetent-dar-cinstit/

# Section 8 Social Media Engagement

# Chapter 24 Empowering People Using Twitter: The Case of Mexico's Internet Tax

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#### ABSTRACT

The purpose of this chapter is to provide evidence of the impact that Twitter has on empowering Mexican people and transforming social protests. This technological tool enables citizens to force political actors and electronic media to take a proper position on certain issues. The aim of this chapter is to explore the uses and misuses of Twitter in Mexican online protests, and in common citizen-user interactions. The main outcome is an explanatory model of e-participation as a possible explanation of this phenomenon and the promotion of some ideas to use Twitter in a proper way. This chapter is organized in five major sections. First, the introduction reviews the origins and fundamental principles of Twitter and social interaction. Section two describes the model of online participation. Section three presents the Internet tax case in Mexico, named: "necessary Internet." Section four discusses the outcomes and possible implications of citizens' empowerment through Twitter using the model. Section five provides insights into future research in this field.

#### INTRODUCTION

The social protest has a long tradition in world history, from the Middle Ages when people started thinking about democracy and human rights, to the French Revolution in 1789 when the Social

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Contract was made, and the concept of citizen was mentioned, indeed ever since then numerous social protests have taken place.

We can mention that the social protest has different origins, from a political perspective such as protests against an established government, like the Russian Socialist March in 1917, or the social protest in China against Chiang Kai Sek, looking for a socialist change; this social protest over streets derived from a revolution and violence.

Other social protests with an ideological content have also changed history, starting with the Hitler era, when Germans were convinced to affiliate to the Nazi Party and launch the Second World War. On the other side Mahatma Gandhi, in India, and his peaceful social protests forced the independence of his country from the domination of the United Kingdom.

The social movement field of research has much work on the different democracies and countries around the world. Starting with environmental social protests (Schwartzman, Alencar, Zarin, & Santos Souza, 2010), the poor movement of workers in Brazil (Campbell, Cornish, Gibbs, & Scott, 2010) along with food and agronomic experts (Starr, 2010) – and with political movements linked with political parties (Schwartz, 2010; Arce, 2010), or the revival of the socialist movement in France (Le Queux & Sainsaulieu, 2010). Research by Rapp, Button, Fleury-Steiner, & Fleury-Steiner (2010) shows the evolution of a dialogue between black female victims using the Internet that evolved to become a social protest.

By using the Internet social movement protests have evolved into more organized global political protests around the world (Feixa, Pereira, & Juris, 2009), in particular social protests against multinational companies (Martin & Kracher, 2008). Nowadays, online tools help to organize social protests (Wall, 2007), like the 1999s "Battle of Seattle" which saw more than 70,000 protestors come together by means of online organizing to take on the World Trade Organization (Mccaughey & Ayers, 2003). Are social movements changing because of technology? This question is difficult to answer, however, research like Earl (2006) analyzes online activist tactics (online petitioning, boycotting, emailing and letter writing campaigns), and Friedland & Rogerson's (2009) literary review of the use of the Internet on social movements provides evidence of the existence of this new path of research.

In Mexico a normal social protest closes main streets and causes traffic congestion that makes authorities pay attention and at least listen to the protesters. In 1968 a movement in Mexico City caused a violent riot and a bloody massacre of students yet the motive remains unclear. In 1998 and 2000 social protests after election results against electoral fraud and a fair counting of votes, created a massive consciousness in Mexican politics. However, the first online protest using technology emerged from the Chiapas State in 1994, with the indigenous Zapatista movement using email to diffuse their ideas around the world and sending massive emails to newspapers and opinion leaders.

The use of information technology and communications (ITCs) creates a new kind of behavior, and social protests which started on the streets (Mosca, 2010) are now are evolving on the web. The Mexican online protest of #InternetNecesario leads that direction, and poses the research question of this study: Is Twitter changing the way Mexicans protest? Complementary questions that this research tries to solve are: Is Twitter empowering Mexicans to protest online? How can Twitter empower Mexicans to make their protest online?

In order to answer these questions, we develop a research model that links the theoretical background of online protests with cyberactivism and recent Twitter research. This model analyzes the case of#InternetNecesario to provide evidence that supports our answers. This chapter presents the introduction of the research problem, the second section concerns Twitter research and cyber activism, followed by a third section that elaborates on the model of analysis as a methodology and finally the analysis of the Mexican case, with some suggestions and future research comments.

# THEORETICAL BACKGROUND

Twitter has been a 140-character explosion for micro-blogging. The use of blogs as part of the Web 2.0 has not been as explosive as the use of Twitter

when it comes to telling a worldwide audience about one's personal thoughts, current activities, plans and so on. This web-based application was launched in 2006, by Jack Dorsey, and has been steadily growing since. In March 2006, Twitter registered a 1500% increase in the number of registered users, (Statesman, 2010), having more than 106 million users worldwide, who send 55 million tweets – messages – everyday. Twitter is considered part of the social network, Contractor and Monge (2002) state there are three types of social networks:

- 1. the social network who we know;
- the cognitive network what do we know about you; and
- 3. the knowledge network, what kind of knowledge we know from you.

This platform is focused on the first type of social network, and tries to become the second type.

A few studies have been published discussing the impact of Twitter on social media and users. The first was made by Java, Song, Finin, & Tseng (2007), the authors compared micro-blogging to regular blogging and found out more engagement and reciprocity in Twitter users when compared to conventional bloggers. Honey and Herring's (Dutton, 2009) research was focused on the conversations that can be maintained using this social platform, they found out that using the @ symbol to target messages to specific users makes this service more usable as a collaboration tool (Honey & Herring, 2009).

Another face of Twitter is the recommendation function. Since the platform is limited to exchanging short text messages, recommending websites, videos or photo sharing is frequent. Phelan, Mc-Carthy, & Smyth (2009) studied this particularity of Twitter for promoting news and stories. The first research focusing on a deep understanding of this relatively new phenomena was made by Zhao & Rosson (2009); they discovered that this tool which eases information sharing also helps Twitter build up a common ground and sustain a feeling of connectivity among colleagues and friends. Later on Boyd, Golder, & Lotan (2010) focused their research on the retweet function as a tool to promote regular conversations and increase the viral effect of short messages or pictures. Diakopoulos & Shamma (2010) complemented Boyd and colleagues' research by adding the sentiment variable, the authors proposed the hypothesis that there is a relationship between an event and an affective response shown through a timestamp and a hashtag. However, the analyzed tweets were evaluative and did not reference the event itself and further research will try to prove consistently the variable hypothesis sentiment.

On the other hand, Kwak, Lee, Park, & Moon (2010) state that an important research question is: Is Twitter a social network or a news media? The authors analyze the topological characteristics of Twitter and its impact as a new medium for information sharing. On the technical side of Twitter, the work of Lee, Kwak, Park, & Moon (2010) and Sarma, Sarma, Gollapudi, & Panigrahy (2010) provides different methods to analyze the Twitter hierarchy of messages and to discover how previous posts influence new ones.

On the side of social movements and e-democracy, previous research like Mosca (2010), establishes the concept of the political use of the Internet as: "using the Internet to gather political information, to discuss political issues and to perform acts of dissent online" (Ibid, p. 4). Supporting this concept are the previous work of Mccaughey & Ayers (2003), van-de-Donk, Loader, Nixon, & Rucht (2004) and Pickerill (2010). More recent research supports the same conclusions like Wall (2007) mentioned earlier and Wigand (2010a) who measures the conversation of different stakeholders to build relationships with government, besides information sharing using Twitter provides evidence of the existence of the political use of the Internet. Calderaro (2010) expands Mosca's (2010) concept: "The Internet also includes tools other than the WWW, such as

E-Mailing Lists, collaborative on-line software, Peer-to-Peer Networks, Instant Messaging tools, and so forth", even though this research is focused on email, it shows the potential of these tools in politics. On the other side, the work of Ayres (1999) presents a less optimistic view highlighting the unreliable and unverifiable information that could circulate on the Internet on social movements' websites producing more uncertainty and confusion rather than a real political discussion. Furthermore, Baumgartner & Morris's (2010) study of social network websites among young users, finds that participation on politics of this cohort are not more inclined to participate than users of other media.

### RESEARCH MODEL

As a result of this literary review we combined a theory with a model of participation to support our research model. This model was proposed by Gonzalez and Gil-Garcia (2009) who developed a model of participation opportunities for citizens. These criteria are as follows:

**Offline principles.** These not only involve education, but also policies and legislation aimed at providing the bases of democracy and participation to citizens.

**Online involvement**. These could be observed in the form of tools used to promote and motivate citizen participation through websites.

**Information for users.** As a bare minimum, it includes names of officials, street addresses, electronic addresses, telephone numbers and business hours.

**Discussion forums**. These are areas for debate on specific topics that allow for the expression of deliberative comments.

**Online contributions.** Know as weblogs or simply blogs, they are a form of activate participation used to increase awareness about general topics as well as to record opinions, reports, stories

and other types of articles related to a particular community topic, sector or territory.

**Real time conversations.** These are tools similar to discussion tables except that they are held at specific and limited times.

**Surveys.** These can be used to gauge the different perceptions related to implemented policies. The advantage of surveys is that they collect quantifiable data which is easy to analyze and understand, and requires minimal equipment or skill.

**Voting**. E-voting implies the introduction of technological components at some or all stages of the voting process, which makes them more difficult to implement than traditional voting methods.

Feedback and results of involvement. These are results of consultations and discussions which must be published afterwards in order to provide participation with feedback and to strengthen confidence in the decision making process.

Our combined research model considers most of the previous variables, but some are not part of our study. Figure 1 shows this model and the link with the theoretical ground. The variable survey is not considered in the Twitter model as a way of participation but is an implicit variable in the moment we participate around certain conversation.

Also this research model expresses a strong link between the real and virtual world, using a technological tool such as Twitter; in this case, the bridge between both is the Twitter platform, that links people supporting or proposing ideas against the government. This kind of interaction occurs along several tools provided by the platform and the replication of the media.

#### THE #INTERNETNECESARIO (INDISPENSABLE INTERNET) CASE

An overview of Internet use in Mexico is needed to contextualize the case study. Internet use in Mexico has grown rapidly in recent years. According to information from the site e-Mexico, in

Political Space = Twitter		
<b>Opportunity of participation</b> (Gonzalez and Gil-Garcia (2009)	Twitter Feature	Author and Research
Online involvement.	Blogging feature (Java, et al., 2007),	
Information for users.	Information sharing and connectedness among users	(Zhao & Rosson, 2009)
Discussion forums.	Information sharing through a news media	(Kwak, et al., 2010)
Online contributions.	Content sharing for promote news Retweet to promote a regular conversation	(Phelan, et al., 2009) (Boyd, et al., 2010)
Real time conversations.	Twitter as collaboration tool	Honey and Herring (Dutton, 2009)
Voting.	Hashtag (Diakopoulos & Shamm	
Feedback and results of involvement.	Instant diffusion of results and real time publicity	(Zhao & Rosson, 2009), (Wigand, 2010b)

Figure 1. Model of social participation and Twitter

2000 the country had 2.8 million Internet users and only 55 cities had Internet access. In 2003, 2.443 access points were allowed to cover the municipalities of the country. The localities with public Internet connections increased from 2.776 in 2000 to 32.326 in 2006. Currently, according to the latest AMIPCI (2010) study, there are 30.6 million Internet users in 2009, representing a national penetration rate of 32.5% on the Internet over six years. Another study performed by the World Internet Project (WIP, 2009) presents a total of 18.2 million personal computers. This is a 23% increase over the previous year.

According to Jasna Seguic from Comscore: "The growing number of Mexicans using Twitter multiplied by six times last year (2009) in order to obtain third place in Latin-American penetration and eighth place worldwide". Data from this company reveals that the Mexican increase in Twitter will reach 935% and Facebook 145% in 2010.

The consultancy group CIU (Competitive Intelligence Unit) provides more research including a telephone survey of a sample of 1,500 respondents. In this survey young people aged 16–25 years use the Internet and 87% of those over 50 years are connected. Of these, 50% connected from home, 22% from work and 20% from an Internet cafe, only 8% connected from school. Of the sample 68% use social networking, 48% of respondents belong to only one social network, but the remaining 52% have access to at least two or more networks. In terms of visiting social networking sites in Mexico; Hi5 takes first place with 69%; Facebook 56%; MySpace 24%; and Twitter 13% (Matuk 2010).

Finally a recent study published online on Twitter platform use indicates that in August 2009 this social media platform had 32,000 accounts and 8,000 were active. In this sense, by January 2010 the total number of accounts grew by four times its size relative to the previous year, while active accounts increased a total of eight times. The results of MenteDigital consultancy group's survey, published by William PerezBolde (2010) reveals that 56% of Twitter users are men, and 44% female but females released 2.5 times more messages than men. Most Twitter users in Mexico are connected to the web via the social network online platform (49%), the rest (41%) use other platforms like TweetDeck. In Mexico 95% of the total public Twitter users in Mexico post one Twitter message per day, 3% published two to five, and only 2% published six or more times. The study of PerezBolde (2010) reveals that according to the growth seen in August 2009 to January 2010, the number of Twitter users in Mexico could reach 350,000 by July 2010.

Some examples of the use of social media in Mexico are

- 1. Citizens of Mexico City being able to evade police road blocks breathalyzers by using Twitter to send the exact location to be avoided. Some were subsequently threatened and punished by the authorities, although there is no legal justification to stop them.
- 2. A student of the Instituto Tecnologico de Estudios Superiores de Monterrey, a private university in the State of Nuevo Leon used Twitter to send messages telling of the intrusion of the military in the Monterrey Campus, as well as raising awareness about the death of two students in this military riot. All of which were initially classified as assassins, but post-revelation they were recognized as students of that institution not linked to drug dealing. Thus Twitter has been used to challenge the media and press reports of federal and state prosecutors.

This data shows the existence of articulated social networks through the use of technology that are pushing, working and promoting their interests inside society and diverse groups. These examples lead us to explore this social trend in Mexico with the case of #InternetNecesario.

Mexican taxes are assessed every year, Mexican Congress creates a new bill of taxes, reducing, maintaining or creating new taxes. The first time they proposed to tax Internet use was in 2009. The bill was approved in the low chamber. However, the president of the Mexican Chapter of the Internet Society, Alejandro Pisanty made a statement against this bill, and posted the message: "promote, not tax" (promote: no tax on internet use) using hashtag#InternetNecesario (Indispensable Internet) imitating a Venezuelan movement with the same name. This took place on Monday 19 October 2009, at 22:00 hours.

This post fostered a social disruption among Twitter users in Mexico, gathering more than 10,000 users posting and re-posting through the online platform and supporting Pisanty's complaint. Approximately 100,000 messages were posted during the 10 days of protest (see Figure 2). This online protest became a trend topic in a few hours reaching fifth place of the top trending topics.

This online social protest motivated Senator Francisco Javier Castellon Fonseca (@Senado-Castellon) to promote a hearing with some representatives of the Mexican Twitter community. This happened on 22 October with the presence of the Chairman of the Senate, Carlos Navarrete. Twelve representatives of the online community talked with the senators; the citizens expressed their disagreement with the telecommunications tax proposed by the low chamber – Deputy Chamber – and gave some proposals for the legislators.

This meeting was widely covered by newspapers and television news and also streamed online. Pollster Maria de las Heras from Milenio Newspaper, published a national poll in which 78% of Mexicans were against taxing Internet use and considered it a basic need (Riva-Palacio, 2009). On 22 October the social media reached up to 32,864 Twitter messages supporting their "virtual representatives" with the senators. During the subsequent days, 11,156 Twitter messages using the hashtag #InternetNecesario were sent daily.

Twitter followers made their protest move from a virtual protest to a face-to-face protest. On the following Sunday, 27 October they gathered together at "Parque Hundido", an emblematic park in Mexico City (see Figure 3). This face-to-face meeting was reproduced in other states like Nuevo León, Yucatán, Jalisco and Chiapas.

Finally, after a battle of several weeks, the Internet tax was officially rejected. Only cellular phone communications, satellite and cable television were taxed. The hashtag #InternetNecesario remains active on a protest website (www.internetnecesario.org).

7h

7h

28 h

Hot topics for Tuesday, October 20 Tuesday 20 October Rank Start time Peak time 🕌 Topic Max popularity Avg popularity W 1. Sun 20:00 Tue 11:30 6.04 % 3.89 % 48 h new 2. Mon 6:00 Tue 11:30 2.24 % 0.35 % 40 h apple W Tue 7:00 Tue 11:30 1.55 % 0.34 % 24 h 3. mouse W Tue 7:00 0.85 % 20 h 4 Tue 10:30 W 1.37 % god 5. Tue 11:00 Tue 11:30 0.33 % 20 h 1.15 % magic 6 Tue 11:00 Tue 11:30 magic mouse W 1.03 % 0.28 % 13h 7. Mon 22:00 Tue 0:30 intemetrecesario 0.95 % 0.30 % 8. Tue 1:00 Tue 11:30 0.95 % 0.14 % 21 h imac W 9. Tue 18:00 Tue 22:30 the world 0.74 % 0.56 % W

Figure 2. Statistical data of #InternetNecesario trends

Tue 0:30

internet

### **EMPOWERING PEOPLE** THROUGH SOCIAL MEDIA

Mon 20:00

10.

Twitter has been used in Mexico as a platform to push ideas against government policies. Conventional protests in Mexico usually consist of demonstrations on the streets or other public places lasting one or two days. However, online protests like the one we are discussing have some differences.

Firstly, this protest lasted an entire week. Over 100,000 Twitter messages were sent to the hashtag, which means that many people joined the protest during the week, when they learned of what was happening.

This online protest was made of 24/7 sessions of online brainstorming, rejections and complaints against the government. All sectors of the population were involved involving all social classes, ages, education levels, political affiliations and economic status, all the participants that supported the hashtag and the protest had a common goal: rejecting the Internet tax. The participants and the representatives who went to the Senate trusted each other, this affirmation needs more evidence to be proved and a research must be conducted to that end, but contrary to other online protesters in Mexico, trust in the Twitter community seems to arrive naturally.

0.46 %

0.71 %

W

The Twitter movement holds some resemblance to traditional protests: the formation of a commission of representatives to talk with the authorities. However, instead of involving only political leaders as is commonplace in traditional movements, this commission was integrated by different sectors of the Twitter community, including the initiators of the hashtag, people with political connections and well-known bloggers and Twitter users from all over the country.

Our research model, presents evidence that Twitter features enhance Mexican Twitter users to conduct their social protest and improve their political pressure using this tool. Twitter produces an online involvement creating the sense of community during a week-long protest. Users could follow the online protest through the platform updated every minute, sharing and producing more information about the topic; this creates a discussion forum with media representatives and senators and forced the latter to make a hearing about this issue (see Figure 4).

According to Figure 4, the online contribution using the Twitter platform could be held on several aspects: tweets, retweets, direct messages,

#### **Empowering People Using Twitter**



Figure 3. Public demonstration at Parque Hundido, Mexico 27 October 2009

linking to the web page of the Mexican bloggers. Furthermore, a secondary protest tool was to send massive emails to congressmen, electronic media and newspapers, claiming: promote no Internet tax. Twitter was used by the protesters as a platform to expose their protest, maintaining a real time conversations all the time, all day, for a week. This is a qualitative difference from a traditional protest that lasts a few hours – marching on the street – a protest in front of a government office, or a strike. The online protest, through Twitter, enables protesters to give their opinion from their cellular phone, office or home.

This online protest voted online using the Twitter hashtag became a Twitter trend in a few hours, and exposed this topic to worldwide coverage, reproduced by international media and ensuring it became a news story for several days. Most of all, the protest – and other factors – reached its main objective: no Internet tax. In a few days feedback was received: a hearing from senators, something that in Mexico for normal channels could take months yet an online protest achieved in a matter of days. Finally after just a week this protest achieved its aim, the rejection of taxes.

Another important feature of Twitter compared with other social media platforms, such as Hi5 or Facebook, is the immediate reaction that Twitter has. The retweet tool creates a virtual space of interaction, through the hashtag that can be considered as a cornerstone or sparkling idea. All ideas, claims and discussions circulate around it and create a virtual community, a political space (Mosca, 2010). This can be seen as the hashtagreaction-community effect. As there are a lot of ideas circulating around Twitter, most of them are disperse and disarticulated, however an argument or a statement about any particular topic can create a community.

Communities created by the retweet effect expand every day. Many Mexicans send the hashtag to their friends, family and coworkers and invite them to participate in the discussion or protest; this viral effect is part of the features of the new

Deliving 1 Courses - The inter-			
Political Space = Twitter			
Opportunity of Participation	Twitter Feature	#InternetNecesario	
(Gonzalez and Gil-Garcia (2009)			
Online involvement.	Blogging feature	Micro-blogging feature.	
Information for users.	Information sharing and	Sense of community by the users	
	connectivity among users	and connectivity during a week	
		long campaign (Zhao & Rosson, 2009).	
Discussion forums.	Information sharing through a	Senators hearing, online	
	news media	discussion of the topic.	
Online contributions.	Content sharing for promote	Online trend published by the	
	news	media. Senator's hearing	
	Retweet to promote a regular	published by media.	
	conversation		
Real time conversations.	Twitter as a collaboration tool	Solutions discussions and	
		proposals to senators. Criticism	
		of political status quo.	
Voting.	Hash tag	#InternetNecesario hash tag	
5	_	acceptance creates a trend topic	
		in short time. Worldwide	
		diffusion (Diakopoulos &	
		Shamma, 2010).	
Feedback and results of	Instant diffusion of results and	Real time publicity of hearing	
involvement.	real time publicity	Twitter posts.	

Figure 4. Analysis of #InternetNecesario with a Twitter social protest model

social media attributions (Boynton, 2009). This expansion can rapidly surpass national borders, Mexicans living abroad promptly join the conversation and increase the social network effect, pressuring the government from the outside.

This effect was used also in the Iranian protest for electoral results on 2007, when young people used Twitter to communicate, organize, and send messages to the international community. Both examples, illustrate how virtual communities create a political space using Twitter for a concrete objective.

This retweet feature is linked with another variable of social media tools: the viral effect. From the 10,000 Mexicans that interacted with the #InternetNecesario hashtag, a few of them were frequent users of Twitter, some sources calculated their numbers at around 2–3,000 seasoned members, the rest were "contaminated" through other Internet tools like email, chatting or blogging. The pushing idea dissolved and evolved with time: "promote, not tax", became a secondary argument; other arguments like "free will", "freedom", "bad government", "corruption", "senators and congressmen bad results" are among the most

popular topics that spawned from the original one. However, the effect of this virtual community also contaminated other spheres like the electronic and printed media, which used the movement to express the social discontent for this bill.

Media synergy was a complementary variable that helped to spread the viral influence of the #InternetNecesario movement. Important television news agencies interviewed some participants of the meeting with the senators. Newspapers and radio stations promoted face-to-face panels about the Twitter hashtag. The mass media in Mexico reproduced the protest on their own websites, expanding the viral effect. This component was very important, because the protest scaled up to national television and the mass media right after the idea was launched. The statement was not put forward in the national discussion by journalists, instead, a single member of the academic community-Pisanty-started it and was immediately followed by 10,000 people who supported the discussion. This was a genuine citizen protest.

This kind of protest called the attention of the political class for the media synergy that was created. Despite the political ideology or the personal interests of the politicians involved in the discussion, the Twitter platform became a place to gather opinions and discuss a tax bill.

Mexicans have a young tradition of political participation. It was in 1996 when free elections and the consolidation of a multi-party system allowed Mexican citizens to build a new space for opinions, contradictions and freedom. The Twitter platform features empower Mexican Twitter users to express their thoughts. At least three important features allowed this online protest to happen: ubiquity; anonymity; and time.

**Ubiquity.** The Twitter platform is now on the laptop computer, the desktop and the cellular phone; this opens the possibility of instant reply, reading Twitter messages and sending and receiving retweets and as a result non-stop news coverage. Mexicans can benefit from Internet spots at home, at school, or at the office. The availability of this platform promotes online participation and the creation of conversations.

**Anonymity.** Despite the fact that every Twitter profile has a name or a picture, everybody can take a new name or personality, this semi-privacy motivates many Mexicans to use Twitter and give their opinions without menace or threat. In a society that is still consolidating its freedom of speech, this Internet tool helps people to trespass the limits and express themselves.

**Time.** A few years ago the political protests were organized online but appeared on the streets or the avenues, however people now can protest all day long using their computer. Meeting is not only face-to-face, meeting online is an alternative; a Twitter platform promotes this kind of exchange of ideas and contacts using an Internet connection. On the other hand, a face-to-face meeting marching on the streets is much more time-consuming. Twitter allows users to give an opinion online, retweet another opinion, discuss a point of view, disagree and create an effect in a few minutes. We are not saying that online communities will replace physical interaction. What is important to remark on is that online protests are now an alternative to promote electronic democracy.

According to Contractor and Monge (2002) the #InternetNecesario cyber-protest started using social networking. Users took advantage of their personal relationships and contacts within Twitter to promote the protest. This group of users created a cognitive network. Eventually, the protesting messages reached a member of the network who happened to be a senator. Citizens were able to reach their government through networking relations and pressure. However, it is difficult to say if the Twitter community in Mexico learnt something and arrived at a knowledge network, the final stage. A further study can provide evidence of this change.

The Twitter platform gave Mexican users a way to express ideas and put pressure on the government. Features like ubiquity, anonymity, and time economy generate trust for citizens and encourage them to express themselves against a tax bill. Mechanisms like retweeting, viral contamination, and mass media synergy, create a social engine to reproduce and expand content along the web. The opportunities of participation features also show an improvement using the Twitter platform to express views and arguments against government proposals. This expansion of features - or empowerment - creates links and networking among a disperse society with different characteristics who share a common goal, and find a political space to discuss, pressure and find an agreement. With this evidence we can answer the question: Is Twitter changing the way Mexicans protest? In the case of the Internet tax, we can affirm that Mexicans used this new option of protest with efficient results. For the following questions: Is Twitter empowering Mexicans to protest online? How can Twitter empower Mexicans to make their protest online? We can say there is no causal relation between the online protest of #InternetNecesario and the rejection of the Internet tax by the senators, and the change of the bill. However, there is enough evidence to

state that social interaction with a political motive was performed using the Twitter platform. Furthermore, the research model presents evidence that Twitter features improve online participation, and the variables ubiquity; anonymity and time are characteristics that empower the use of social media for a political participation online. Our model of interaction provides a deep explanation of this phenomenon in Mexico.

## SOLUTIONS AND RECOMMENDATIONS

Does the #InternetNecesario online protest represent the new era for civic engagement in Mexico? It is very difficult to answer this question so far. However, during the 2009 mid-term elections in Mexico, a Facebook group was opened to promote null voting. The Facebook group increased affiliation and participation along the year, and promoted a national discussion to pressure politicians and political parties to improve their performance and commitment with Mexican democracy.

The impact of the Internet on Mexican political activism is another path of research. We cannot be sure about whether #InternetNecesario as an online political protest did produce a change in the political decision. Senators and media can argue that they had a key role and the Twitter protest only created synergy and increased the public attention level to discuss it.

However, the possibility of promoting political protests in Mexico using Twitter, and getting the attention of the politicians is a fact. Politics over the Internet using social media tools is an important issue to be analyzed. A new challenge is to analyze the political use of Twitter, in contrast to the citizens' side; this includes political strategies aimed at keeping in touch with citizens and promoting a political candidate for the polls. Wigand (2010) analyzes the public administration use of the Internet in the Obama administration. Also Bailey & Singleton's (2010) national survey in the US about the use of social media in government analyzes the same issue. None of these measure the political impact of Twitter.

Mexican senators opened a Twitter account later on, they got a lot of followers and received several claims overnight, but is this really a new communication channel between politicians and citizens?

How far is the day when the political use of Twitter can lead to setting an agenda of public policies; to lead to discussions between candidates and citizens; to promote or reject a new bill, etc? It is very difficult to manage a political Twitter account and maintain a face-to-face interaction everyday. Instead, politicians could use it as an online media for sending messages and sharing thoughts, but not necessarily for listening to citizens' claims. Twitter has three main disadvantages to consider. The first one is the superficial input of information, 140 characters is good to summarize but not enough to present a whole idea or discussion over some political issues. Most political ideas can be misunderstood or have a lack of content.

The second disadvantage is that the messages – Twitter posts – are not maintained in the web; one difference in Facebook technology is that the Facebook wall keeps the conversations online, Twitter conversations are gone from one day to other. Third, the subscription services – followers – can only have access to the information of the sender, but the sender – in this case the politician – is willing to subscribe or unsubscribe the user and only subscribe to those of the politician's own circle of interest. This creates a close circle of information, listening only to the people they want to hear, and speaking for everyone else.

Finally, despite the fact that politicians make scarce use of Twitter as a tool to engage citizens on political labor, many Mexican citizens use this tool to help each other. Frequent uses of Twitter include: warning about traffic jams in Mexico City; preventing corruption through public exhibition– using pictures – of policeman or politicians doing something illegal; breaking the law by avoiding alcohol check points on weekends. Those are some examples of the use of social media tools to interact with the government.

### FUTURE RESEARCH DIRECTIONS

Twitter for open government has strong potential to become the new tool to engage citizens in public affairs. The use of social media tools for interacting with governments is a new field of research. The following are some questions that should be addressed in future research: How to promote the use of citizen interaction? What are the boundaries of government in the Twitter field? How far can a citizen go to discuss and point out a public policy or a bill? Should Twitter use by government be subject to privacy regulations?

In a more theoretical perspective, the use of Twitter by citizens and politicians evolves the meaning of "communications", the structure of political communications is changing, and the communication code must change. The political communication community of researchers should analyze these transformations and paradigm shifts.

This research was made using secondary data, links, Internet statistics, Twitter numbers and media reports. However, a more in-depth investigation of this topic can be done using qualitative and quantitative methodologies. The use of focus groups and interviews with the participants of this online protest can provide evidence of their links, the way they relate to each other and form networks with their peers or friends and conform to a community.

On the other hand, the aftermath of the protest must be analyzed in order to find out whether the use of the Twitter platform can give rise to new groups of protesters. Did protesters remain in contact? Did they form a new online community? Have they protested for another political or social motivation? A complementary path of analysis could be the trust factor. Why do people trust Twitter more than a newspaper? Why did Mexican protesters use Twitter rather than political channels? The trust factor is a key issue that should be researched in order to form an integrated view over this phenomenon and its implications.

Finally, research on Twitter and other social media tools, requires a new methodology to be developed, to provide variables and tools to understand better this phenomenon and to systematically acquire knowledge about it. An important problem that should be addressed is the validity of the information; the use of this tool and its political conclusion occurs so fast that it is difficult to measure. For example, the #InternetNecesario protest occurred during three days but the whole protest lasted one week. It is quite difficult to develop and implement a measuring instrument in such a short time.

Research on civic engagement through Twitter must address the new communication structures, and the formation of new protest communities using online tools, and creating new political spaces. There is a clear need for developing complementary methodologies, new research tools are required, novel theories should respond to this fast-changing reality and these are the key points to be aware of in future research.

# CONCLUSION

The #InternetNecesario Mexican online protest was a turning point in Mexican citizens' participation. With the Internet platform and the Twitter social media tool, Mexicans are able to claim, discuss, collaborate, take an opinion and make a clear statement about any political issue.

The characteristics of the Twitter platform empowers Mexican citizens with a common ground to make their claims and protest. The ubiquity, mobility of Twitter, the short messaging, the possibility of retweeting producing viral connections and enhancing their networks allows a new synergy to be produced among electronic media and the Internet and creates an online community that supports a claim: no Internet tax, promote it.

The aim of this chapter was to analyze this movement, understand its essence and the way of participation in the social protest online and to try to produce a theoretical model to explain it and to reproduce or improve the model of social protests online by analyzing variables, interactions, consequences and effects among the Twitter community in Mexico and the congressmen in the country.

In Mexico, Twitter has become a communication channel with politicians. The #InternetNecesario protest states this argument. Some Mexican politicians use, collaborate and read Twitter maybe more than the Internet itself. Many busy Mexicans are aware of news, political decisions and political discussions using the Twitter platform; online discussions pass through Twitter.

However, only 29 million Mexicans have Internet access, and from this only 20–30,000 use Twitter, this means that only a small group of Mexicans have access to this possibility of connection with its representatives. There are still a majority of people not involved in the online discussion over Twitter and their opinions and world vision are not part of this kind of discussion. The digital divide in Mexico is an important issue to consider in order to provide a more democratic life.

Does Twitter promote democratic life? It is premature to answer this question, nevertheless social media is building networks and connections among citizens and political parties, citizens and politicians, citizens and mass media; this networking is going to exchange information, produce data and improve knowledge of Mexican society. In the long run the use of information technology can produce more ways and paths to participate in democratic life. This is just the beginning.

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# **KEY TERMS AND DEFINITIONS**

**Boycotting:** Online actions to obstaculize government measures or decisions.

**Cyber Activism:** Political actions using the internet platform to pressure, support or inffluence government or political actors to take a stand about certain topic in the public opinion.

**Networking:** Human and technological links of ideas, data, personal information or knowledge.

**Online Petitioning:** Interactive technological system that organizes and retrieves citizens petitions about public policy.

**Online Political Space:** Virtual location to exchange and interact political positions, ideas,

arguments or debates that influences an specific political system.

**Online Protest:** Use of technological tools through internet to claim, pressure or support political decisions.

**Social Media:** networking space organized by technological applications – twitter, facebook, linkedin – to interact, contact, produce and collect information, ideas, or knowledge using internet platform.

**Twitter:** Information technology tool to share and produce knowledge through a platform of 140 characters.

**Viral Effect:** Instant diffusion of online message using social media applications.

# Chapter 25 Local Government Use of Web 2.0: Los Angeles County Perspective

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#### ABSTRACT

Web 2.0 refers to various networked applications utilizing technologies such as application mashups, content syndication, videocasts, wikis, blogs, social networking, user tagging, social bookmarks and content and service rating. Such technologies are designed to reach, attract, and interact with a greater electronic user audience. The potential of these technologies for e-government applications at Los Angeles County is analyzed. The government model for leveraging Internet technologies is different from that of commercial enterprises or academia. Thus immediate utilization of seemingly attractive technological opportunities must be tempered by organizational, implementation, and social responsibility constraints. Appropriate attention needs to be paid to legal and operational issues. The main conclusion drawn is that Web 2.0 presents an opportunity for local governments such as Los Angeles County, but that there should not be a headlong rush to implementation without consideration of a variety of other issues.

#### INTRODUCTION

Over the past few years, a set of technologies called Web 2.0 has been transforming how users interact and access information and services on

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the Internet. Web 2.0 is comprised of networked applications built on web technologies and design principles to exploit web-based business models, as well as facilitate community-based development and social networking. Web 2.0 technologies include, among others, application mashups, content syndication, videocasts, wikis, blogs, social networking, user tagging, social bookmarks and content and service rating. Increasingly, Web 2.0 technologies are embedded in Internet sites to enrich online user experiences and are becoming an important component in e-government offerings. Such technologies are designed to reach or attract a greater electronic user audience, thereby enhancing citizen outreach and increasing the effectiveness of e-government applications. The potential of these technologies for e-government applications at Los Angeles County are analyzed.

E-government is defined by the Intergovernmental Advisory Board, (2003) as "the use of technology, particularly Web-based Internet applications, to enhance the access to and delivery of government information and services to citizens, business partners, employees, agencies, and other entities." Spanning over 4,000 square miles, Los Angeles County has a population of over 10 million, making it equivalent to the eighth largest state in the nation. Los Angeles County government is comprised of 39 departments providing wide ranging services including, among others, health and human services, housing, law enforcement, public works and various municipal services. Los Angeles County has established a significant presence in the area of e-government. A complete inventory of current e-government applications in Los Angeles County can be found at the Los Angeles County Portal at www.lacounty.gov.

The potential of Web 2.0 technologies for egovernment applications at Los Angeles County is analyzed. The government model for leveraging Internet technologies is different from that of commercial enterprises or academia. Thus immediate utilization of seemingly attractive technological opportunities must be tempered by organizational, implementation and social responsibility constraints. Application mashups are regarded as a good business opportunity for the County, and content syndication offers a convenient way for the County to share and disseminate information to the public. Wikis, blogs and social networking also offer advantages but require more resources for implementation and present a variety of legal and control problems. Appropriate attention needs to be paid to issues such as loss of ownership control and authenticity of the final products.

Most existing e-services in Los Angeles County would be described as being of the Web 1.0 genre. However, Los Angeles County has included some Web 2.0 technologies in its shared portal infrastructure, which was launched in January 2009. The County continues to evaluate how Web 2.0 technologies can be leveraged to transform the way it provides online information and services, as well as interact with its constituents and stakeholders. From an academic point of view, providers of e-government services have been urged to avail themselves of the capabilities of Web 2.0, and, as recommended by Chang and Kannan (2008), "just go do it". However governmental agencies have challenges and responsibilities that are inherent in providing such services and that leads to the caution "not so fast". In the remainder of this chapter, we examine various Web 2.0 capabilities and describe factors that should be considered before any "gung-ho" foray into Web 2.0 is made.

## FRAMEWORKS FOR ASSESSING WEB 2.0

An evaluation of e-government, including Web 2.0 technologies, should include an assessment of the maturity level of e-government deployment, as well as a framework for evaluating specific web technologies that can be leveraged to further the business objectives for e-government. A determination of the maturity of the current stage of e-government deployment is critical to developing strategies and a roadmap for deploying e-government capabilities. An e-government roadmap can be used to identify challenges, barriers and risks, as well as mitigation strategies. An e-government assessment framework facilitates the implementation of the e-government strategies

and roadmap by facilitating a tactical analysis and prioritization of initiatives and projects.

# **E-Government Maturity Models**

Layne and Lee's four-stage model (2001) describes the evolutionary development of e-government from the delivery of static and basic information through web sites, enabling citizens to perform simple online transactions, to vertical integration of government services and horizontal integration of different functions across organizational boundaries. While Web 2.0 technologies certainly facilitates the improved delivery of information and services through vertical and horizontal integration, it also extends e-government to a new level of transformation. More specifically, the collaborative and social networking technologies afforded by Web 2.0 have created new opportunities to further transform the way governments can engage its constituents. Gartner Research's Four Phases of E-Government; Presence, Interaction, Transaction, and Transformation, is more aptly suited to the use of Web 2.0 technologies to deliver transformational e-services. Some examples include the opportunities for improved government transparency and accountability, increased power to engage constituents, and to further reduce the cost and improve efficiencies as described in Accenture's Web 2.0 and the Next Generation of Public Service (2009).

IBM, with its Four Phases of E-Government (IBM Business Consulting, 2003), offers another perspective for assessing e-government maturity. It describes the evolution of e-government in terms of four waves of change; automation of processes, expansion of access and usability, integration of process and technology, the transformation to an on-demand e-services delivery model. IBM asserts that governments will need to develop on-demand capabilities to enable e-government transformation to flexible, outcome-focused organizations that constituents are learning to expect. While there is more than one way to assess the evolution of e-government within an organization, there is a common thread that e-government involves a continuum of multiple phases, not a one-step process. As such, an e-government model can be used to provide benchmarks and to help develop a roadmap for evaluating, selecting and implementing web technologies and e-services. Table 1 describes an e-government framework (Gartner 2009) that describes the phases of e-government maturity and modes for service delivery, enabling technologies, and corresponding e-services.

# E-Government Assessment Frameworks

In any consideration of adopting new technology, attention must be paid to the benefits and costs of such adoption. With regard to e-government benefits, Freeman (2009) has suggested three main categories of evaluation: government agency efficiency, user convenience and citizen involvement. The business case for Web 2.0 implementation should then be made in terms of these criteria. "Government agency efficiency" is defined by Cresswell (2006) as "obtaining increased outputs or goal attainment with the same resources, or obtaining the same outputs or goals with lower resource consumption." Basically, efficiency is reflected in needing fewer people or positions to do the same (or perhaps even an improved) job as compared with the manual version of providing the same service. "User convenience" has to do with electronic services that allow the user to enjoy remote access 24/7, saving travel time and cost, encountering less administrative burden, avoiding waiting time, the ability to conduct online transactions, etc. "Citizen involvement" has to do with greater participation of the citizenry in the democratic process of government. Paraphrasing Codagnone (2006), this necessitates electronic services that are up to date, accurate, and easy to access, use, and understand. Government can

E-Government Phases	Enabling Technologies	E-Services	
<b>Presence</b> Characterized by a simple unidirectional dissemination of information from govern- ment to its constituents.	• Static HTML pages delivered using web servers.	<ul> <li>Information about services and contact information.</li> <li>Access to public documents.</li> </ul>	
Interaction & Communication Offers simple interactions between gov- ernment and its constituents, e.g. e-mail contacts, simple requests for information and linkages to relevant sites.	<ul> <li>HTML pages with capabilities to provide form and document downloads.</li> <li>E-mail enabled requests for information and services.</li> <li>Enterprise search capabilities.</li> </ul>	<ul> <li>E-mail requests for information and feedback.</li> <li>Search for documents and website information across the enterprise.</li> <li>Ability to download forms and documents.</li> </ul>	
<b>Transaction</b> Provides online self-service capabilities to conduct business transactions between government and its constituents.	<ul> <li>Horizontal portal with web content management.</li> <li>E-commerce and online payment systems.</li> <li>Application mash-ups to support online information queries.</li> <li>Content syndication and video casting services.</li> </ul>	<ul> <li>Program level content ownership and contribution.</li> <li>Ability to transact business online.</li> <li>Access and subscribe to video webcasts and archives.</li> </ul>	
Transformation       • Social networking and online co         Enables a high level of constituent participation in the delivery of services and collaborative decision-making, with seamless integration across enterprise systems.       • Social networking and online continue.         Wikis and blogs.       • Wikis and blogs.         • Web services to support bi-direct online transactions.		<ul> <li>Community and collaborative sites for service intermediaries and consumers.</li> <li>Direct feedback and rating of published content and online services.</li> <li>End-to-end integration with enterprise systems, e.g. application, billing and pay- ment of property taxes.</li> <li>Subscription-based digital notification services that are targeted by address or geographical location.</li> </ul>	

Table 1. E-government maturity model

then be conducted with greater openness and transparency and more participation by citizens. Gartner Research has developed a similar codification scheme described by Di Maio (2008). The three criteria they espouse are titled operational efficiency, constituent service level and political return. Table 2 summarizes the key elements and criteria for each category for assessing egovernment benefits.

#### Benefits of Web 2.0

It can be argued in many cases that the basic e-government application per se will not have changed under Web 2.0, only its presentation format and the level of citizen engagement will have been altered. Thus the efficiency of the application should remain relatively unaffected. However there is also an aspect of efficiency having to do with increasing the number of users of a service. This amortizes the fixed cost of an application over a greater number of users and provides efficiency by means of engendering either a greater number of overall users and/or an additional reduction of non-electronic users. Reaching a greater proportion of the population by means of Web 2.0 would yield efficiency of this kind. The economic justification then becomes a matter of assessing the growth in the user population versus the extra resources required to utilize Web 2.0 in that application. In terms of user convenience and citizen involvement, it seems highly likely that Web 2.0 may have much to offer. The measurement of these evaluation categories is much more challenging than is the efficiency criteria.

Web 2.0 technologies, like third-party social media, provide an opportunity to significantly leverage the economies of scale that are inherent

	Key Elements and Evaluation Criteria	
<b>Operational Efficiency</b> The ability to provide increased service levels and value at a lower cost.	<ul> <li>Cost <ul> <li>Economies of scale from utilizing shared infrastructure and reusability of common technologies.</li> <li>Reduced one-time and operating costs through horizontal and vertical integration of processes and systems.</li> </ul> </li> <li>Time <ul> <li>Reduced time to conduct or complete a transaction.</li> <li>Reduced "time-to-market" by re-using common technologies to assemble online solutions to respond to constituent demands and needs.</li> </ul> </li> <li>Degree of Transformation <ul> <li>Organizational and programmatic efficiencies gained from streamlined processes and elimination of process bottlenecks.</li> <li>Improved service delivery with same or reduced resources through horizontal and vertical integration of processes and systems.</li> </ul> </li> </ul>	
<b>Constituent Service Level</b> The effectiveness in meeting service needs and demands of constituents.	Usefulness  • Availability and accessibility of online services. • Enhanced role of service intermediaries. • Alignment with programmatic and organizational objectives. Depth of Service • The degree to which the online service achieves a service goal. • A positive value-to-cost ratio, i.e. the value of the online service exceeds the "cost" for the constituent to use the service.	
<b>Political Return</b> The capacity to increase outreach and constituent feedback and participation in decision-making.	<ul> <li>Constituent involvement</li> <li>The degree to which constituents are able to participate in providing feedback and decision-making.</li> <li>Increased outreach to targeted constituents based on needs and demands for services.</li> <li>Increased capacity to reach a broader audience to inform and educate.</li> </ul>	

Table 2. E-government assessment framework

in its delivery platform. Government entities can take advantage of these "no-cost subscriptionbased services" without having the need to develop and deploy these applications and solutions with government resources and infrastructure, other than Internet access to these services.

Finally, Web 2.0 presents government entities with new opportunities for engaging, collaborating and servicing its constituents. Not only can government leverage the economies of scale and enriched user experiences provided by Web 2.0, it also facilitates a much broader delivery mechanism and target audience for constituent outreach. Table 3 summarizes some of the opportunities to use Web 2.0 in Los Angeles County.

We now turn to a discussion of specific Web 2.0 technologies and how they are utilized at Los Angeles County. These include application mashups, videocasts and content syndication, wikis, blogs and social networking, and user tagging, social bookmarks, and content rating and service rating.

# GOVERNMENT APPLICATIONS OF WEB 2.0

# **Application Mashups**

An application mashup is a web application that combines data from more than one source into a single integrated tool usually accomplished using open application programming interfaces and data sources to produce results that could not be produced individually by the original sources. Application mashups provide an opportunity to leverage the County's internet applications to create innovative and more effective ways to communicate, interact and deliver government services. Utilization of middleware software

Service Cluster	Opportunities and Benefits	
Administrative Services	<ul> <li>Increase transparency and accountability by facilitating access to public information using mash-up technologies.</li> <li>Property Tax Portal for end-to-end process for administration of tax information and payments, including wikis and blogs for tax payer education and support.</li> <li>Online Permitting to support permit application, plan reviews and permit issuance.</li> </ul>	
Children and Family Services	<ul> <li>Online communities served by social networks and tools, e.g. wikis and blogs to facilitate information sharing, feedback and service ratings, increased participation in decision-making related to the delivery of services.</li> <li>Enhance the role of service intermediaries by providing secure online community resources for collaboration and gathering feedback to improve services.</li> <li>The use of "crowdsourcing" to help discover potential patterns of abuse and fraud.</li> </ul>	
Health and Mental Health Services	<ul> <li>Composite application using third party data vault intermediaries, e.g. Microsoft's Health Vault t provide secure system wide access to health information.</li> <li>Enhance the role of third party service providers by providing secure online community resources for collaboration and gathering feedback to improve services.</li> </ul>	
Community and Municipal Services	<ul> <li>Provide mashable information about public transportation, road closures, construction sche ules, and traffic conditions.</li> <li>Use of social networks and application mashups to facilitate community reporting of pot holes, graffiti, littering, and other public nuisances.</li> <li>Online communities serving unincorporated areas of the County to provide municipal services and facilitate constituent participation.</li> <li>Use of content and service rating for public library services.</li> <li>Use of videocasts and webcasts to increase outreach for municipal, recreational, and cultura programs.</li> </ul>	
Public Safety Services	<ul> <li>Subscription-based digital content syndication and communication services to inform and alert communities.</li> <li>Online "Neighborhood Watch" communities to help discover crime patterns and facilitate community participation and outreach.</li> <li>Use of webcasting to facilitate regional-based jail visitations, thereby reducing cost and travel time for inmate families.</li> <li>Use of social networks for peer and community support to reduce recidivism.</li> </ul>	

Table 3. Web 2.0 opportunities and benefits

like Ruby-on-Rails can significantly simplify the implementation of application mashups across the County. Other considerations with regard to application mashups include defining who owns the data and how it will be managed.

The County is evaluating opportunities and requirements to leverage application mashup technologies to more seamlessly work with third-party service providers to more effectively provide service to the public. In additional to technical requirements, other considerations being evaluated include, service level agreements, information security and privacy, and process change management. Service level agreements formalize the responsibilities of the County and its third party intermediaries and ensure an agreed upon level of performance by all parties. Information privacy and security considerations also need to be assessed. Information privacy laws and regulations (e.g., Health Information Portability and Accountability Act) must be factored into the implementation of mashups with service intermediaries. Information security is as strong as its weakest link. As such, security assessments must be included as part of the contracting process for service intermediaries. Finally, operational impacts need to be evaluated and processes streamlined to maximize the efficiencies and effectiveness of the new level of information and services to be provided by the service intermediaries. It seems likely that specialized intermediaries may be able to supply services to the public at lower costs.

However, some loss of control over content may be inevitable, and formulation of the data at very discrete levels may be required. Also guaranteeing "authenticity" of the information can be an issue with third party providers. Described below, are some other examples of application mashups that have been implemented in the County including Services Locator, Online Payments and Countywide Employee Directory.

#### Services Locator

The Services Locator is an example of an application mashup by using cartographic information from Google Maps services to provide a geospatial representation of County information and services. Using the Services Locator, the public can identify and locate various county services within the vicinity of any address in Los Angeles County. If desired, the user can also link to the underlying websites that provide more information about the services, e.g. reading programs at a library, summer programs at a park, or contact information at a local Sheriff's station. Using Google's mapping services, a user can also get driving directions to the locations presented in the Services Locator.

# **County Payment Center**

In 2007, the County partnered with Link2Gov to accept credit card payments for County services, products, or information. With Link2Gov, County departments are able to utilize a common secured platform to process credit card payments from their various Internet storefront web sites. This application allows the Treasurer-Tax Collector to streamline and control its accounts receivable process while providing the public with an additional option to pay for County services and products.

# Countywide Employee Directory

The County is currently implementing a new Enterprise Human Resource Management System that will have an Employee Self-Service module to significantly improve the ways County employees can access and update their employment information. Application mashup technologies will integrate employee records with a Countywide Employee Directory for authentication and to provide basic directory information, e.g. contact information, e-mail, and work location for every County Employee.

## Videocasts and Content Syndication

Videocasts are defined as the online delivery of video on demand or video clip content either as files for downloading or streaming video feeds. While podcasts were originally audio-based, they are now often used interchangeably with videocasts. Content Syndication is comprised of technologies that facilitate the automatic update of content (text, graphics, audio and video formats). Two of the more common methods for content syndication are: Real Simple Syndication (RSS) and Atom.

Content syndication using Web 2.0 technologies like Real-Simple-Syndication (RSS) web feeds provides an effective way for the County to disseminate and share information with the public, business partners and employees (e.g., YouTube and Facebook). These technologies allow the County to post informational videos about its programs, community service announcements and community outreach. However, there are policy, organizational and implementation considerations that need to be formulated before the County can consider fully deploying these technologies. Currently, County policy prohibits access to all social networking sites, including YouTube and Facebook. However, exemptions are provided on a case by case basis for Departments to post video content on YouTube, but these sites are still blocked and cannot be accessed within the County infrastructure.

Content syndication, however, can be implemented with little organizational impact. One very useful application of syndication technologies like Real Simple Syndication (RSS) is subscriptionbased notification services. These services allow interested users to subscribe to a menu of information and services of which they would like to be kept informed. The County is currently evaluating solutions to provide a countywide platform for electronic notification services that can be easily implemented across the County Portal and its department websites. It would be highly desirable if communities of users could be created on social networking sites that would be interested in being informed of new developments in County e-services. Some examples of existing RSS feeds are listed below.

#### **County News Feed**

The County is evaluating the use of RSS web feeds to provide subscriber-based news feeds. Some County departments have implemented custom e-notification services on their public website, e.g. Department of Public Works' eNotify and Public Library's Notices by Email.

#### Service Outreach

Similarly, users can also subscribe to RSS feeds that are organized by community programs. Using the RSS feeds in this manner complements and help support other community outreach efforts.

#### **Employee News**

Employees are another community of users that can benefit from subscription RSS feeds on news or announcements. Some examples of categories of news that an employee can subscribe include employment and promotion opportunities, employee programs, and employee targeted events like benefit enrollments and celebrations.

#### Wikis, Blogs, and Social Networking

Wikis are a collection of Web pages designed to enable anyone who accesses it to contribute or modify content, using a simplified markup language. Wikis are often used to create websites for community-based collaboration and information sharing. Blogs describe a Web site that is usually maintained and administered by an individual or an entity with regular entries of commentary, descriptions of events or specific topics. It allows readers to record their comments usually about a specific topic of common interest. Social Networking describes the building of Web pages that represent online communities of individuals who share similar interests by providing a variety of ways for users to interact. Social Networking sites usually incorporate other Web 2.0 technologies like content syndication to enrich the user experience and facilitate users to interact.

Of all Web 2.0 technologies, wikis and blogs would allow for the broadest and greatest extent of interaction between the County and its constituents. However, wikis and blogs require the most resources to implement and sustain. Policies such as clear rules for participation and commenting need to be established and enforced to define terms for appropriate use of the wikis and blogs. Lines of authority must be maintained, and it is important that clear statements of government positions are articulated. The benefits of direct constituent interaction with immediate feedback provided by wikis and blogs also require resources to actively engage and provide timely responses to constituents, moderate the wikis and blogs and ensure compliance with terms of use, administer constituent registration and perform "housecleaning" activities. Other challenges to implementing wikis and blogs include:

- Ensuring that the comments and contributions do not become platforms where public discussions are monopolized by a vocal minority or activist groups and used to rally their supporters and promote mass e-mail campaigns;
- Avoiding information overload and keeping the contribution and discussion threads focused on the topics that are being discussed. While extra feedback and dialog should be encouraged, wikis and blogs will also require County staff resources to moderate the blogs and provide feedback or respond to constituents;
- Facilitating civilized and balanced discussions of key topics of community interest that are representative of the diversity of constituents; and
- Adhering to the requirements of the Freedom of Information Act (FOIA) and public disclosure laws such as the Brown Act which requires archiving of public records. Wikis and blogs will increase the volume of material needed to be archived and potentially turned over in response to FOIA requests. This will require the County to develop information management and retention policies, as well as content management and archival technologies.

The above factors have contributed to the fact that social networking technologies have not been widely implemented at the County. Some limited efforts which are in the planning stage, such as the County Forum and Community Outreach, are described below.

# **County Forum**

Blogs could be viewed as "virtual" town meetings for the County to interact and dialog with its constituents. Some topics for such public forums include public comments, public policy discussions, grading of restaurants, discussion of green and cost saving initiatives, and community policing and services discussions. Blogs require moderators and care must be taken to have that person reflect official County policy rather than their own opinion. The moderator is an example of additional resources required to implement a Web 2.0 service. It is proper that such moderators be paid for their efforts by the County, otherwise there would be little legal basis for review of their viewpoints.

# **Community Outreach**

Wikis can be used by constituents to contribute content and provide feedback on community plans and policies. For example, recyclers, environmentalists, nonprofit and civic groups may have worthy ideas for dealing with disposing hazardous household waste. The collaborative and interactive nature of wikis provides an opportunity for broader participation and to provide ideas for solving problems and improving services.

#### Community Alerts and Bulletins

Another aspect of utilizing social networking services is subscription-based community alerts and information bulletins. Constituents can register to be notified and kept informed about community alerts and events. These communication services, usually delivered in the form of text-messages, email and/or audio recordings can be used in both emergency and non-emergency situations. In 2009, the County implemented an Alert LA emergency mass-notification system that has since been used successfully to coordinate community evacuations during the Station Fire and floods. More recently, the Sheriff's Department is partnering with Nixle<sup>TM</sup> to provide community alerts and notification services using its Municipal Wire facility.

### User Tagging, Social Bookmarks, Content Rating and Service Rating

User tagging and social bookmarks allow Webbased users to store, organize, search, manage and share bookmarks to Web pages that they want to remember. They provide a user-based perspective of how content is informally "tagged" and inform other users of new bookmarks and references. Content and service rating is an extension of social bookmarking that allows consumers of content and online services to rate the value and usefulness of a particular piece of content or service.

As the amount of information and services has proliferated on the Internet, the ability to provide accurate and relevant search for specific information has become more and more important. Relevancy of search results is often subjective and difficult to pre-determine. Social bookmarking provides a useful way for consumers of information and services to "tag" or bookmark Internet information and collectively improve the relevancy of information searches from the consumer's perspective. This helps eliminates much of the complexity and challenge of trying to predict or guess how a constituent may view or want to search for specific information or services.

If users are allowed to tag content, then some form of authentication is necessary to assure "correctness". Such effort can require significant time and effort. An example of current County activity is constituent and employee feedback. This application of Web 2.0 technologies solicits and collects feedback on County Internet content and online services. The feedback loop is critical to the improvement of online services and for refining the type of content so that it is useful and relevant to the constituents.

#### IMPLEMENTATION CONSIDERATIONS FOR WEB 2.0 IN GOVERNMENT

While Web 2.0 technologies have been widely applied and widely accepted as the electronic mode of conducting business, there are significant differences in the effectiveness of Web 2.0 technologies in commercial and public sector applications. Table 4 summarizes the evaluation of the Web 2.0 technologies discussed in the previous sections based on their business value and effectiveness in advancing the objectives of County programs, as well as organizational and technical considerations for implementation.

The analysis shown in Table 4 would seem to indicate that Web 2.0 technologies holds promise to enhance the delivery of information and services, as well as increase the level of interaction and participation with County constituents and stakeholders. However, business value and organizational considerations need to be thoroughly evaluated before implementing such solutions.

The government model for leveraging Internet technologies is different from that of commercial enterprises. Commercial websites and portals are geared towards the acquisition and retention of customers. County constituents and stakeholders, on the other hand, come to the County portal and websites to find specific information or to transact specific business (e.g., pay property taxes), in a quick and efficient manner. It is important that the implementation of Web 2.0 technologies is focused towards such objectives. The County must evaluate policy and organizational impacts when implementing technologies like social networking, wikis and blogs. While these technologies promise enhanced user experiences and civic participation, their implementation must be considered with policy and organizational implications. Often, additional resources are required to ensure that these technologies are effectively implemented and that their benefits are fully realized.

	Status	Implementation Considerations
Application Mash-ups	Implemented • GIS-based Services Locator Evaluating or Developing • American Recovery and Reinvestment Act (ARRA) Stimulus Funding Tracking • Crime Mapping	Organizational • Data ownership and governance • Data privacy and security Technical • GIS web services and data management • Integration with business intelligence and dash- board tools
Videocasts	Implemented         • Board of Supervisors meeting webcasting and video archives         • Sheriff's Newsroom         Evaluating         • Expand hosting and delivery of video archives to include video tagging and clipping services	Organizational • Alignment with program objectives • Resource considerations • Usage policy and management Technical • Impacts to network infrastructure • Technical changes to streamline the delivery of webcasts and video archives
Content Syndication	Implemented• Syndication of selected content from department websites to County Portal within the County's Shared Portal InfrastructureEvaluating• Facility to share content using RSS with external social media• RSS feeds to coordinate communications among responding departments during emergencies	Organizational • Data ownership • Data privacy and security Technical • Impacts and changes to technical infrastructure
Wikis and Blogs	<ul> <li>Implemented</li> <li>Limited implementation by some departments.</li> <li>Evaluating</li> <li>Communities of interest to facilitate collaboration and outreach</li> </ul>	Organizational • Alignment with program objectives • Resource considerations • Usage policy and management • Data ownership and administration • Data privacy Technical • Impacts and changes to technical and security infrastructure
Social Networking Services	<ul> <li>Implemented</li> <li>Targeted department use of social media, e.g. Registrar-Recorder/County Clerk</li> <li>Evaluating</li> <li>Establishing amendments to the Terms of Service/Use to accommodate County requirements</li> <li>Evaluating the use of Linked In to extend job outreach by Department of Human Resources</li> </ul>	Organizational • Alignment with program objectives • Resource considerations • Usage policy and management • Data ownership and administration • Data privacy Technical • Impacts and changes to technical and security infrastructure
Content Rating and Social Bookmarking	Implemented • None Evaluating • The use of content rating for online services and selected published content	Organizational • Alignment with program objectives • Data ownership and administration • Resource considerations to evaluate and act on submitted feedback Technical • Impacts and changes to technical infrastructure

Table 4. Application	<i>of Web 2.0</i>	technologies in	Los Angeles County
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# **Organizational Considerations**

The implementation considerations identified in Table 4 are broadly categorized into organizational and technical considerations. Organizational considerations include challenges such as:

- Data ownership, which raises questions as to which business unit or program owns the information but also delineates the responsibilities for managing the information and services being provided. In some cases the question of ownership cannot be clearly defined, e.g. in the use of a mash-up or composite application that aggregates information and services from more than one business unit and program.
- Usage policy defining the terms of use is essential to establish the proper use of Web 2.0 technologies. These terms of use generally applies to the target clients or consumers of the Web 2.0 service and set guidelines for appropriate use of the service. Additionally, many government entities do not currently allow employee access to public social media at work, due to concerns about employee misuse and impact to productivity.
- Organization and client readiness need to be carefully evaluated when considering deploying Web 2.0 technologies. Are the targeted clients or consumers ready to use the technologies, e.g. access to computers, familiarity with using social media or webbased technologies, sufficient bandwidth to accommodate video and multimedia content, etc.? Many consumers of government services are at a different level of computer literacy and have a much lower accessibility to government information and services provided on the Internet. However, these issues of accessibility and literacy will in time be addressed as the use of the Internet

to conduct business continues to spread to broader segments of the population. Conversely, is the business unit or program ready to effectively utilize Web 2.0 technologies, e.g. video production capabilities, familiarity with social media, and the capacity to effectively engage its clients and consumers using these tools?

- Alignment with program objectives is crucial to the ensuring that Web 2.0 technologies are effectively used to advance the business unit or programs mission. For example, public service announcements published solely on YouTube may not be the most effective way to get the message out. However, the use of YouTube as an extended channel of a broader public service campaign to target the YouTube community would be more effective.
- Resource requirement is an important but often overlooked consideration web utilizing Web 2.0 technologies. Dedicated skilled resources with programmatic knowledge are essential to ensure a vibrant and engaging virtual community. Another example is the use of content rating and feedback is only as effective if there are resources and processes to make timely content and service improvements.

Many of these organizational considerations can be addressed with governance and program management.

#### Governance

Governance, when properly structured and implemented, can address many of the organizational considerations described above. Successful governance requires an e-Government Steering Committee comprised of stakeholder executives who have the authority and responsibility of the business lines or programs to:

- Prioritize and direct initiatives;
- Ensure that adequate funding and resources are assigned to successfully implement the initiatives;
- Address cross-functional issues, such as data ownership; and
- Establish usage policies and terms of service.

The e-Government Steering Committee is complemented by an e-Government Advisory Committee responsible for implementing Steering Committee directives, policies and coordinating the deployment of approved initiatives.

## Program Management

Program management is comprised of the activities that ensure the successful implementation of e-Government initiatives in support of business and programmatic objectives. It involves the formulation of business plans that clearly define how Web 2.0 technologies will be utilized to achieve program objectives, as well as the operational plans to support the deployment of initiatives.

# **Technical Considerations**

The technical considerations cited in Table 4 include challenges related to:

- Architecture planning to manage and plan the selection and implementation of Web 2.0 technologies in a way that supports interoperability, reusability and scalability of solutions; and
- Technical infrastructure readiness to support the demands of Web 2.0 technologies, such as bandwidth and security.

# E-Government Architecture Planning and Management

The discipline and rigor of sound architecture planning is crucial to the management of diverse of solutions and implementation choices in the evolving landscape of Internet and Web 2.0 technologies. Careful and deliberate architecture planning:

- Ensures that technology investments achieve the business results;
- Maximizes the returns and value of the investment by promoting interoperability and reusability of technologies: and
- Provides a blueprint and implementation roadmap to guide the adoption of emerging technologies.

# Infrastructure Planning and Management

Adjustments to the technical infrastructure, e.g. network and security, are often required to support the implementation of new technologies. Deployment of video casting and content syndication will place additional demands on network bandwidth. Similarly, the security and directory infrastructure may be impacted by the deployment of virtual communities within an extranet. As such, infrastructure assessments should be conducted and adjustments made to accommodate the deployment of Web 2.0 technologies.

# FUTURE DIRECTIONS

Turning to directions for future research, we follow the line of discussion presented by Freeman (2009). At this point there is ample theoretical methodological material available in the literature regarding e-government. Thus, the main thrust for future research should be empirical. What is needed are reports on implementation of methodologies and assessments of how well they worked. Also there should be detailed studies of specific applications (especially at the local level) so that the same applications development is not undertaken multiple times. Creative methods of sharing applications need to be developed so that the entity that makes a "self-financed" application available to others is in some way rewarded.

From a methodological viewpoint, standardization of data needs to be worked on so that cross comparisons become simple and straightforward. The approach might be that some standards are proposed, commented on and then adopted. General adherence will then be mandatory, but specific entities could superimpose additional requirements that would be consistent with the underlying standards. Empirical reports on user satisfaction and the measurement techniques used to ascertain such results would be of considerable interest to governmental entities that are newly establishing various e-government applications.

The effects of economies of scale on different applications offer another fruitful area for future research. Assessment of temporal patterns of takeup rates that have been experienced with various applications would be another empirical finding of interest. Such results could assist smaller municipalities in deciding upon which applications to pursue and in what order.

#### CONCLUSION

Chang and Kannan (2008) maintain that "governments will have to engage citizens at sites where they are (e.g., social network sites and online communities) rather than expect them to approach government portals". We feel that such sites will be useful in making citizens aware of government offerings but do not concur that it will be necessary to transact business on those sites. Kaminsky (in a short excerpt within Chang and Kannan paper) cites implementation barriers such as technological (not all local governments possessing the required hardware, software and personnel); institutional (inadvertent loss of intellectual property, rules governing the retention of records, rules of engagement and propriety, fear of making a commitment, and violation of information sharing, legitimacy and confidence as to who can speak for the agency, reputation/brand risk, lack of codes of conduct for employees engaging in virtual communities, maintenance of trust in the government, concern about information not being cleared through traditional channels and vetted in advance); security (employees operating outside of firewalls, blocking websites from accessing data, overloading services, compromising network bandwidth, and insuring the integrity and authenticity of governmental data); and privacy (possible violations of privacy for employees and citizens as a result of Web 2.0 access).

Cultural change is also required to leverage Web 2.0 technologies to transform the way government engages with its constituents. The County lacks an e-Government Program to provide the focus and strategic planning to facilitate the change management required break down the organizational silos and to revolutionize ways to more effectively engage constituents and deliver services. For example, the County has traditionally looked internally to develop and deploy solutions. The Web 2.0 model necessitates the use of external platforms, like Google, YouTube and Twitter. The challenge is to develop a new service delivery model that incorporates these Web 2.0 platforms with County systems in a manner that is secure and enhances the quality of service to constituents.

The government model for leveraging Internet technologies is different from that of commercial enterprises or academia. Thus immediate utilization of seemingly attractive Web 2.0 technological opportunities must be tempered by organizational, implementation and social responsibility constraints. There is an aspect of efficiency having to do with increasing the number of users of a service. This amortizes the fixed cost of an application over a greater number of users and provides efficiency by means of engendering either a greater number of overall users and/or an additional reduction of non-electronic users. Reaching a greater proportion of the population by means of Web 2.0 would yield efficiency of this kind.

Application mashups are regarded as a good business opportunity for the County, and content syndication offers a convenient way for the County share and diseminate information to the public. However, appropriate attention needs to be paid to issues such as loss of ownership control and authenticity of the final products. Wikis, blogs and social networking require more resources for implementation and present a variety of legal and control problems. From an academic point of view, providers of e-government services have been urged to avail themselves of the capabilities of Web 2.0, and, as recommended by Chang and Kannan (2008), "just go do it". However governmental agencies have challenges and responsibilities that are inherent in providing such services and that leads to the caution "not so fast". Web 2.0 presents an interesting opportunity for local governments such as Los Angeles County but that there should not be a headlong rush to implementation without consideration of a variety of other issues. As yet the overwhelming benefit of instituting Web 2.0 for local e-government applications has not conclusively been demonstrated nor has the clear business case for it been articulated.

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## **KEY TERMS AND DEFINITIONS**

**Application Mashup:** A web application that combines data from more than one source into a single integrated tool usually accomplished using open application programming interfaces and data sources to produce results that could not be produced individually by the original sources.

**Content Syndication:** Use of Web 2.0 technologies like Real-Simple-Syndication (RSS) web feeds to disseminate and share information with the public, business partners and employees (e.g., YouTube and Facebook).

**E-Government Citizen Involvement:** Degree of (added) participation of the citizenry in the democratic process of government by means of e-government services.

**E-Government Efficiency:** Obtaining increased outputs with the same resources or obtaining the same outputs or goals with lower resource consumption through the use of e-government services. Basically, efficiency is reflected in needing fewer people or positions to do the same (or perhaps even an improved) job by electronic means as compared to the manual version of providing the same service.

**E-Government User Convenience:** The benefits derived from electronic services that allow the user to enjoy remote access 24/7, saving travel time and cost, encountering less administrative burden, avoiding waiting time, etc. **Electronic Government:** The use of technology, particularly Web-based Internet applications, to enhance the access to and delivery of government information and services to citizens, business partners, employees, agencies, and other entities.

**Videocasts:** The online delivery of video on demand or video clip content either as files for downloading or streaming video feeds.

Web 2.0 Technologies: Networked applications built on web technologies and design principles to exploit web-based business models, as well as facilitate community-based development and social networking.

**Wikis:** A collection of Web pages designed to enable anyone who accesses it to contribute or modify content, using a simplified markup language.

## Chapter 26 The Obama Effect: The Perception of Campaigning 2.0 in Swedish National Election 2010

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#### ABSTRACT

This chapter presents a survey study on attitudes towards political campaigning in social media. During the national election in Sweden in 2010, a considerable amount of resources was invested in online communication with the constituency, not least in social media. Whereas several studies have focused on e-democracy at a macro level, there is a lack of studies examining the phenomenon of campaigning 2.0 as it is perceived by the actual voters. This chapter, therefore, asks the question whether the voters noticed the political campaigning in social media at all, and if so, how they perceived it. The main findings are that respondents who were already interested and politically engaged considered campaigning 2.0, in line with the politicians' rhetoric, as a way to enhance democracy. Respondents who were neither interested nor engaged in politics, on the other hand, showed little interest in this kind of communication. Consequently, the study confirms assumptions about digital divide and continued fragmentation of the citizenry.

#### INTRODUCTION

Political campaigning in 2010 is campaigning 2.0. The American president Barack Obama serves as the front figure of this new way of communicating with the constituency – direct and online. Election campaigns often function as test sites

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for new communication technologies and tactics. At the same time the discourse among campaigners, politicians and the political experts is rather technologically optimistic. Above all, they embrace the democratic potential of the new media. Online campaigning is presented as a possibility to solve the well-known problems of disengaged citizens, decreasing voter turnouts and declining party membership (Oscarsson & Holmberg, 2007;

Stakston, 2010). Generally, it is claimed that the Internet, and Web 2.0 (social media) in particular, supports the development of e-democracy through fostering direct contact between the political representatives and the citizenry (Coleman & Blumler, 2009; Negroponte, 1995; Rheingold, 2003). This enthusiastic tone of the discourse is obviously not limited to campaigns in the US. When Sweden prepared for the national election in September 2010, the expectations on Web 2.0 were high among politicians and campaign workers (Gelin, 2010; Staktson, 2010). The main political parties in Sweden spent a considerable amount of time and money communicating on social media platforms. Numerous employees worked solely with social media campaigning, professionals were hired to coach politicians in different online possibilities, and campaign workers were activated to spread the political message in their online networks.

However, several studies are questioning this celebratory discourse. These studies stress phenomena such as the digital divide (Norris, 2001), simplification (Noam, 2002), commodification and commercialization of political information (Andrejevic, 2009; Papacharissi, 2002), as well as online noise covering the important political discussions (Dean 2010; Noam, 2002). In this binary discussion of the potentialities and actualities of campaigning 2.0, there is still a clear gap: the voters' perspective on these developments is missing, at least in the Swedish context. The question is whether the potential voters even care about the interactive possibilities following campaigning 2.0 and politics 2.0.

Therefore, this chapter analyzes how users of social media - one of the main target groups of politicians, campaigners and spin doctors - perceive this form of subtle and innovative campaigning. Firstly, the chapter describes how media and politics converge in Sweden, with special focus on the appearance of party campaigns in social media in the national elections 2010. Secondly, and mainly, the study examines the awareness and perception of both political campaigning and politics in general in social media. Based on a survey among students at a Swedish university, the chapter asks whether the addressed citizens notice political campaigning at all in their social networks, and if so; how do they perceive it? The chapter concludes by critically examining to what extent civic awareness is raised by new media.

#### THE SWEDISH POLITICAL SYSTEM

In order to understand the discussion in the chapter, it is necessary to present the general political and media related background. Sweden is a constitutional monarchy with a parliamentary democracy. The parliament has legislative power, and the government implements the decisions of the parliament. General elections are held every fourth year, on the third Sunday of September<sup>1</sup>. During most of the twentieth century, the party system has consisted of five significant parties organized in two blocks; the Left block and the Right block. Since the 1930s, the Social Democrats, the biggest party within the Left block, has been the party to most often hold the government position as a single-party minority government. When they have formed minority governments they have organized coalitions with other parties (not necessarily another party within the same block). This system of constant cooperation has resulted in a relatively consensus-oriented political climate in Sweden. Towards the end of the 1990s the political landscape changed to some extent with more political parties on the field, but the leftright distinction in politics has remained relevant nonetheless (Strömbäck & Nord, 2008). All in all, Sweden fits well into Hallin & Mancini's (2004) description of democratic corporatist model which includes, for instance, a rather extensive welfare state, consensus-oriented politics, high levels of political parallelism and active state intervention.

The Swedish parties are mainly financed through public funding. Apart from that, they receive small incomes from member fees, donations, sales and lotteries (Strömbäck & Nord, 2008). The voter turnout is among the highest in the world. In 2006, as much as 82 percent of the population voted in the general election. However, like in many other countries, the voter turnout has been declining since the early 1980s (Oscarsson & Holmberg, 2007; Petersson, Djerf-Pierre, Holmberg, Strömbäck & Weibull, 2006). Furthermore, the electoral system in Sweden must be characterized as relatively party-centered. Parties are generally still considered more important than individual candidates, despite the introduction of a system to express preferences for a candidate in 1998<sup>2</sup> (Martinsson, 1999; Petersson et al., 2006). In Sweden, characterized by strong party identification, individualized campaigns are considered problematic. The politician is meant to represent the voice of the party, hence direct and personal communication with the constituency might be perceived as pushing one's own interests instead of that of the party (Martinsson, 1999; Zittel, 2004). It is important to keep this in mind, since (personalized) social media is increasingly used as a communication tool which might be seen as contributing to the emergence of a personalized political system in Sweden.

The most intense phase of campaigning in Sweden normally lasts for three to four weeks. The previously stable voting patterns have vanished; today people switch preference more easily from one election to next, but also during one specific campaign (Oscarsson & Holmberg, 2007; Strömbäck & Nord, 2008). The political trust has also clearly decreased. In the past when party allegiance was more stable, election campaigns were less important. Obviously, they play a bigger role when allegiances are more volatile; a majority of the voters nowadays claim that they make up their mind during the campaign<sup>3</sup>. Nevertheless, Swedes are described as fairly interested in politics, especially during election times when politicians appear a lot in the media. However, their actual political activity consists mainly of voting and following the news, contrary to for instance Americans who

engage more actively in the campaigning itself (Petersson et al., 2006; Strömbäck & Nord, 2008). Swedish voters are said to be media centered, since a majority of the population relies mainly on the traditional media for political information (Nord, 2006). In terms of political campaigning, it is important to know that the parties could not launch political spots on TV until quite recently. This direct form of presenting the party program without editorial influence by journalists became possible for the first time during the election campaign for the European Parliament in 2009. Consequently, Petersson et al. (2006) claim that Swedish election campaigns have been not only mediated, but largely media-steered. "That is, that they are imbued with and tailored according to the objectives media set for political journalism and election coverage" (p. 53). Politicians are often used as sources and hence function as agenda setters, while the journalists frame the stories and therefore have a comparatively strong influence on the political discourse.

However, this point of view can be made more nuanced. The media logic is built on a struggle for public attention which affects both the media and the politicians equally. It is therefore hard to decide who has "the upper hand", politicians or journalists (Petersson et al., 2006, p. 93). Moreover, with the Internet and the fragmentation of the media landscape, the struggle for attention has intensified. More actors, such as different branch organizations, think tanks and a multitude of media channels are now involved in the business of influencing public opinion. The public relations and lobbying branches have certainly expanded in Sweden, albeit modestly compared to many other countries. As a result, a postmodern, market-oriented way of campaigning has evolved, also in the sense that political campaigns nowadays start out by studying both the voters' and the opponents' opinions (Petersson et al., 2006). Consequently social media is often welcomed as revolutionizing the communication between citizens and the political elite.

### SWEDISH POLITICAL CAMPAIGNING 2.0

In February 2010 the leader of the Social Democrats, Mona Sahlin, initiated the campaign for the Swedish national election by stating that the campaign would build extensively on social media and direct mobilization. The plan was to establish at least one million direct contacts during the campaign. In the aftermath of Obama's campaign, political spin doctors and consultants reinforced the importance of social media in order to mobilize swing- and non-voters in particular (Gelin, 2009). On the one hand, campaigners stated that the parties were going where the voters are, namely online and especially on social networking sites. On the other hand, they stressed that an integrated campaign, both on- and offline, was crucial. Campaigning 2.0 is therefore based also on offline forms of spreading the political message: door-by-door campaigning, telephone calls and billboards. Although these are rather conventional features of campaigning in the U.S., they are partly new in the Swedish context (Petersson et al., 2006).

Martin Gelin-one of the leading strategists of the Swedish version of campaigning 2.0 - stresses firstly that the main goal of employing social media is to spread political information among the citizenry. Secondly, the political elite and strategists can get information about current matters of concern among the citizens. Thirdly, Web 2.0 provides the establishment of a dialog with and between the citizens (Gelin, 2010). Gelin's arguments exemplify the dominating celebratory discourse among campaigners and communication strategists (Howard, 2006). By analyzing the national election campaign in the United Kingdom in May 2010, Gelin (2010) draws the conclusion that information spread through social media has more substance than mass mediated communication. He states that traditional media is more spectacle-oriented, thereby supporting negativity as well as cynicism among the voters.

Coleman and Blumler (2009) present a similar line of argumentation when stating that the mediatization and professionalization of political campaigns lead to journalists focusing more on the scandals, wrongdoings and personal failures of individual politicians, which in turn contributes to increased cynicism and political disconnection among the citizens. Cynicism and political disenchantment find its visible expression in decreasing voter turnouts and party memberships. All of this adds up to a perceived democratic deficit. As a result, the possibilities of Web 2.0 are celebrated as the master program to solve the problems of contemporary democracy. Political participation is presented as being easy, playful and not linked to any specific ideology.

It is hardly surprising that campaigners saw the future for campaigning in Sweden online, since 65 percent of Swedes use the Internet daily (Carlsson & Facht, 2010). Among 16 to 35-yearolds the rate is even higher, around 80 percent, which is a relatively large number according to the World Internet Statistics 2010<sup>4</sup>. The Internet is primarily used for sending e-mails, checking the news and reading online newspapers. Apart from that, practical information such as timetables, product information facts or information about travelling are of great interest (Findahl, 2009). When it comes to social media 26 per cent of the Internet users employ them at least once during an average day. Facebook is among the most popular social media with around 4.09 million Swedish users<sup>5</sup>. The amount of Internet users in Sweden who are members of an online community such as Facebook increased from 10 percent in 2005 to 39 percent in 2009 (Carlsson& Facht, 2010).

One of the problems when dealing with campaigning 2.0 is defining what is meant with Web 2.0, a term coined by Tim O'Reilly and Dale Dougherty in 2004 in order to refer to a new version of the web. In this chapter Web 2.0 and social media are used synonymously. Wu Song (2010) stresses that Web 2.0 is "commonly used to refer to web formats such as blogs and social networking sites that are driven by social connections and user participation" (p. 249). Important proponents are YouTube, MySpace, Facebook and Wikipedia, all of which are changing the Internet experience for a wide range of users. Although there is broad agreement that Web 2.0 involves some kind of participatory principle, it is not clear exactly what web applications belong to that category, especially when it comes to an everyday usage of the term (Wu Song, 2010).

Different forms of social media provide different possibilities for political communication and campaigning. In the Swedish context, Facebook is currently used and understood as the primary platform for communication with the voters. Twitter, on the other hand, is not as widely used as is usual in the US and served more of an elite discussion between politicians, political PR consultants and journalists. Blogs are considered to be a vivid field of political debate and the political parties tried actively to establish contacts with important bloggers (Stakston, 2010). Although there are a number of politically rather influential blogs, lifestyle blogs are dominating in Sweden. According to Findahl (2009), the typical blogger is young, female and writes about her everyday life.

An ad-hoc inquiry among communication professionals of the main political parties confirmed that social media was highly valued in order to reach voters. All parties that responded to our inquiry<sup>6</sup> stressed a high degree of professionalization concerning campaigning in social media. They employed extra personnel to handle the different communication platforms. Furthermore, the political staff was briefed in the correct usage of social media. All informants described this effort as something completely new which had not been important during prior elections, even after the emergence of social media7. The Social Democrats was the party most pronounced in its aim to reach out to the voters online, for example, they offered a simple online toolkit for individualized engagement in the campaign<sup>8</sup>, similar to options for participation in the Obama campaign.

Petersson et al. (2006) argue that the ambition of Swedish political parties is to communicate with all citizens, as opposed to the strong segmented campaigns in the US with a typical "focus on 'most likely voters' and emphasis on demographic segmentation" (p. 109). However, our ad-hoc inquiry showed that the parties focused on traditional adherents as their target groups even within social media. Interestingly, not one of the informants claimed that the parties aimed to activate new voters or swing voters in particular. They referred to "our voters" in general as the typical party target groups characterized along demographical lines. As early as in 1998, Bimber stated that the Internet might lead to an accelerated pluralism, meaning that it supports the formation of thin issue-based communities rather than more stable thick communities. He argued that the Internet encourages the eroding process of group politics towards less institutionalized, issue-based political activities (Bimber, 1998). Contrary to that argument the Swedish parties were still trying to translate their traditional party perception and core values into the online world in their attempts to activate traditional voter groups. Bimber as well as other more recent studies (Howard, 2006), however, show that the amount of undecided and swing voters among the constituency is steadily growing. Voting is no longer based on long-lasting party alliance, but on current developments within society perceived to be important by the individual voter.

#### THE POLITICAL CAMPAIGNING 2.0 STUDY

Politicians clearly have a positive attitude towards the utility of social media in the Swedish context. Web 2.0 is believed to give a voice to the citizens and include them in the political debate. Simultaneously, it offers the politicians an opportunity to get closer to the voters. A case in point is communication consultant Stakston (2010) who calls for 'politics 2.0', i.e. removing decision-making processes from the context of traditional parties to new forms of integrated participation.

However, throughout this discourse of positive potential and improvement of civic culture, the citizens themselves hardly ever get a say. Although abstract typologies of new media (non-) users do exist, such as digital natives and digital immigrants, these are mostly limited to a theoretical level (e.g. Prensky, 2001). There is a lack of empirical research on attitudes towards the presence of political parties in social media, at least in a Swedish context. Partial exceptions include Gustafsson (2010) and Findahl (2009). However, their studies differ considerably from our research. Gustafsson (2010) accomplished a small-scale qualitative study with semi-structured discussions about attitudes towards the political presence on Facebook. The results were ambiguous; some respondents expressed contempt towards politics on Facebook, whereas others ascribed a certain democratic potential to social media communication, but were afraid of information overload. The scope of the study was too narrow to provide any general conclusions and consequently the author called for more comprehensive studies to get a broader understanding. Like us, Findahl (2009) obtained his results from a quantitative survey study, but he was concerned with the Internet in general and not social media per se. His study observed a small increase in interest concerning political information online, and the author consequently anticipated a more inclusive dialogue with citizens in the future.

The study in this chapter examines young peoples' perceptions about political communication 2.0 and especially political campaigning 2.0. The main questions are: Do the addressed citizens notice the presence of political discussions and party campaigns in their social media networks? If so, what do they think about it? Do they trust political information received through social media more than that of traditional mass media, as is claimed by PR consultants and current handbooks for politicians (e.g. Stakston, 2010)? Do social media offer an alternative to traditional media when it comes to political information and political participation?

## RESEARCHING POLITICAL CAMPAIGNING 2.0

In order to investigate how Swedish voters with a high usage of social media perceive political campaigning in their social networks, an online survey was conducted among all students (approximately 7800 registered students) at Södertörn University. The university is located in the southern suburbia of Stockholm and has a rather atypical student profile in the Swedish context: in comparison with other universities in Sweden, the students are younger9 and more often they have a migrant background<sup>10</sup>. The population is of special interest, since young adults are among the biggest user groups of social media in Sweden (Findahl, 2009). Hence, they are more likely to come across party campaigns online. It also seemed interesting to analyze this particular population's attitude towards campaigning 2.0, namely that of young adults from a migrant background who might be more inclined towards swing voting rather than stable party loyalty (Bevelander & Pendakur, 2008).

The server-side web survey (Couper, 2008) distributed by e-mail was chosen due to its practicability and efficiency. A link to the online questionnaire was sent out in May 2010. Access to Internet and e-mail accounts can be considered unproblematic since all students receive an e-mail address when registering for studies and they all have access to wireless lan, as well as computer rooms at the campus. The response rate was quite low, only 14 percent (the survey resulted in 1091 completed questionnaires). Compared to other non-solicited online surveys with an average response rate of 10 percent or lower, this was still comparably high (Witmer, Colman & Katzman, 1999). The low response rate might be

partly explained by the fact that not all students use their university e- mail accounts regularly. Unfortunately there are no official figures on the usage of the university's e-mail accounts available.

Sax et al. have identified three main reasons for non-response in online surveys which might be applicable also in this case, namely "limited access, difficulties in assuring anonymity and confidentiality, and technical problems" (Sax, Gilmartin & Bryant, 2003, p. 413). The authors discuss the growing intensification of online surveys as a bombardment of especially students facing growing time pressure and work load at the same time. Sax et al. state that response rates to national mail-out surveys decreased from 60 percent to 21 percent since 1960. In order to assess a potential non-response bias the low response rate might have caused for our survey, the composition of the sample was matched with the latest data about the students at Södertörn University in regard to area of studies, age and gender, published in the Annual Report for 2009. The comparison showed only marginal discrepancies (see Table 1) but the results should nonetheless be interpreted with caution due to the low response rate.

The online questionnaire comprised 31 questions divided into four 4 sections, namely media usage, social media, political campaigning and demography. The quality of the questions, positioning and design was tested with a pre-test among students belonging to the original population. After the pre-test the questionnaire was partly adjusted, mainly by shortening the questionnaire.

In the analysis we will not focus on differences between demographical categorizations such as gender, ethnicity and age. Even though these variables were continually tested, they are not given prominence as analytical categories in the following.

Gender			
Women	68		
Men	21		
Other	11		
Age	·		
<25	47		
25-34	34		
25<	19		
Area of Studies			
Humanities/Social Sciences/Law	61		
Natural Science, Technics	5		
Pedagogic and other	22		
N=1091			

Table 1. Overview over socio-demographic facts of the respondents (in percent)

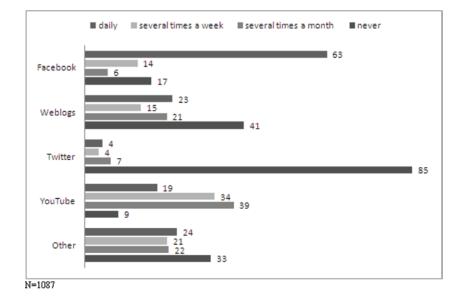
## AWARENESS OF POLITICS AND CAMPAIGNING 2.0

#### Social Media Use

To begin with, it is important to clarify that most of the students take part in social media in one form or another (Figure 1). Only 9 percent declared that they do not use social media at all. Facebook is the most frequently used social medium. 63 percent stated that they use Facebook on a daily basis, with blogs and YouTube reaching approximately 20 percent of the students' attention daily. However, it was quite common for YouTube to be used as often as a couple of times per week. Only 4 percent used Twitter daily and as many as 85 percent reported to never use Twitter. Those figures reflect well the general statistics of social media usage in Sweden, where Facebook is dominating among the social networking sites. Blogs in general are written by only 5 percent of the Swedish population, whereas 37 percent read blogs from time to time (Hast & Ossiansson, 2010). Furthermore, the students in our survey spent more time - namely between 30 minutes up to one

#### The Obama Effect

Figure 1. Social media usage in percent



hour - using social media as compared to watching television online, reading newspapers (both online and offline), listening to the radio (both online and offline), as well as reading e-books<sup>11</sup>. Only in reading books and watching television offline did they spend more time on a daily basis. All in all, social media is a part of everyday life for the majority of the students.

## Awareness of Political Content in Social Media

The students were asked whether they had noticed the presence of political parties in general on the social media platforms. 47 percent answered affirmatively, whereas 44 percent answered negative. When asked whether they had observed that the actual *campaign* had been initiated, as many as 77 percent gave a positive reply, however only 28 percent of the students indicated that social media had been their source of information. Anyway, the most common ways to encounter political content in social media were through status updates (37 percent), group invitations on Facebook (27 percent), link postings (20 percent) and blog entries (14 percent). Only 5 percent of the respondents had been contacted directly by a party representative in social media. Hence, although the respondents came across political content in social media – albeit in a more general (not election-specific way) - the politicians themselves did not (yet) actively contact them.

The majority of our respondents did not engage to any higher degree with the political information they received from acquaintances in their online social networks. Most often they just briefly skimmed through the requests (27 percent) or alternatively read them closely but without engaging further (18 percent). In that sense we could speak of *thin-awareness*, meaning a superficial rather than profound awareness, or as Norris (2002) puts it; "people click from one topic to another, this process is more accidental than purposive" (p. 66). Thin-awareness is unlikely to result in any online participation and even more unlikely in offline civic activity.

### Political Interest and the Awareness of Campaigning 2.0

In order to get a more differentiated picture of the awareness of political communication in social media, several intervening factors, such as political interest, must be discussed. The students were asked to evaluate their political interest in general, i.e. even during non-election periods. 24 percent declared that they were very interested in politics, with an additional 40 percent stating that they were fairly interested. Only 6 percent were not interested at all. Regarding the awareness of campaigning 2.0 there is a clear difference between those who described themselves as being politically interested and those who were not. Students who were interested in politics were more aware of the presence of political campaigning online, whereas politically disinterested students were less likely to be aware of it. Moreover, politically interested students were more likely to be aware of political jokes and parodies<sup>12</sup>, which might be understood as a certain form of political awareness. Peterson (2008) states that humor "can give us information and insight that enhances our ability to fulfill our roles as citizens in a democracy" (p. 22). In that respect our findings confirm well-established theories of knowledge gap and digital divide, describing an enhanced gap between already well-informed and interested citizens and those who are neither informed nor interested (Norris 2000, 2001, 2002; Trichenor, Donohue & Olien 1970). Furthermore, it is likely that politically interested students associate with other politically interested individuals and consequently receive more political information than disinterested students. Hence the virtuous circle of political communication described by Norris (2000) is even more pronounced.

## Political Engagement and the Awareness of Campaigning 2.0

Not surprisingly, not many of the respondents were politically active within party politics. Only 4 percent stated to be active members within a party, whereas 7 percent were passive members. These results correspond well with other reports, showing young people in particular to be hesitant towards active membership in organized political movements, instead preferring alternative forms of activism (Fenton, 2010; Oscarsson & Holmberg, 2007). Similarly to the previous findings, there was a significant difference between students who were party members (active and passive) and those who were not party members, in regard to their awareness of campaigning 2.013. Students who were party members were more likely to be aware of the presence of political parties in social media. Among the students 63 percent are considered swing voters, i.e. they have changed their party preference since the last election. However, the tendency towards swing voting has no significant influence on the awareness of campaigning 2.0.

## **Civic Engagement and the Awareness of Campaigning 2.0**

In order to widen the perspective and not only focus on political party membership as a crucial variable representing political engagement, we analyzed the awareness of politics 2.0 in connection with a broader civic engagement. While the respondents were not particularly interested in politics regarding party membership, a more nuanced picture emerged when applying this broader understanding of politics. When the students were asked about their concern with certain societal issues, such as migration, gender equality and environmental issues, many of them showed great involvement. Approximately 40-60 percent stated that the issues listed were very important, with an additional 30-40 percent replying that they were rather important.

Besides showing interest in such topics, we asked whether they ever discussed the stated topics with friends and acquaintances. Most of the students were not only (passively) interested, but also discussed the issues. Naturally, the next question was whether they not only discussed the issues, but also acted according to their stated opinions by, for instance, consuming environmentally friendly products or donating money or things to humanitarian organizations. Even regarding this the students must be described as highly active with between 50-90 percent stating to be very active. In that sense, our survey confirms Fenton's argument that we should speak of a displacement of traditional politics rather than political withdrawal. The students are not politically engaged in a traditional, but rather a post- or late modern, sense (Fenton, 2010).

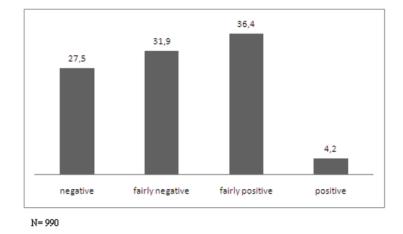
Analytically it is possible to make a distinction between institutionalized civic engagement and non-institutionalized civic engagement. Here institutionalized civic engagement is understood as passive or active membership in a non-government or non-profit organization or interest group, but not a political party. Non-institutionalized civic engagement takes the shape of societal activities such as environmentally friendly consumption, voluntary work, donations, signing petitions, participating in protests, initiating and becoming members of political groups within social media and actively discussing and commenting current issues, however not within the frame of an organization. The analysis shows that students who were engaged both in an institutionalized and a noninstitutionalized way were more likely to be aware of political communication within social media than students who were not civically engaged at all. Nonetheless, it is important to notice that only civic engagement in a non-institutionalized sense matters for the awareness of campaigning 2.0 statistically<sup>14</sup>. 95 percent of the students that noticed campaigning 2.0 were engaged in a noninstitutionalized manner.

### PERCEPTION OF POLITICS AND CAMPAIGNING 2.0

## Perception of the Mediation of Political Campaigns

Apart from the awareness of politics 2.0 and campaigning 2.0, we were also interested in attitudes towards them. One part of the questionnaire therefore focused on the students' perceptions of different ways politicians communicate with citizens. The respondents were asked how receptive to political content through different communication methods they considered themselves to be. The findings confirm previous research that Swedes regard mass media as a relatively satisfying source of political information (Nord, 2006). The majority of the students who were asked about their preferred media channels when it comes to political information clearly considered traditional mass media as both professional and trustworthy. 61 percent agreed completely or almost completely with the statement that they were well-reached by mass media since mass media is impartial. Similarly, 64 percent agreed with the statement that they were well-reached by mass media because mass media handles information professionally. When asked about communication via social media, campaign rallies and political advertising, the support is significantly lower. These findings speak against the celebratory tone of political communication practitioners such as Stakston (2010). However, the most critical attitudes were displayed by the students towards direct telephone calls by campaign workers. Only 10 percent stated to have a positive attitude towards telephone calls as a campaigning tool. This is in line with a general critical attitude towards direct political marketing in Sweden. Previous studies have shown that among the possible forms of direct contacts between campaign workers and voters, visits or calls at home are clearly the least popular (Petersson et al., 2006).

Figure 2. Social media attitude index



## Perception of Political Content in Social Media

In order to map out the general attitude towards political communication in social media, we created a cumulative social media attitude index, consisting of eight items<sup>15</sup>. The focus was on political issues in general, not campaigning per se. The degree of positive attitudes expressed towards politics in social media determined the placement on the social media attitude index. For the sake of clarity we created four subgroups after the cumulating the index items.

As Figure 2 shows, the respondents were overall rather negative towards political communication in social media. When applying a more nuanced analysis it became clear that very active social media users were more likely to be positive towards politics 2.0 than students who did not use social media at all. Those who were used to the communication patterns in social media were thus able to see a certain democratic potential. Their frequent use of social media indicates a general approval of social media induced communication. In addition, they are presumably more used to selecting relevant information.

# Political Interest and the Perception of Politics 2.0

Just as political interest was a crucial factor when analyzing *awareness* of campaigning 2.0, it was relevant also concerning the perceptions. As Figure 3 shows, students that were interested in politics were more likely to be positive towards political communication in social media, whereas students who were disinterested in politics tended to be less positive. The difference between these groups when it comes to the perception of politics 2.0 is highly significant<sup>16</sup>. Linking this back to the aforementioned finding that politically disinterested students were less likely to be aware of political communication in social media, one could argue, in accordance with other studies, that interested students really do see a democratic potential in social media (Gustafsson, 2010; Norris, 2002). Our data speak against a mobilization of students that are disengaged from politics in social media. For them social media is more about networking with friends. In that sense the gap between students who are already involved and aware and those who are not is reinforced.

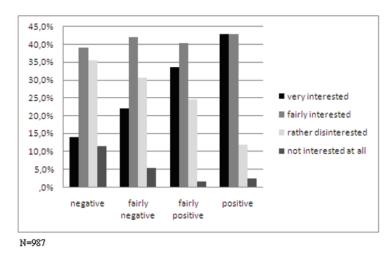


Figure 3. Political interest and the perception of politics 2.0

#### Political Engagement and the Perception of Campaigning 2.0

When it comes to political engagement in a narrow sense, here operationalized as passive or active party membership, those who were politically active were more positive towards politics 2.0 than those who were non-active<sup>17</sup>. Gustafsson (2010), who has investigated politically active and nonactive Facebook users, found similar tendencies, and suggested that politically non-active Facebook users find it hard to take information on Facebook seriously, and therefore assume that political participation in social media networks hardly can be seen as meaningful (Figure 4).

# Civic Engagement and the Perception of Campaigning 2.0

We also found a correlation, although weak, between civic engagement and the perception of campaigning<sup>18</sup>. Active and passive members in non-governmental or non-profit organizations (that is, institutionalized civically engaged) tended to be rather positive towards political campaigning in social media, whereas non-members were less positive (Figure 5). Non-institutionalized civically engaged students, i.e. those who for example donate or consume environmentally friendly products, were also more positive towards politics 2.0 than students that were not civically engaged. This too supports Gustafsson's (2010) findings stating that politically active participants perceived Facebook as a helpful extension of communication possibilities. This tendency was confirmed when looking at the correlation between the awareness and the perception of politics 2.0<sup>19</sup>. Those students who were aware of political content in their social media networks were more likely to be positive towards it than those who were not aware of politics 2.0.

## CONCLUSION

In brief, students who were politically and civically interested and active were more sensitive to political communication in social media. At the same time they valued political communication in social media higher and anticipated the democratic potential of new ways of communicating with the political establishment. Another assessment emerged when turning to the politically and civically disinterested and non-active students. They were less aware and less positive towards political communication in social media. One explanation

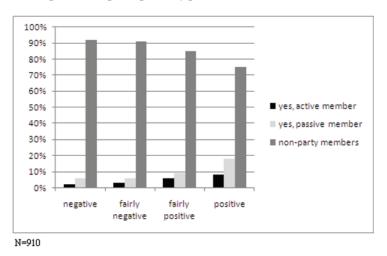
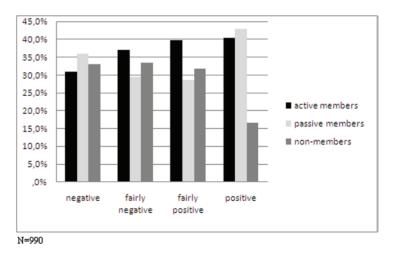


Figure 4. Party membership and the perception of politics 2.0

Figure 5. Institutionalized civic engagement and the perception of politics 2.0



might be that they were not as sensitive to political communication as politically interested students, i.e. even if they came across similar content in their social networks they might not label it as political. Apart from this explanation one could employ the uses and gratifications approach (Katz, Blumler & Gurevitch, 1974), as Norris (2002) does. She argues that already existing patterns of engagement and participation are reinforced in the online environment, since "Internet users have certain predispositions and needs that motivate them to seek different programs and sources [...]" (Norris, 2002, p. 60). This statement is supported by the main finding of the study namely an apparent gap between those who were already politically interested and those who were not, which is vital to pay attention to. In this respect political communication might contribute to further fragmentation of the citizenry rather than to an integration of broader social strata in an equal dialogue. At present, political parties seem to reinforce this gap by focusing on communicating with the voters who are already involved and interested, thereby, as Norris (2002) states, "preaching to the choir" (p. 76).

Politicians and campaigners embrace the Internet revolution (Howard, 2006; Norris, 2002) and celebrate it as a general solution to problems such as democratic deficit and the decreasing engagement of citizens in traditional politics. The Internet revolution promises a more even and equal relationship between the political elite and the "ordinary" citizens. Thereby, democracy is supposed to be strengthened. Nonetheless, politicians and campaigners are not able to involve formerly disinterested and non-engaged citizens. Instead, they focus on people who are already civically active and interested. This is reflected in our findings, which go in hand with earlier ideas such as Norris' (2000) virtuous circle of political communication. Rather than the Internet revolutionizing political participation, we found old patterns reinforced. The rhetoric of e-democracy and direct interaction is not (yet) living up to its promises.

Instead of uncritically celebrating e-democracy and the Internet revolution, future research should ask for new mechanisms for participation in online environments. New possibilities of communication between citizens and politicians do not automatically result in more intense and direct communication, since the possibilities for interaction continue to be limited. For instance, the amount of time available for individual politicians will not dramatically increase. Even if it might be easier for the individual citizen to send a question or a comment using social media, the respective representative will not be able to respond personally to each and every citizen's request Gurevitch, Coleman and Blumler (2009) furthermore state that although interactivity as such is praised "many politicians lack confidence in entering into public discussion beyond the protective walls of the broadcasting studio"(p. 174).

Another important mechanism concerns online selection procedures. The lack of time makes it necessary to structure online content according to relevance. New selection mechanisms organizing

social media communication are actually already in place. Today it is the collecting and ranking of information that structure the awareness and importance of weblogs and fan pages. Just as journalists and editors previously functioned as gatekeepers, rankings (such as knuff.se) now structure the awareness and impact of for example weblogs among the political elite and the citizens. As a result, the flow of endless online communication, even without hierarchies, is pre-structured in one way or another. Research should pay more attention to this new mechanisms of selecting, linking and processing in order to be able to judge the democratic potential of web, politics and campaigning 2.0. Otherwise the structural gap between active and interested, and consequently responsive citizens, versus disinterested and nonresponsive citizens will only increase.

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### **KEY TERMS AND DEFINITIONS**

**Campaigning 2.0:** Campaigning 2.0 is understood as political election campaigns largely performed online with the help of social media such as Facebook, YouTube, Flickr, Twitter and weblogs.

**Civic Engagement:** Civic engagement is a contested term and one clear definition is hard to find. In the chapter we distinguish between institutionalized civic engagement and non-institutionalized civic engagement. Institutionalized civic engagement includes passive and active membership in parties as well as interest groups, non-governmental and non-profit organizations. Non-institutionalized civic engagement refers to civic activities that are part everyday life, such as environmental friendly consumption, volunteering, donating, and signing petitions.

**E-Democracy:** E-democracy stands for a more active citizen participation in political matters, enabled by modern information and communication technologies.

**The Obama Effect:** The Obama effect refers to the way in which political parties have been inspired by the American president Barack Obama's extraordinary success in engaging grassroots supporters in the presidential campaign of 2008 by the use of direct contacts and social media.

**Politics 2.0:** With politics 2.0 we refer to one of the buzz terms in political communication nowadays. The term encapsulates the celebratory understanding of Internet-mediated communication that removes decision-making processes from the isolated context of traditional party politics to new forms of integrated participation.

**Social Media:** Social media are networking web sites driven by the logic of social connections and user participation. In the chapter, the terms social media and Web 2.0 are used synonymously.

**Thin-Awareness:** Thin-awareness is understood as shallow awareness. The recipient is not engaging in-depth with the content. As a result of clicking or sapping through several topics (for instance on a web site), the process of reading information is more or less accidental rather than purposeful.

## **ENDNOTES**

- <sup>1</sup> http://www.regeringen.se/sb/ d/2853/a/18099 (2010-05-07)
- <sup>2</sup> On the ballot the voter can only choose between parties but can express his/her preference for a candidate in case the party wins the election.
- <sup>3</sup> In 2006 58 percent of the voters reported that they decided about whom to give their vote to during the campaign. This number has increased continuously since 1964 (Oscarsson & Holmberg, 2007).
- <sup>4</sup> http://www.internetworldstats.com/stats. htm
- <sup>5</sup> http://www.facebakers.com/countries-withfacebook/SE/
- <sup>6</sup> We contacted all big parties that are running for election. Six out often answered, namely Feministiskt initiativ (the Feminist Initiative), Sverigedemokraterna (the Sweden

Democrats), Folkpartiet (the Liberal Party), Miljöpartiet (the Green Party), Socialdemokraterna (the Social Democrats), Kristdemokraterna (the Christian Democrats).

- <sup>7</sup> For example Parliamentary elections 2006 and elections for the European parliament 2009.
- <sup>8</sup> http://www.socialdemokraterna.se/Valet-2010/Din-insats-ar-avgorande/
- <sup>9</sup> Half of the students are younger than 25 years.
- <sup>10</sup> 37 percent of new students come from a migrant background, i.e. both parents are born in another country.
- <sup>11</sup> These formats are used between 15 and 30 minutes on an average day.
- <sup>12</sup>  $\chi^2$ =27,031,p=0,00, N=950, null hypothesis: there is no correlation between political interest and the awareness of political jokes and parodies.
- <sup>13</sup> t=-5,543, p= 0.00, N=990, null hypothesis: there is no correlation between party membership and the awareness of campaigning 2.0.
- <sup>14</sup>  $\chi^2$ =39,618, p=0,00, N=1084, null hypothesis: there is no correlation between noninstitutionalized civic engagement and the awareness of campaigning 2.0.

a) social media provide true and trustworthy information b) through social media the contact with politicians is improved c) social media have a political function for med) with social media I can discuss politics with my friends d) social media offer the possibility to be political in an amusing way e) politicians should use social media because they are trustworthy f) politicians should use social media are of interest to me

<sup>16</sup>  $\chi^2$ =69,085, p=0,00, N=987, null hypothesis: there is no correlation between political interest and the perception of politics 2,0.

<sup>17</sup>  $\chi^2$ =17,632, p=0,007, N=910, null hypothesis: there is no correlation between party membership and the perception of politics 2.0.

<sup>18</sup>  $\chi^2=11,889$ , p=0.06, N=990, null hypothesis: there is no correlation between institutionalized civic engagement and the perception of politics 2.0.

<sup>19</sup>  $\chi^2$ =85,766, p=0,00, N=919, null hypothesis: there is no correlation between awareness of social media and the perception of politics 2.0. Section 9 Performance Measurement and Citizen Satisfaction

## Chapter 27 Performance Measurement and E-Reporting: Exploring Trailblazing Programs

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#### ABSTRACT

Public sector performance measurement systems are often designed by high-level administrators and agency staff. In many instances performance reports are treated as internal documents or provide limited information of how government actions impact the lives of citizens or fall short of expectations. Performance measurement and reporting approaches, however, are gradually changing to include citizens in the process and to communicate results in a more robust way to the public. This chapter explores the topic of e-reporting and the potential it offers to engage the public in the assessment of government performance. Three exemplary programs are examined: Virginia Performs, Maryland's BayStat, and King County AIMs High. Each offers useful techniques for describing program objectives, showing government progress, making data available, and exploring interactive mechanisms that support data manipulation or customization. The chapter concludes with a discussion of future areas of research.

#### INTRODUCTION

Measuring performance and reporting results is a central concern for governments around the world. Elected officials want to show results to increase transparency, validate policy decisions, reduce cynicism, and build trust in government actions. Public administrators are central to the performance measurement and reporting process as they collect, interpret, utilize, and report performance information. Even more important is the role of the public, as citizens want to see the tangible results of government programs funded by their tax dollars.

Much is known about the promise and pitfalls associated with measuring public sector performance. Performance measurement, for example, is widely recognized as a management strategy capable of producing systematic assessments of how much and how well government performs.

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A spate of research and professional association publications present strategies and showcase best practices that promote it as a management tool. Many of the challenges of measuring performance, as well as the factors that can facilitate performance measurement in public organizations, have been carefully studied and are widely discussed in published academic research and redressed with professional association activities and training. Other research highlights how citizens can be engaged in the performance measurement process to align government decisions with citizen preferences.

As performance measurement has advanced in the field of public administration, e-government has also evolved as a mechanism that can share information, support web-based transactions, and transform government through collaborations in a virtual or electronic space. It can play a vital role in the strategies government uses to inform the public and interact with citizens. Most importantly, it is a mechanism that can make the results of public measurement efforts available to the public via e-reporting. For this examination, e-reporting is defined as a government strategy for making performance information and results available to the public. Offering interactive functions, e-reporting is conceptualized as including features such as the use of graphic displays of complex information for easy comprehension by non-governmental audiences, the availability of raw data for manipulation and mapping, or other report-generating devices for citizens to customize their own performance report.

This chapter explores how performance measurement and e-government strategies intersect with increasing public demand for transparency in government and for tangible results from government spending and services. It begins with a discussion of the ability of performance measurement to measure agency performance and the potential for engaging citizens in the process. E-government is introduced to highlight the uses of technology and its transformative potential to inform and involve citizens their government. And finally, e-reporting is presented as an intersection of performance measurement and e-government, in the sense that reporting results can be done through innovative uses of technology Three leading models for e-reporting in the United States are presented as exemplary programs that are reporting performance results to the public via sophisticated e-reporting strategies. The efforts of Virginia Performs, Maryland's BayStat, and King County AIMS High of the State of Washington are profiled. The chapter concludes with a discussion of future areas of research and considerations for public administrators who are interested in advancing an e-reporting strategy in their jurisdiction.

## BACKGROUND

## Performance Measurement and Reporting Practices

Performance measurement is touted as a management tool that public administrators can use to measure and account for agency performance to elected officials and the public. Standing the test of time, performance measurement is deeply rooted in public administration history as it has served as cornerstone of municipal reform of the progressive era (Williams 2003), scientific management (Taylor, 1912), total quality management, scorecards, and other subsequent management approaches. More recently, it is advertised as the means to promote results-oriented government with public administrators using it to assess how much and how well public services and products are delivered (Moynihan 2008; Callahan 2004).

Performance measurement systems can improve management decision making with indicators that capture efficiency, effectiveness, and/or service quality and results. Some performance measurement systems, for example, can be designed to promote efficiency (getting more with less), improve service quality, determine program impact (outcomes), or measuring the productivity of workers. Overall, performance measurement is a management tool that can be applied to answer questions such as (Behn 2003):

- How well is the organization performing?
- Are managers, staff and the public learning from performance information?
- How can elected officials, employees, the public and other stakeholders be motivated to improve public organizations?
- How can results be shared so that elected officials, citizens, the media, and other stakeholders are aware of the accomplishments of government?

In its simplest form, performance measurement can help administrators and staff assess the volume of work accomplished by quantifying the number of citizens served, the number of vaccinations administered, or the number of potholes filled. Efficiencies can be determined by examining the relationship between output to costs in personnel, supplies, and overhead. Broadening the understanding of the impact of public services, administrators can also survey citizens regarding service quality or show the impact that public health programs and services have on the quality of life of citizens. And furthermore, when integrated into organizational processes such as budgeting and strategic planning, performance measurement can serve as the building blocks of a broader management strategy referred to as performance-based management or managing for results (Moynihan 2008; Wholey 1999).

More recently, however, there is an increasing emphasis on the importance of reporting performance results (Callahan and Kloby 2009). Professional associations are proffering workbooks and guides to assist with translating performance information to citizen-based audiences. For example, the Association of Government Accountants has adopted Citizen Centric Reporting, a reporting guide that incorporates simple communication tools and formats to communicate complex financial information and performance data to citizens. In addition to providing suggested criteria for reporting performance information to the public, the Governmental Accounting Standards Board (GASB) has recently proposed new guidelines for reporting performance information that emphasize the importance of relevance, understandability, comparative data, timeliness, consistency, and reliability.

Networks such as The Public Performance Measurement and Reporting Network or the Community Indicators Consortium draw attention to the value added by citizen participation in the measurement of government performance. Network conferences, research, and publications bring members of the academic and practitioner communities together to strengthen the connections among citizens, government officials and administrators, and highlight the value of an informed citizenry. Other independent organizations, such as the Center on Government Performance at the National Center for Civic Innovation, a program of The Fund for the City of New York, encourage local and state governments to produce and disseminate annual performance reports to the public, and consider the public's feedback in preparing subsequent reports. Similarly, the Worcester Regional Research Bureau conducts independent, non-partisan research and analysis of public policy issues to promote more informed public debate and decision making on financial, administrative, management and community issues facing the region.

Many of these initiatives are driven by the ideals of an open and transparent government that publishes performance information to the public and provides opportunities for citizen input and involvement. A fundamental assumption to this version of measuring and reporting performance information is that openness and citizen engagement can increase the precision of performance measurement and ultimately align management decisions with citizen preferences. There are, however, a number of challenges that impact the extent to which government performance measurement efforts address the citizen's point of view and includes them in the process.

## SHIFTING FROM INTERNAL TO EXTERNAL REPORTING

## Performance Measurement and Reporting Challenges

Measuring performance and showing results is the central theme of administrative reforms and movements to reinvent, streamline, and steer government services. It is the focus of much scholarly research, and it is touted as capable of stimulating improved decision making (Hatry 1999), as bolstering organizational learning (Moynihan 2005), and of adding value to the measurement process with models that include citizens and other stakeholders (Cohn-Berman 2005; Callahan 2004). Despite the obvious benefits of holding public administrators and staff accountable and employing sophisticated systems to measure agency performance, implementation has revealed a number of challenges.

Performance measurement is often approached as a technical exercise with little consideration given to organizational context, and more emphasis on designing objective, quantitative measures of performance. Managers and high-level decision makers spend a considerable amount time and resources searching for and defining the one-bestmeasure of performance (Behn 2003). A search that Behn (2003) characterizes as futile.

Measurement efforts are often implemented with a focus on assessment and reporting with little emphasis on the use of measures to improve performance on an on-going basis. Poister and Streib (1999) highlight that in many cases administrators and staff will measure a bevy of indicators to the point of being *data rich and information poor*  (a.k.a. Drip Syndrome). Administrators need the savvy and skill to determine useful measures of performance rather than wading through reports and data that yield little useful information.

In many cases, performance measurement schemes are designed to achieve manageriallydriven goals. Public managers and department directors, for example, set priorities, determine indicators (usually quantitative), and strategies for data collection and reporting (Long, E. & A.L. Franklin 2004; Callahan 2004). These transactions operate internally, with an emphasis on improving process through compliance. While this model may improve the management of operations in general, there is a decreased likelihood of aligning administrative processes and actions to generate meaningful results for key administrative staff and service recipients. As a result, front-line staff and middle managers view the initiative as oppressive, and as yet another management fad that will eventually fade and be replaced by a new and more fashionable management method.

Measuring performance requires processes and the capacity to support a system of learning. Administrators, elected officials and personnel should therefore be knowledgeable of the purpose, mechanics, and full range of applications of measuring performance. Research illustrates, however, that public administrators and staff need training to effectively survey and engage citizens, collect data, and translate findings into meaningful statements to support informed deliberation (Gibson et al., 2005).

Finally, there is little consensus about how to define and measure the performance of public sector agencies. Performance, in other words, is subjective. Internal organizational actors, for example, may hold efficiency and productivity as key indicators of performance. Yet, to the external stakeholder, as in the case of a citizen or service recipient, performance may be defined by the quality of services and the nature of interactions with agency personnel (Cohn-Berman 2005). Rather than working to define and measure the complex

	Internal Reporting Practices	External Reporting Practices	
Who is the target audience?	Public managers, agency personnel, and techni- cal experts.	The broader community ranging from government personnel to citizens.	
What is the measurement focus?	Agency or program-specific performance measures.	Agency or program-specific performance measures, as well as indicators of community conditions and/or quality of life.	
How are comparisons made?	The emphasis is on comparing current results to past agency or program performance.	Comparisons of community conditions to the region and/or other jurisdictions.	
What is the purpose of measure- ment?	Measures are usually intended to help manage government services.	Indicators show trends in community condi- tions to identify when and where there is a need to improve conditions.	
Who is responsible for the results?	Agency personnel.	Non-profits, community groups, government, citizens.	
How are reports made available?	Documents or PDF files.	Interactive Web sites with links to documents/ PDFs as well as raw data and other mecha- nisms to interact.	

Table 1. Comparison of performance measurement reporting practices

concept of performance, managers are more likely to document compliance to clearly specified rules and regulations (Behn 2001).

As measuring and reporting performance is traditionally considered the focus of public administrators and those working in government, there is growing interest in measuring what matters to the public and reporting information more openly. Table 1 provides an overview of the different approaches to reporting performance results. Following the characteristics of internal reporting practices, for example, the primary audience of performance reports are internal government actors who are likely to consult reports to determine how a program is performing. Performance information with an external focus is more likely to engage a broader audience as performance information is readily available (often electronically) and offers information about quality of life, facilitates comparisons to other jurisdictions, and is available to manipulation by the user.

## Increasing Occurrences of Performance Reporting

Some researchers have documented the evolution of performance measurement since its early intro-

duction in our administrative history (Williams 2003, 2004) and many practitioners and researchers continue the effort to increase the sophistication and scope of performance measurement in the public and non-profit sectors. There are, for example, government programs that are achieving some success with measuring and reporting the results. As a result of examining performance measures in reports produced by four countries (Australia, Canada, Ireland, and he United States), Boyle (2009) finds that performance reporting by U.S. agencies includes a significant number of indictors that focus on results (or outcomes). Analyzing the performance measurement strategies of 21 U.S. cities, Ho and Ni (2005) assert that more cities are shifting to an outcome or results orientation as they present government results in budget documents.

Research also shows the benefits of performance reporting. Examining employment services agencies, for example, Mausolff (2004) emphasizes the ability of performance reporting to stimulate organizational learning. Perez, Bolivar and Hernandez (2008) assert that transparency through online financial reporting can improve the image of governments and the confidence of citizens. Examining performance reporting of schools and hospitals, Meijer (2006) highlights that publications of performance results can stimulate schools and hospitals to score better on performance indicators because they are scrutinized by 'public eyes'— but also cautions that such desire to show positive results can undermine efforts to improve effectiveness.

Other research presents government programs that work to include citizens in the process of defining performance goals, measurable indicators, expectations for desired results, and continued assessment after data collection and reporting (Callahan and Kloby 2009). Such efforts signify increased interest in developing performance measurement systems that focus on process, efficiency, and level of productivity and that are also capable of engaging citizens to determine what matters and what they expect of government. Overall, public administrators are seeking ways to align management decisions with citizen demands and preferences, while also creating inlets for citizens to connect more directly in the policy process as they have influence in agenda setting, determining measures, and assessing government performance.

# From Performance Reporting to E-Reporting

Key to the advancement of public sector performance reporting is the utilization of technology and e-government strategies. Introduced in the 1950s as a way of adding digital components to the functions of government, e-government emerged in the 1980s with more concrete strategies to provide government services through electronic mediums. This includes voice mail, computers, electronic bulletin boards and touch-screen kiosks. The following items present a summary of the range of e-government utilization in government (Garson 2006: p.23):

• Presence –the provision of information in a passive nature (e.g., availability of reports or informational brochures)

- Interaction simple interactions between government and citizens, government and business, agency personnel (e.g., Web site functions that manage citizen queries via e-mails or interactive forms)
- Transaction an exchange between government and businesses or individuals (e.g., payment for license renewal, taxes, or other fees)
- Transformation consideration of how government functions are conceived and organized with an emphasis on collaboration between the levels of government, across sectors, and with citizens.

There have been various initiatives at the federal level of government since the early 2000s to integrate e-government into management decision making and service delivery. This includes key legislation (Mullen 2005) or inclusion of egovernment concerns in presidential management agendas (Garson 2006). More recent developments include the provision of portals such as firstgov. gov that connects citizens to many aspects of federal government. Other mandates focus on reducing inefficiencies, breaking down agency barriers, and hastening government processes via e-signature, e-grants, e-procurement, e-regulation have been a primary concern. In his assessment of the progress of the field, Garson (2006) notes that e-government has advanced to provide more transactional opportunities between government and external groups or individuals. Even with new initiatives like the development of the Office of Management and Budget's newly established Office of e-Government and Information Technology, and other federal Web sites like Recovery.gov or Business.gov, practice shows that e-government has not yet achieved a transformational status. Transformation, that is, in the sense that government is able to develop virtual spaces that provide single points of access to government services for individuals, or that creates a single flow of information and collaborative decision making

as agency barriers are dissolved and enable a free flowing exchange of information and ideas between all levels of government, across sectors, and with citizens.

It is at this point where e-government and performance measurement and reporting practices can intersect to potentially fuel transformation. While much of the focus of e-government is on identifying how it can increase the performance and productivity of public agencies, shifting attention externally to examine how it is used to bolster transparency and collaboration in the measurement and assessment of government services may create new opportunities for engagement and transformation. More specifically, rethinking the way government efforts and performance are reported may increase the likelihood of aligning citizen preferences with management decisions as well as creating occasions for citizen input and other collaborations to problem solve in a given jurisdiction.

Exploring the intersections between the goals of e-government to bolster performance and engage the public, and the goals of performance measurement to determine agency performance and include citizens in the process, this research reconceptualizes performance reporting as ereporting. E-reporting, for example, involves more than simply posting performance reports on a Web site (e.g., presence), more than simple exchanges about how government operates or where it falls short (e.g., interaction), more than determining how many fees were collected electronically (e.g., transactions), and can serve as a way to redefine government into an institution that works equally with other sectors and citizens to address societal needs and concerns (e.g., transformation). Ereporting, therefore, involves a sophisticated way of providing web-based performance information that shows how government works to achieve certain goals, that provides functions for citizens to view or generate customized performance reports that include graphic displays of quantitative information, and shows how other groups

or individuals can contribute or collaborate to address these goals. There are some state and local examples that are starting down the path to transforming the way e-government is used to report on agency performance and ultimately to engage citizens.

## **Examining E-Reporting Trailblazers**

Examining the role that e-reporting can play in performance reporting, diminishing silos across government agencies, and increasing the potential for collaboration across sectors and with citizens, this chapter highlights the reporting techniques of three government programs:

- King County AIMs High, Washington State: http://your.kingcounty.gov/aimshigh/index.asp
- Virginia Performs, The Commonwealth of Virginia: http://vaperforms.virginia.gov/
- BayStat, The State of Maryland: http:// www.baystat.maryland.gov/

Each are high-profile programs that receive many accolades for their work with measuring government performance and reporting results and are seemingly compelling candidates for further analysis from an e-reporting perspective. King County AIMS High, for example, is one of only eight recipients of the Association of Government Accountants' GOLD Certificate of Achievement in its Service Efforts and Accomplishments (SEA) Report Review Program for consistent reporting that informs the public, elected officials and public administrators of government performance. The Pew Center on the States awarded Virginia the top overall grade for government performance in 2005 and again in 2008 based on their assessment of how well the state managed and reported on its personnel, funds, infrastructure, and information. And finally, BayStat is the next generation of the famed Baltimore CitiStat program-a performance measurement initiative that is celebrated for increasing accountability and responsiveness to citizens, and has been widely adopted in city and municipal governments nationwide. Governor Martin O'Malley (formerly the mayor of Baltimore) is the principal architect of the "performance-stat" approach in Baltimore and has modified this strategy for measuring and reporting performance results to state government.

Each program Web site offers extensive program backgrounds, they present policy theories that articulate the intentions of the initiatives, they include graphics to help citizens view performance information, and narratives that explains the role of government in relation to particular performance indicators. Each of these programs are considered trailblazers as they are continuously breaking new ground in performance measurement and reporting techniques and can serve as a model for presenting results and building awareness of how problems can be solved across sectors. A program overview and description of their respective e-reporting approach is presented for each program below.

# King County AIMs High: Annual Indicators and Measures

King County is part of a broader national movement throughout all levels of government to use innovative approaches to provide information to assess and improve government performance and increase transparency and accountability by publicly reporting performance results. The King County AIMs High: Annual Indicators and Measures Web site is designed to provide information to the public about key performance measures that reflect the work of government and key quality of life indicators (referred to as community-level indicators) that reflect broader social or community conditions. According to the AIMs High Web site, the goals of their e-reporting strategy are:

• To illustrate how King County's services and performance contribute to community conditions;

- To demonstrate how the state of the community shapes the county's decision making and performance;
- To provide all members of the community (government, business owners, nonprofits, and individual residents) with the opportunity to identify what actions need to be taken to improve community conditions; and
- To increase access to information and support informed public debate.

King County's performance measures and community-level indicators are organized by the following themes: Natural Resources, Land Use and Transportation, Health, Safety and Infrastructure, Housing and Homelessness, Economy, Education, Equity, and Governance. Each theme is divided into sections. Results are intended to help the public understand and evaluate the county's performance in achieving its goals and outcomes.

When navigating the Web site, users are able to click on each theme and are presented with county goals and a measurement strategy. Figure 1, for example, presents the performance measures and community-level indicators for the theme of "Health". To support the health of county residents, King County focuses on the challenges of inequality, the role of promoting health, and providing services that protect and care for citizens. Each of the components of Figure 1 include active links to each of the performance and community-level indicators with extensive explanation of how the county performs, how it contributes to addressing health related issues, and how problems can be addressed in collaboration with county agencies, other community-based organizations and citizens themselves. Links for the community-level indicators provide descriptive statistics and other information describing the scope of problems or needs (e.g. rates of adult obesity, HIV incidents, mortality rates, and smoking among adults and kids).

The degree of influence that the county has over results varies by measure. In some cases, for example, the measure presents a specific program result, in other cases a measure may be the result of multiple agencies' efforts. For each of the community-level indicators and performance measures shown in Figure 1 there is a discussion of community conditions and government efforts are related, what influences these conditions and government performance, and what role King County government plays in addressing community conditions and needs. Each section provides answers to each of the following questions: How is King County doing? What else influences these indicators? What role does King County government play?

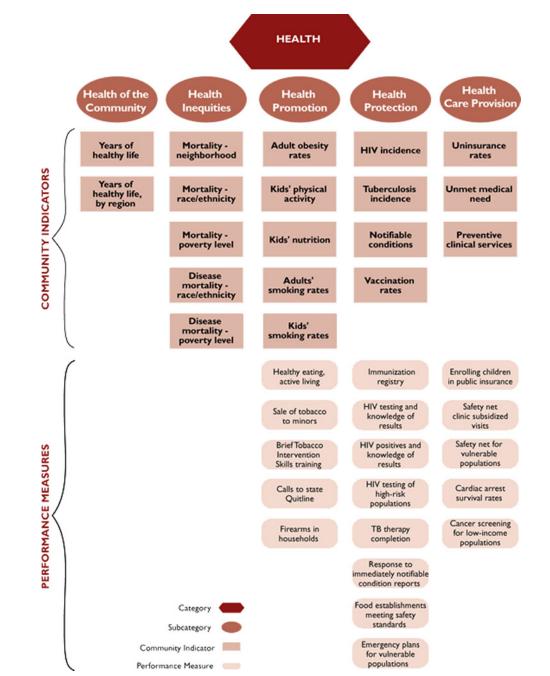
For community-level indicators associated with Health Promotion (as shown in Figure 1), information illustrates that chronic conditions such as heart disease, diabetes and obesity, lung diseases and injuries are the leading causes of death and disability in King County. Tobacco use, physical inactivity and poor nutrition are identified as increasing the risk of developing many chronic conditions. Data snapshot via bar graphs, line charts, or other graphic displays of quantitative information are readily available to help viewers assess the scope of a problem or community condition for themselves. In this case, for example smoking rates among teens and adults are available for examination. Figure 2 illustrates, for example, that the percentage of 10<sup>th</sup> and 12<sup>th</sup> grader smokers has slightly increased from 2006-2008, while the percentage of adults smokers has been gradually declining since 2001. Additional links provide further data and tables about county resident smoking patterns.

And finally, a discussion of how King County addresses these issues is provided along with performance measures for specific programs or initiatives. To support healthy eating, for example, the county promotes menu nutritional labeling, removal of trans fat from foods, farmers markets, and community-based nutrition education. It encourages physical activity by planning for and maintaining walking and bike trails, parks and recreational facilities, and support for walking groups. County offices reduce tobacco use by limiting tobacco advertising and sales, enforcing no-smoking ordinances, and providing assistance to medical providers for offering smoking cessation counseling to patients. Web site users can easily access a description of these efforts and how it is performing. Data, graphics, and a discussion of the linkages between community conditions and government efforts are provided for all of the themes listed above.

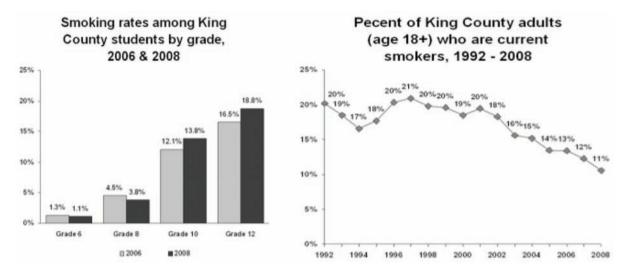
## Virginia Performs

Virginia Performs, a signature initiative of the Council on Virginia's Future, is a performance leadership and accountability system within state government. The Council on Virginia's Future provides oversight of the Virginia Performs program as it facilitates the visioning process that informs long-term goals and creates opportunities for dialogue with citizens. The Council plays a leadership role in the process as it provides a forum where legislative, executive branch, and citizen leaders can come together for work that transcends election cycles, partisanship, limited organizational boundaries, and short-term thinking.

One of the key functions of the Council on Virginia's Future is to help connect the dots between service area expectations, agency activities, and broader societal concerns and goals. The Virginia Performs system coordinates expectations, actions, and performance measurement efforts to show how service delivery can be efficient, can show results, and can have a transformative effect on the state as a whole. It works with state agencies to craft performance measurement systems that make connections between agency activities and broader societal goals. These goals include the following (see http://future.virginia.gov/ aboutVAPerforms.php):



*Figure 1. King County AIMs High health measures and indicators ((Source: http://your.kingcounty.gov/ aimshigh/health.asp)* © 2011, *King County, The State of Washington. Used with permission.))* 



*Figure 2. Teenage and adult smokers in King County (© 2011, King County, The State of Washington. Used with permission.(Source: http://your.kingcounty.gov/aimshigh/search2.asp?HEHealthProm))* 

- A preserved and enhanced economy (Economy)
- Elevated levels of educational preparedness and attainment of citizens (Education)
- Healthy lives and strong and resilient families (Health and Family)
- Protected, conserved, and wisely developed natural, cultural, and historic resources (Natural, Historic, and Cultural Resources)
- A fair and effective system of justice and responsiveness to emergencies & disasters of all kinds (Public Safety)
- A safe transportation system that allows the easy movement of people and goods, enhances the economy, and improves quality of life (Transportation)
- Recognition as the best-managed state in the nation (Government and Citizens)

Virginia Performs aligns specific state agency outcomes with larger statewide goals. Quality-oflife measures (referred to as societal indicators) answer the question, "How is Virginia doing?" on broad issues such as obesity, land preservation, and educational attainment. Key objectives and measures help agency leaders and elected officials see whether government action is getting results on these high priority issues -- for example, obesity in adults, acres of land preserved, and graduation rates. In addition, specific metrics help gauge whether state programs and services are producing the desired results and whether agency operations are well managed. Figure 3 presents a diagrammatic overview of the logic of the Virginia Performs measurement scheme.

To answer the question, "How is Virginia doing?" progress is monitored and reported with a Scorecard at a Glance for each long-term goal and societal indicator showing progress over time and in comparison with other regions and states. Objectives and measures have been established by state agencies during strategic planning that show results of agency activities and how they relate to the long-term goals and societal indicators. To achieve the long-term goal of a safe transportation system, for example, programs emphasizing safety, education, and infrastructure maintenance are implemented. User-friendly graphics, shown in Figure 4, allow citizens to quickly assess whether conditions are improving,



Figure 3. A graphic model of the Virginia Performs system (© 2011, Virginia Performs. Used with permission.)(Source: http://vaperforms.virginia.gov/extras/about.php))

maintaining, or worsening, and how much of an influence state offices have over them.

In the case of infrastructure condition, conditions are worsening. Clicking on "Infrastructure Condition" brings the user to a webpage that describes the importance of well maintained roads, and bridges and tunnels for fluid transportation and overall safety. Graphics show the declining condition of bridges and roads in the last several years and how Virginia compares to other states and national averages. Information describing state agency responsibilities is provided. VDOT, for example is the state agency described as being responsible for building and maintaining road infrastructure, choosing the material and construction techniques used, and as making tradeoff decisions between cost and service lifespan, between replacement or repair. The Department of Aviation, the Department of Rail and Public Transportation, and the Virginia Port Authority are also highlighted as having either complete or shared responsibilities for maintaining airports,

Figure 4. Assessing transportation performance trends at a glance (© 2011, Virginia Performs. Used with permission.)(Source: http://vaperforms.virginia.gov/Scorecard/ScorecardatGlance.php))

Performance Trends and State Influence Key		ls and State Influence Key	Performance Trends and Influence: Transportation			
improving		improving	Transportation			
	+	maintaining	Goal: Ensure Virginia has a tr	ansportation system that is		
	+	worsening	safe, allows the easy movement of people and goods,			
	10	significant state influence	enhances the economy, and in Infrastructure Condition	nproves our q	quality of life.	
	⑪	limited state influence	Land Use	+	1	
			Traffic Congestion	÷	10	

transit facilities, and ports. Links to specific agencies or other available data and information are provided. This level of detail and reporting is provided for all of the societal indicators and agency metrics.

## BayStat

The Chesapeake Bay plays a vital role in the environmental, economic, and social wellbeing of the region. Increasing levels of pollution are negatively impacting water quality, the health of fish and wildlife, and local economies. To restore the vitality of the water and the region, BayStat was created in 2007 to serve as a statewide tool designed to assess, coordinate and target Maryland's Bay restoration programs, while informing citizens on progress. Spearheaded by Governor O'Malley, monthly meetings between the Secretaries of the Maryland Departments of Agriculture, Environment, Natural Resources and Planning, scientists from the University of Maryland and other key staff are conducted to monitor performance. These frequent encounters provide the opportunity for the team to assess progress, evaluate what's working and what's not, and adapt our efforts accordingly. The intent of this initiative is to coordinate across state agencies and borders, foster decision making based on the best available science, target resources for results, and foster transparency and accountability for citizens. Much of the work also involves implementing the Maryland 2 Year Milestones program – a plan with several states and the Environmental Protection Agency to accelerate efforts to restore the Chesapeake Bay with significant reductions of pollutants such as nitrogen and phosphorus.

The BayStat Web site provides an in-depth discussion of the contributing factors that led to the decline in the health of the bay. Reports generated by local institutes or universities are highlighted to provide additional information of environmental conditions. The 2009 Chesapeake Bay Health Report Card, for example, is featured as a source of scientifically-based, transparent, timely, and geographically detailed annual assessment of Chesapeake Bay health. The Health Report Card, released annually since 2007 by the University of Maryland Center for Environmental Science (UMCES), provides an assessment of the previous year's conditions with user-friendly graphics. For example, interactive maps give users the option to review water conditions and pollutant levels by region, as well as water quality as reported by frequent tests conducted by state agencies

Links are also available to other government initiatives that can have an impact on water quality. Data on the value of trees and forests and information on government initiatives to plant trees or create incentives for others is also available. Other programs related to agriculture, oyster beds, and environmental stewardship are linked to the BayStat Web site, showing the interconnectedness of government efforts to address large-scale problems.

## CONCLUSION

The programs highlighted in this chapter illustrate some of the ways e-reporting strategies can be developed to inform citizens and stimulate collaboration across government agencies and sectors. They provide links to information on community conditions, delineate what government programs are designed to address, discuss the role of government in addressing them, provide performance information, and show or suggest how communitybased organizations, businesses, and citizens can engage in the policy process. Rather than providing static reports, the Web sites are dynamic, with user-friendly graphics to convey complex data over time and in comparison to neighboring or comparable jurisdictions, and mapping features to show needs or areas of improvement. Reports on performance information show how agencies and offices within government can collaborate or streamline their efforts to address similar goals.

Further analysis of these and other public sector e-reporting initiatives can potentially deepen our understanding of how external performance reporting practices impact public administrator decisions and management approaches. For example, is e-reporting a form of window dressing to provide a glossy view of how government operates? Or, can the process of providing performance reports that are thick with description of community conditions and agency efforts foster more intentional and collaborative actions with transformative potential? More needs to be learned about how transparency in conveying the connections between government agencies, across sectors and with the members of the public impact decision making and collaborations.

Little is known about how citizens use this information. Is the availability of such in-depth Web sites providing citizens with what they need to assess the work of government and engage in the process? Or are we finding that the provision of such information and numerous Web functionalities are overwhelming the public with too much information? How, in other words, are citizens benefiting from e-reporting? Practical insights from program administrators in these and similar government programs should also address the challenges of fostering transparency, collaboration, and interactive reporting mechanisms. What, for example, is required to make the shift from traditionally internally focused performance measurement to a model that is collaborative across agencies, with the private sector, and citizens? Building a performance measurement system has its challenges. Designing one that reflects the features of the profiled programs in this chapter is likely to be even more daunting. Reflections of public administrators on organizational culture, leadership, professional development and motivation, as well as engaging in collaborative exchanges would equip public administrators to take on and successfully implement performance measurement and e-reporting.

To summarize, this chapter explores the concept of e-reporting through the works of exemplary public sector programs. Much needs to be learned about the impact of e-reporting on management decisions and agency performance. More needs to be learned on the impact e-reporting has on the perceptions citizens toward their government and its influence on citizen engagement and other private sector collaborations. Most importantly, further study of e-reporting may inform our understanding of its impact on governance, and ultimately, on whether it can facilitate transformation.

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## **KEY TERMS AND DEFINITIONS**

**E-Reporting:** This involves web-based opportunities for citizens to view or generate performance reports that include graphic displays of quantitative information to help visualize government progress. It may include the availability of raw data for manipulation by citizens.

**E-Government:** This includes strategies to provide government services through electronic mediums, such as voice mail, computers, electronic bulletin boards and touch-screen kiosks.

**Performance Measurement:** The systematic assessment of how much and how well government delivers a service or product.

**Performance Reporting:** The practice of reporting on the degree to which performance measurement goals and objectives are achieved though agencies activities. Performance reporting often occurs internally, among agency survivors and personnel via intranet capabilities or paper-based processes.

**Transformation:** This concept broadens the impact of e-government strategies and aims to change the nature of public administration. It offers the potential to use technology in a transformational way that fosters interactions within government and with external audiences such as the private sector and citizens.

# Chapter 28 Democracy as the Missing Link: Global Rankings of E-Governance in Southeast Asia

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#### ABSTRACT

The re-emergence of neoliberalism paved the way for the democratization of Asia at a time when many countries in the region were suffering from one of the worst financial crises in its history. The reluctant acceptance of the Washington Consensus by Thailand and Indonesia, the eager anticipation from the Philippines, and the resistance of Malaysia and Singapore contributed to the dynamic political discourse in the region. In this chapter, I will discuss the concepts of traditional and e-governance and e-democracy that are heavily entrenched in the neoliberalist orientation. More importantly, I will present an argument for the inclusion of e-democracy in all facets of good e-governance.

#### INTRODUCTION

Besançon (2003) asserts that good governance becomes apparent when "nation-states perform effectively and well on behalf of their inhabitants (p. 1)". Assessing good governance has had a common set of criteria forwarded by leading scholars and international organizations since Harry Truman spoke of democracy and the dichotomy of 'developed and underdeveloped' in the same vein as the 'Point Four' in his 1949 inaugural speech. Among the well-known indicators being used by organizations include rule of law, accountability of authorities, inclusion of citizens in decisionmaking processes, and control of corruption (Grindle, 2007).

However, the gradual shift of governance from traditional practices to those that are assisted and

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enhanced by new information and communication technologies (ICT) has introduced new indicators and neglected some of the more important ones. If governance (pre-ICT and in many cases ICT-free) is measured with particular attention to the nationstate's inhabitants such as the World Bank's "interactions among players in civil society, business, and politics"; the UNDP's "voices of the poorest and most vulnerable are heard in decision-making over the allocation of development resources"; and the USAID's "transparency, pluralism, citizen involvement in decision-making, representation, and accountability" (Grindle, 2007, pp. 556-557), indicators for e-governance have little to do with measuring how good governance is perceived by the people. For instance, the 2009 Waseda University International e-Government Ranking measured network preparedness, required interface-functioning applications, management optimization, homepage, chief information officer in government, and e-government promotion (Obi, 2009 February 1). In other words, measuring e-governance focuses more on the infrastructure and how the government uses it to 'govern' and less on how the people use it to fully participate in the affairs of the nation-state.

This chapter will discuss the impact of worldwide e-governance rankings on the perception of good governance that in some cases leads to the notion that effective e-governance is a reflection of a truly democratic system. Of particular interest are countries in Southeast Asia that are regularly measured for good governance where the difference between their ranks in effective traditional governance and e-governance provides grounds for contentious interpretation. How do we reconcile traditional governance and e-governance? Do ICTs change the mechanics of assessing efficient delivery of services to the people? More importantly, as e-governance is increasingly becoming a fad, has it really enabled a genuine democratic system? For instance when Singapore toppled the four-year reign of the US as the best in e-government including 'relationship between government and its stakeholders' in the Waseda ranking, it was treated with so much adulation that its less than stellar rank of 136<sup>th</sup> (below Indonesia's 117<sup>th</sup> and the Philippines' 123<sup>rd</sup>), in the World Bank's 2008 assessment of 'voice and accountability' became almost negligible.

In this chapter, I argue for the importance of including e-democracy in the discussion of e-governance in Singapore, Malaysia, Thailand, Indonesia, and the Philippines.

### BACKGROUND

#### **Neoliberalism and Governance**

The late 1970s to the 1980s saw the dramatic shift of world politics and economics from one that was characterized by heavy government involvement to one that focuses on promoting private individual profit signaled by pivotal moments in history. Neoliberalism is believed to have been initially manifested in Deng's liberalization of the Chinese economy, Volcker's daring move to change policies in the US Federal Reserves that won Reagan's support, and Thatcher's 'handsoff' policy on the British economy (Harvey, 2005). The neoliberalist approach, Chesney (in Chomsky, 1999) believes, appeals to many in the political spectrum from "...the center and much of the traditional left as well as the right (p. 7)" and which became the dominant ideology in the past three decades. Chomsky (1999) explained that neoliberalism is a fusion of new and classical ideas that are basically rooted in the philosophy of Adam Smith and revolves around the general principles of privatization, liberalization of trade and finance, ending inflation, and a market-based system of pricing<sup>1</sup>.

Whether voluntary or through coercive measures, governments saw the neoliberal approach as an emerging trend imposed by the world power and was thereby inevitable that such a system be adopted. Among the early 'shifters' were Canada, New Zealand, and Australia (Jessop, 2002).

A change in economic approach, in both domestic and international systems, meant an imminent change in political approach and governance as well. Harvey (2005, p. 3) called this transition an occurrence of "creative destruction" that transformed traditional systems of, among others, sovereignty, labor, social relations, and welfare which sought to "bring all human action into the domain of the market". This transition further highlighted the pressure on some governments to loosen their control over the market that in turn figured prominently in public policy. As the U.S. and Britain actively embraced the relatively new paradigm, political systems elsewhere struggled (and even resisted) to reconcile state control and free market enterprises as Chwieroth (2007) pointed to those that initially viewed neoliberalism as incompatible with their respective political climate such as Argentina in the 1980s and Chile and Malaysia in the 1990s. As a result of the imposition of neoliberal ideals, we've witnessed the weakening of socialist foundations and the rise of the U.S. as the world's liberator whose efforts galvanized radical changes in many countries that would not have otherwise relinquished control. Hence, these events led to "the uneven geographical development of neoliberalism on the world stage" (Harvey, 2005, p. 9) that was characterized by mainly an intricate process of pitting traditional capitalist against neoliberalist views.

The move towards neoliberalism likewise propelled international organizations like the International Monetary Fund (IMF), the World Bank, and the World Trade Organization (WTO) to prominence for they were tasked to oversee world finance and trade. These organizations not only played a significant role in the world market but would also continue to influence and pressure regimes to install a more open and participatory governance<sup>2</sup> as a requirement for participation in the international economy<sup>3</sup>.

However, Larner (2000, p. 5) believes that the growing literature has inadequately touched on the relevance of neoliberalism in the transformation of traditional governments and has, thus, neglected "post-social politics"4; and to which I specify governance as one of the most dynamic fields in politics that is worth discussing. Explaining how governance and politics relate to each other would entail a lengthy account dating to the root of the nomos vs. physis dichotomy espoused by the famous sophist, Protagoras<sup>5</sup>. But to make matters less complicated, I refer to Heywood (2003) having differentiated politics as "the activity through which people make, preserve, and amend the general rules under which they live (p. 21)" from governance as the "various ways in which social life is coordinated (p. 6)". More importantly, I attribute the intersection of these concepts to Finer (1970, p. 6) who explained that, "it is the choosing of a course of action that constitutes the point of contact between the two concepts, 'government' and 'politics'."6

The notion of governance is often viewed from the context of the neoliberal orientation because it was during the fall of socialism that scholars, politicians, think-tanks, governments, and international institutions took great interest in this concept. De Angelis (2003) posited that when discussing governance, we most likely pertain to "global neoliberal governance" characteristic of the last three decades or so. Furthermore, Demmers, et al. (2004, p. 1) observed that good governance is often invoked by international institutions, especially funding institutions, as both a "goal and a condition of official (development) assistance". For instance, the World Bank defines governance as the exercise of authority for the "common good"7 and the United Nations Development Programme (UNDP) views good governance as "participatory, transparent, accountable, and efficient". In doing so, these international institutions have tacitly created the belief that good governance runs parallel to the neoliberalist ideas of authority being exercised in an atmosphere of minimal government intervention. More specifically, Phillips and Ilcan (2004, p. 397) referred to neoliberal governance as one that assigns responsibility to a population and does not simply highlight deregulation and privatization but also dwells on the "implementation of policies and practices to create a diverse array of capacitybuilding arrangements that link production and consumption of goods and services".

In line with the mainstreaming of governance, these same international institutions have come up with "empirical indicators" they claim measure the quality of governance, that in turn greatly influence funding decisions and considerations especially relevant to the so-called developing countries.

#### **Measuring Governance**

The practice of measuring governance has been met with optimism on the one hand and caution on the other. For while the intention to reflect the performance of nation-states in ensuring an active participation of the citizens in the affairs of the nation-state seems ideal to a certain degree, there remains a tentative and often skeptical treatment of governance indicators. Arndt and Oman (2008) reported that some developing countries criticized governance indicators (specifically those of the World Bank's and the UNDP's) because such indicators are wholly based on the tenets of neoliberalism and are therefore not friendly towards countries that have not fully acceded to the Washington Consensus<sup>8</sup>. Nevertheless, many see the importance of measuring governance especially when presented in a "comparative aggregate rating index" that serves to either embarrass governments who rate low or to encourage improvement of the overall situation of the nation-state (Besançon, 2003, p. 2). Moreover, these ratings play a crucial role in the allocation of funding for development purposes that is usually provided by international agencies and in some instances, by wealthier governments. Simply put, a country that does poorly in the ratings has less chances of obtaining foreign aid and with very little to leverage because being poorly rated reflects a country beset mainly by rampant corruption and is seen by donors and investors as an unfriendly place and therefore resistant to sound policy changes that would effectively improve poor practices. Thus, we can surmise that poorly rated countries don't practice what Bovaird and Loffler (2003, p. 6) defined as good governance: "the negotiation by all stakeholders in an issue (or area) of improved policy outcomes and agreed governance principles, which are both implemented and regularly evaluated by all stakeholders."

Among the widely used governance indicators are coming from the World Bank with its World Governance Indicators (WGI), Doing Business Indicators, and the Country and Policy Institutional Assessment (CPIA). The WGI indicators, in particular, identified six dimensions of governance that the World Bank uses in measuring governance: 1) voice and accountability, 2) political stability and absence of violence, 3) government effectiveness, 4) regulatory quality, 5) rule of law, and 6) control of corruption. The latest report from Daniel Kaufman and company contains aggregated data from 1996 to 2008 that evaluated more than two hundred countries using the abovementioned dimensions<sup>9</sup>.

The most recent WGI of 2009 presents the top performing countries measured against the six indicators (Table 1).

The World Bank asserts that it does not base its funding decisions on the WGI rankings. But some donor agencies such as the USAID, IMF, the Millennium Challenge Account, and the European Union (EU) refer to such indicators in the allocation of "large sums of money" since measurements reflect which countries have improved in the most important areas and which need improvement (Besançon, 2003, p. 2). Good performance in governance indicators may also encourage higher debt forgiveness of developing countries. Neumayer (2002) suggested that lenders would very well benefit from looking at the

Indicators						
**Rank	voice and accountability	political stability	government effectiveness	regulatory quality	rule of law	control of corruption
1	Germany	Japan	Germany	UK	UK	Germany
2	UK	Germany	UK	Germany	Germany	UK
3	France	France	France	US	US	France
4	US	Italy	US	France	France	Japan
5	Italy	US	Japan	Japan	Japan	US
6	Japan	UK	Italy	Italy	Italy	Italy
7	Brazil	Brazil	China	Brazil	India	Brazil
8	India	China	Brazil	China	Brazil	India
9	Russia	Russia	India	India	China	China
10	China	India	Russia	Russia	Russia	Russia

*Table 1. Top ten countries according to the World Bank's world governance indicators\* (2009)* 

Source: Kaufmann D., A. Kraay, & M. Mastruzzi 2009: Governance Matters VIII: Governance Indicators for 1996-2009

\*The ranking is not against more than 200 countries measured by the WGI but only among the largest in terms of Gross Domestic Product (GDP) and at 90% confidence interval; WGI also ranks according to size of population. See more, http://info.worldbank.org/governance/ wgi/mc\_countries.asp

\*\*The WGI uses percentile ranking of 0-100%.

borrower's quality of governance when deciding on allocation of credit and commented that some WGI dimensions may help in providing debt forgiveness to encourage countries that are committed to improving governance. Furthermore, Arndt and Oman (2008) explained that investors rely on governance indicators to "identify and reward developing countries that are improving their governance – and punish those that aren't (p. 5)" since investors demand macroeconomicbased indicators to avoid similar financial crises that occurred in the past.

However, the caveat lies on whether figures are reported honestly and transparently. For one, reports on the World Bank's tenuous approach to the indicators is said to spring from the institution's aim to maintain good relations with governments and may also be one of the reasons why some countries have very high ratings since some data may be fabricated; thus, ratings are often used (or misused) and interpreted in different contexts (Arndt & Oman, 2008; Besançon, 2003; Bovaird & Loffler, 2003). Therefore, the propensity, of not

only academics and experts but the general public as well, to rely heavily on popular measurements of governance, is creating a host of contentious interpretations and uses that may create distorted perceptions. Arndt and Oman believe that misconceptions people have of the indicators are tied to several reasons: 1) people not fully understanding the limitations of the measurement; 2) people believing that multiple data sources balance out individual biases; 3) lack of understanding of statistics leads to the belief that numbers presented are facts; 4) misleading advertisement of rankings that creates misconception; and 5) people ignoring warnings from producers on the use of cross-country comparison. Given this dilemma, however, and upon examination of the critical views on governance measurements, the growing trend of this endeavor provides hope that better mechanisms will be put in place and that limitations on these measurements will lessen overtime.

Efforts to expand our understanding of governance have gone beyond the traditional orientation to one that is facilitated by technological advancements. The introduction of new technology-assisted governance from the time the internet technology was opened to a wider public use in the 1990s paved the way for what experts call e-governance. The dynamics of the use of new technologies in governance is relevant in this chapter as I discuss the salient points that would differentiate traditional governance to one that is performed and evaluated in the context of new information and communication technology (ICT).

#### **Measuring E-Governance**

The practice of e-governance is one that resonates from among the central ideas of neoliberalism to develop information technologies. Harvey (2005, p. 3) opined that this pursuit of information technologies led some "to proclaim the emergence of a new kind of 'information society'" (see also Jessop, 2002) keeping in mind that neoliberalism promotes freedom of information that could be obtained from improving channels of information dissemination to reduce corruption in the nationstate as what Brown and Cloke (2005) found in their study of Nicaraguan neoliberal reform. Furthermore, increased and enhanced participation in globalization entails rather sophisticated technologies that would facilitate increased interdependence among countries (Haque, 2004). Hence, as the international economy moves towards developing information technology infrastructure, it becomes imperative that governance takes the same route.

E-governance is being hailed as an activity that provides avenues for governments to improve the delivery of services to their citizens that will in turn lead to the development of the economy and promote participation from the underprivileged members of the society (Chadwick, 2003; Fang, 2002; Madon, 2004). Similar to many concepts that abound in the social, economic, and political studies of governance, e-governance holds not a single, concrete definition. Amid the abundance of definitions and descriptions, a common understanding of e-governance is the use of ICTs such as the internet, the Web, and mobile technologies to effectively "deliver information and services to citizens and businesses" (Bathnagar, 2003, p. 1).

Efforts geared towards strengthening ICT infrastructure have been observed in many parts of the world. In Australia for instance, being rated highly in e-government, both federal and state governments have signified their commitment to afford the delivery of services through electronic channels; Taiwan and Ireland have recently allocated huge amounts of money for the development of their information technology infrastructure, and Korea has set up plans to boost broadband technology. The likes of the U.S., Singapore, Canada, and many European countries who almost always top e-government rankings have taken the most significant and successful measures in adopting e-government. Among many developing countries, the adoption of e-governance has seen both a relative success and a rather slow process of implementation. Galpaya and company (2007) reported that countries such as India, Pakistan, the Philippines, Sri Lanka, and Thailand have been experiencing major challenges in performing egovernance where technology diffusion, awareness, use, and penetration remain very low. In Fiji, citizens opined that the government remains reluctant to use new technologies for governance because of the intent to "keep people in the dark and also not expose its bad governance" (Chand, 2006, p. 4).

Perhaps because governance (specifically pre-electronic governance) is usually measured to provide information on how countries are faring for mainly investment and foreign aid purposes, attention is shifting to the measurement e-governance as well. Some of the well-known projects evaluating e-government include the United Nations E-government survey of the UN Department of Economic and Social Affairs since 2003. According to its most recent survey conducted, e-government has become "a force for effective governance and citizen participation, both at national and local levels (UN, 2010)". It measures the performance of national governments according to three dimensions of e-governance: 1) scope and quality of online services, 2) telecommunication connectivity, and 3) human capacity<sup>10</sup>. The top ten countries in 2010 are Republic of Korea, United States, Canada, United Kingdom, Netherlands, Norway, Denmark, Australia, Spain, and France.

Another organization actively evaluating egovernment is the Waseda University Institute of e-Government that started ranking countries in 2004. The institute is tasked by the Asia Pacific Economic Cooperation (APEC) to research e-government initiatives among APEC members since 2004. The latest report of 2009 used the following indicators: 1) network preparedness, 2) required interface-functioning applications, 3) management optimization, 4) homepage, 5) chief information officer (CIO) in government, and 6) e-government promotion. The top ten countries in the latest report are Singapore, U.S., U.K., Canada, Australia, Japan, Korea, Germany, Sweden, and Italy and Taiwan (tied at 10<sup>th</sup>).

The focus of e-governance is on reforms that would improve service delivery. Clift (2003) asserted that governments who currently make significant developments in e-governance are starting to pay more attention to e-democracy. Others, on the other hand, are slow to address democracy as an important component of egovernance. Where measures of traditional governance use indicators that account for a democratic participation (such as those of the WGI and UNDP), measures of e-government do not adequately address, if not completely exclude, indicators for democracy.

#### **Democracy in Governance**

Defining democracy has been as challenging as the discourse surrounding its principles, elements, and manifestations. To be sure, definitions of democracy have enumerated certain common and dominant attributes that include the right of people to participate and the right of citizens to have a voice to challenge how they are being governed.

As the title of the chapter suggests, good governance or its measurement would not make much sense unless democracy is factored into the equation. Democracy is seen in this context as the participatory approach to governance and is said to be important in promoting social and economic development (Westra, 2010); so much so that democratization has become a hot-button topic in political discourse of the developing world (Baker, 1999). In the neoliberal tradition, coming from its central tenet of freedom, democratic governance entails the presence of both positive and negative freedoms. Dworkin (1996, in Bühlmann, Merkel, & Wessels, 2008) articulated that if this were the case, positive freedoms such as universal suffrage and effective elections are as important and necessary as negative freedoms such as free speech or freedom of information which will enable citizens "to mount more powerful collective actions and place pressure on elites to provide good governance" (Charron & Lapuente, 2010).

Not a few scholars would argue that neoliberalism has weakened democracy. Chomsky (1999, p. 11), for instance in his book *Profit Over People: Neoliberalism and Global Order*, was not one to hold back criticism of America's imposition of the Washington consensus on countries that must be democratized. He claimed that for democracy to be fully realized, "people should feel a connection to their fellow citizens, and that this connection manifests itself through a variety of nonmarket organizations and institutions," Chomsky further emphasized that in neoliberal societies:

Instead of citizens, it produces consumers. Instead of communities, it produces shopping malls. The net result is an atomized society of discouraged

# individuals who feel demoralized and socially powerless.

Brown and Cloke (2005) concurred that the neoliberal approach, albeit carrying with it a perceived 'better' democracy, did not work very well for countries that had to adjust to more than just a mere political system as was the case of Central America in the 1980s which had to deal with several political turmoil and the pressure of liberalizing their economies at the same time.

Judging the merits and shortcomings of the role of neoliberalism in democracy requires a thorough cross-country comparison of governments that would involve heavy accounts of each country's political history. To be sure, proponents from each side of the debate have eloquently presented their arguments that are subject to further discussions.

This chapter stands to gain from the dichotomy of success and failure of neoliberalism when discussed in the context of democracy and governance. Since this debate will not see the end of day anytime soon, the best I can do is make an intelligent assumption that although the current treatment of governance, in terms of how we measure it, somewhat relies on the present state of democracy in any given nation-state, experts find it necessary and important to measure democracy separately (perhaps to steer clear of neoliberal assumptions?). This is evident in the endeavors of Freedom House's 'Political Rights' and 'Civil Liberties', and Transparency International's Corruption Perception Index (CPI). It is likewise important to note here that the World Bank's WGI, through the works of Daniel Kaufmann and team, having evaluated governance using dimensions that indicate democracy still had to include the new Index of Democracy from the Economist Intelligence Unit since 2006 to produce a more robust system of measurement.

# THE SOUTHEAST ASIA CASE: GOVERNANCE, E-GOVERNANCE, AND DEMOCRACY

## Neoliberalism in Southeast Asia

To expound on the discussion of the role of democracy in effective governance, this second part of the chapter presents the case of select Southeast Asian countries namely, Singapore, Malaysia, Thailand, Indonesia, and the Philippines.

The Washington Consensus saw an opportunity to capture Southeast Asian countries during the crisis in the late 1990s. Amid the much heralded liberalization of markets in the U.S. and Britain in response to globalization, markets in Asia looked elsewhere for guiding principles. However, amid the Asian economic crisis in 1997-1998, many countries in Asia inadvertently succumbed to neoliberal conditions when they sought and accepted help from the International Monetary Fund (IMF) (Yeung, 2000). Hewison (2003) stated that among many 'perceived flaws' in the so-called Asia Capitalism, then US Treasury Secretary Robert Rubin specified that Asian countries had,

weak financial sectors, noncommercial relationships amongst banks, governments, and industrial companies, and a lack of transparency in financial transactions and government decision-making, to name a few – all of this eventually led to severe financial instability. These problems are not self-correcting; they require the help of the international community and a reorientation of the role of the government and the political will to implement that reorientation (p. 3).

Finding itself in an unprecedented economic dilemma, Thailand's former stellar role as one of the most successful economies drastically changed in 1997 during the "resurgence of neoliberal policy prescription" (ibid.). At the time, the Thai government's heavy involvement in the regulation of the market was viewed by neoliberals as a thorn in the country's backside and the IMF sought to change this by negotiating a \$17 billion "stand-by facility" (ibid.).

The policy shift to neoliberalism in Indonesia happened around the same time as the privatization of businesses became imminent amid the crisis. Neoliberalism was imposed on the Islamic country in the form of a \$40 billion bailout extended by the IMF to the government (Rudnyckyj, 2009).

Singapore and Malaysia have displayed a strong resistance to neoliberal impositions having vigorously defended the central role of the government in political economics. Singapore, on the one hand, promoted a system of regionalism that encouraged businesses to venture into the Asian region with the active backing of "state assistance programs and the restructuring of government-linked companies" (Yeung, 2000, p. 136). Malaysia, on the other hand, not only "refused to adhere to neoliberal orthodoxy of liberalization and financial opening. Rather, Malaysian government embarked upon a systematic counter-offensive designed to mitigate the influence of external economic forces and retain a degree of national policy autonomy." (Beeson, 2000, p. 335).

In the case of the Philippines, neoliberal reforms occurred before the Asian crisis, back in the 1980s (Beja, 2006). Neoliberalism has its roots in the country as far back as the 1960s which points to the fact that the Philippines had been operating (mainly borrowing money) under conditions set by the U.S. and the IMF even before the 1990s crisis. In keeping with the point of reference of this chapter (that is, the resurgence of neoliberalism in the 1980s), it was during Corazon Aquino's time as president (1986-1992) that neoliberalism took its deepest roots in the country's economic orientation and attributed to the influence of the Reaganism and Tatcherism on certain personalities close to the president (Bello, 2009). Unlike other countries in Southeast Asia, the Philippines is probably one of the most willing participants of neoliberal reforms as evident in its joining the

ASEAN Free Trade Area (AFTA) through its Common Effective Preferential Tariff (CEPT) program and the World Trade Organization (WTO) in 1995.

Experiences of these countries during the dominance of neoliberalism, in terms of economic approach, give hints of how governance may be at work. It is important to keep in mind that the most significant crisis in the region happened a little over a decade ago and changes have occurred that may or may not be relevant to the discussion of governance and democracy measurement. For even the U.S., currently under democrat Barack Obama, has adjusted its approach to the economy quite radically when the government offered bailout packages to its faltering businesses and is now in continuous debate over state-funded health care amid the housing crisis that spiraled into a global recession.

However, the point of this chapter is to discuss the relevance of the still dominant neoliberal ideology that is well-entrenched and stays rather influential in the conduct of foreign aid and funding and resonates loudly among private foreign investors.

## How do Southeast Asian Countries Fare in Governance and E-Governance Measurements?

The discussion in this section is based on the World Bank's WGI for measuring traditional governance, the UN's e-Government Survey and the Waseda University Institute's e-Government ranking for e-governance, and the Freedom House's 'Political Rights' and The Economist's Democracy Index for democracy. Table 2 presents a comparison of the five countries according to the World Bank's WGI.

Of the five countries selected for this chapter, Singapore claims the highest overall rank out of the six indicators used by the WGI with Malaysia in second followed by Thailand, the Philippines, and Indonesia. Of particular interest here is the 'voice and accountability' (VA) and the 'control for corruption' (CC) dimensions between Singa-

	Indicators					
**Rank	voice and accountability	political stability	government effectiveness	regulatory quality	rule of law	control of corruption
1	Indonesia	Singapore	Singapore	Singapore	Singapore	Singapore
2	Philippines	Malaysia	Malaysia	Thailand	Malaysia	Malaysia
3	Thailand	Indonesia	Thailand	Malaysia	Thailand	Thailand
4	Singapore	Thailand	Philippines	Philippines	Philippines	Indonesia
5	Malaysia	Philippines	Indonesia	Indonesia	Indonesia	Philippines

Table 2. Ranking of the five Southeast Asian countries\* (WGI, 2009)

Source: Kaufmann D., A. Kraay, & M. Mastruzzi (2010): The Worldwide Governance Indicators: Methodology and Analytical Issues \*The ranking is not against more than 200 countries measured by the WGI in 2009 but only among the five countries at 90% confidence interval. WGI also ranks according to Gross Domestic Product (GDP) and size of population, among others. See more, http://info.worldbank.org/governance/wgi/mc\_countries.asp

\*\*The WGI uses percentile ranking of 0-100%.

pore and the Philippines. VA according to the WGI, "measures the extent to which the country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media"; while CC "measures the extent to which public power is exercised for private gain, including petty and grand forms of corruption, as well as 'capture' of the state by elites and private interests." From a layman's point of view (and probably someone not grounded in the intricacies of statistics), a high rating in VA should ideally translate to a high rating in CC because accountability alone would make sure that certain and effective mechanisms for controlling corruption are in place. Knack and Langbein (2010) echoed the same sentiment in their critique of the WGI measurement. In the course of their empirical examination of the two dimensions, they concluded that there was a correlation between VA and CC which led to their conclusion that the WGI did not measure what they intended to measure. In response to this, Kaufmann and his team stated that much of Knack and Langbein's findings and methodology fell short of considering underlying conditions and factors pertinent to the two dimensions. Moreover, Kaufmann and team called the critique naïve for harping on the notion that correlation necessarily leads to causation.

However, although it is interesting to compare Singapore and the Philippines, such comparison should be done with caution. Any comparison should be placed in context and in the case of the two countries in that, certain factors have to be considered in line with Kaufmann's justifications. The size of the population between the two countries is already a big difference; Singapore's population is merely five percent of the Philippines' population to which manageability can be attributed. Other important factors include GDP and the country's budget that take into account revenue and expenditure. This is the reason why organizations conducting the evaluation advise caution when making a cross-country analysis based solely on raw data.

Table 3 presents e-government rankings according to the UN and the Waseda University Institute of e-Government.

The ranking of e-government among the five countries is identical with the WGI's overall ranking. The latest survey by the UN makes special mention of Singapore in many instances most notably its sound e-government system in times of economic and financial stress by making "rapid cash transfers" to the most vulnerable members of its population. Singapore is ranked 11<sup>th</sup> in the world according to the UN and 1<sup>st</sup> according to Waseda having dominated the Waseda

*Rank	UN (2010)	Waseda (2010)
1	Singapore	Singapore
2	Malaysia	Malaysia
3	Thailand	Thailand
4	Philippines	Philippines
5	Indonesia	Indonesia

Table 3. E-government rankings of the five countries

\*Ranking is among the five countries and not against all countries in the studies.

ranking in the last two years toppling the U.S. who maintained the number one spot until 2008. For its part, Malaysia has been gaining ground in the effective utilization of the mobile technology through its 'mySMS' system that facilitates effective and easy access to services provided by the government especially when citizens need to obtain crucial information including emergency notifications. Moreover, the system also provides people with an avenue to air their complaints against poor public service.

While existing measurements of e-government or e-governance certainly provides a view of how new ICTs are being used for governing, many of the indicators focus on the development of the infrastructure and how it is utilized by governments in facilitating service delivery. Although the UN survey explored e-participation, its role was purely supplementary to the main dimensions used in the survey. Waseda, however, included eparticipation as one of the main indicators albeit later. One factor that I believe is largely missing is the point of view from the citizens and how ICTs can enhance capabilities in drawing out democratic participation with the government beyond the traditional one-way communication from government to citizens.

# Democracy as the Missing Link in E-Governance

The supplementary dimension of e-participation presented by the UN survey was explained in the

report as "beyond e-voting" and that "it changes the dynamics between government and citizens (p. 84)". If we were to examine what the UN wants to convey in e-participation, we can assume that it is in fact, e-democracy. Similarly, Waseda reported a rise in the use of e-government tools and consequently measured countries for e-participation for the first time in their latest ranking using indicators such as information, mechanisms, and consultation.

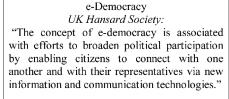
It is indeed a curious matter that, for whatever reason, the UN and Waseda avoided the use of 'e-democracy'. By juxtaposing the rationale for the e-participation dimension provided by the UN and Waseda with the definition of e-democracy by the UK Hansard Society<sup>11</sup>, we can see that they are very much the same (see Figure 1). This could probably be said about the distinction being made between 'e-government' and 'e-governance'. For while the term 'governance' is used in the measurement of traditional government, there are those who measure ICT-enabled government by using two distinct concepts of 'e-governance' and 'e-government' as if these two were starkly different in practice.

It is quite clear that these beliefs are anchored on a type of democracy that many scholars call *participatory democracy*. Michels (2006, p. 325) referred to Rosseau and other theorists in explaining that participatory democracy "covers every aspect of participation in political decisionmaking," adding that participation "should not be limited to the political arena, but should also

#### Figure 1. Defining e-participation and e-democracy

e-Participation UN e-Government Survey: "It affords citizens new ways to have their say. Even the voices of the marginalized can now be heard making the public sphere increasingly rich and diverse."

Waseda 2010 e-Government Ranking: "The mechanisms or applications for disseminating such information by citizen initiative are growing as well with everything from PCs, to mobile phones, to PDAs being able to access government information."



encompass such areas as the workplace." Furthermore, when compared to the operational definitions of traditional democracy, no significant difference can be seen either, save for the role of new ICTs.

The Economist's Intelligence Unit's Index of Democracy, which evaluates countries every two years, measures democracy using five categories: electoral process and pluralism, civil liberties, the functioning of the government, political participation, and political culture while stressing that "a healthy democracy requires the active, freely chosen participation of citizens in public life" (The Economist, 2008, p. 16). Similarly, Freedom House measures countries under the three categories of 'free', 'partly free', and 'not free' while examining indicators that point to "respect for political rights and civil liberties" adding the importance of "independent civil life, and independent media" (Freedom House, 2010, p. 3). Thus, comparing the five Southeast Asian countries in the measurement of democracy (see Table 4), gives us an interesting picture of how the actual measurements of traditional (Freedom House and The Economist) and e-democracy (the UN and Waseda) are notably different and are not entirely reflective of their very similar operationalization of the concept of democracy.

The measurement of traditional governance as opposed to e-governance involves the crucial role of indicators for democracy. As pointed out earlier in this chapter, evaluating governance without taking democracy into account provides an incomplete picture between good governance and bad governance. This is the case with the much hailed e-government rankings by the UN and Waseda where e-democracy is minimized as a supplementary indicator under the guise of 'e-

*Rank	UN (2010)	Waseda** (2010)	Freedom House (2010)	The Economist (2008)
1	Singapore	Philippines	Indonesia	Thailand
2	Malaysia	Singapore	Philippines	Malaysia
3	Philippines		Malaysia	Indonesia
4	Indonesia		Singapore Thailand	Philippines
5	Thailand			Singapore

Table 4. Traditional and e-democracy rankings of the five countries

\*Ranking is among the five countries and not against all countries in the studies.

\*\*Waseda only reported the Top 10 countries in e-participation that does not include Indonesia, Malaysia, and Thailand.

participation'. If not carefully scrutinized, the notion of good e-governance or good e-government (deciphered through aggregate overall scores) may be dangerously interpreted as one that is characterized by an effective e-democracy as well, where citizens enjoy political and civil rights similar to the measurement of traditional governance.

Existing e-government rankings downplay the role of e-democracy and focus too much on the status of ICT infrastructure, how governments utilize the infrastructure, and how to improve the infrastructure. There is less reference to the relations between governments and citizens in the context of participative e-democracy.

The discussion that follows will present the five countries in light of a number of e-government and e-democracy features that were examined in this study.

### **Online Presence**

All five countries have online presence through portals established by their respective governments for public access. The government of Malaysia has the most number of government websites at 451 at the federal level as of November 2010; the state level has almost an equal number of websites that would bring the total to close to a thousand official websites maintained by the government. The main portal is hosted separately in Bahasa Malaysia and in English and has an accessible directory on the homepage for all available government websites containing comprehensive information on the location, URL, and other contact details of departments under each ministry. The Philippines and Indonesia come close in terms of the number of official websites at 597 and 344 respectively. While Indonesia's main portal is hosted in both Indonesian and English, the Philippines' has made its portal available only in English. Both portals have direct links to their respective department websites. Singapore's main portal is the most organized and offers the

highest ease of use and access. Standing at 163 official websites, Singapore hosts all websites in English and provides direct links to websites of its official departments and centers. Thailand has 119 websites and mostly hosted in the national language. Except for Singapore and The Philippines, these countries have responded to the findings of the OpenNet Initiative (ONI) that pointed to the citizens' clamor for government websites to be hosted in the national language.

In the latest report of Singapore's e-government efforts, iGov.sg outlines the country's goal to move from what it calls "Gov-to-You" to "Gov-With-You" (iGov, 2010; p. 9) to promote greater citizen participation. The Philippines, on the other hand, still currently works on providing wider access to people and establishing government-citizen connectivity by establishing online presence; as of 2006, almost 93% of government agencies have had their websites up and running.

All five governments provide a securityenabled citizen registration mechanism that connects registered users to a host of different public services such as filing of taxes, lodging of complaints, accessing government announcements, and business opportunities among others.

# Filtering of the Internet

The 2009 ONI study reported on the filtering activities of the five countries and found that all, but the Philippines, have instituted mechanisms to filter unwanted Internet content. Thailand has the strictest and most blatant rules in place initiated by former Prime Minister Thaksin Shinawatra. Authorities in the country have gone as far as blocking and removing websites to as many as 800,000 in 2005 facilitated by an internet committee formed by the prime minister. Singapore has limited its filtering to some pornographic and violent websites but continue to control Internet activities such as requiring bloggers to be licensed and the prevalence of civil and political threats to online activities deemed subversive. While the

Country	Internet population*	Facebook population <sup>†</sup>	Facebook penetration rate (%)
Indonesia	30,000,000	27,338,560	11.3
Malaysia	16,902,600	8,163,300	31.2
Philippines	29,700,000	16,235,000	16.3
Singapore	3,658,400	2,352,400	50
Thailand	17,486,400	5,143,240	7.7

Table 5. Internet and Facebook populations

\* Source: InternetStats: Indonesia: September 2009; Malaysia: June 2009; Philippines, Singapore, and Thailand: June 2010 <sup>†</sup> Source: InternetStats: August 2010

ONI did not detect active filtering by Malaysia and Indonesia, the study mentioned media reports on incidents of selective blocking of some websites that include social networking and user-generated websites such as Facebook and YouTube.

# Participation in Social Networking Sites

In light of the discussion of the importance of e-democracy for an effective e-governance to be realized, it is necessary for us to include the rise of social networking that is strengthened by the internet. Existing literature in this area emphasize the new technology's potential to strengthen civic and political engagement (Gimeno, 2009; Montgomery, 2008; Paske, More, & Romer, 2009). This is in conjunction with the Economist's list of democracy indicators that include civic participation as a manifestation that democracy is at work. Take Facebook, for instance, the social networking site has reached more than half a billion people that has surpassed the population of many countries. The participation of the five Southeast Asian countries had been significant from the onset when examined against their respective current internet population (see Table 5). This significance is two-fold in the case of the countries in discussion. One would be the rapid growth of membership from each country on a regular basis and another would be the contentious treatment of online activities by each government. The media and some human rights organizations have been widely reporting on the imposed blocking mechanisms and threats on the people's civic and political rights. These issues are briefly laid down in the following sections that present the current trends in each country.

# Current Trends in E-Governance and E-Democracy in Southeast Asia

#### Singapore

The city-state's ranking in both traditional and egovernance is the most impressive among the five Southeast Asian countries. Dominating not just regional rankings, Singapore is well entrenched in the list of top countries in the world: in all WGI dimensions except for 'voice and accountability'; 9<sup>th</sup> in e-participation and 11<sup>th</sup> in e-government development in the UN; and first in the past two years in the Waseda rankings. However, Singapore ranked the poorest in the measurement of democracy: 82<sup>nd</sup> in The Economist's Democracy Index; 139<sup>th</sup> in the Freedom in the World Country Ratings of the Freedom House; and 136th in the 'voice and accountability' of the WGI. The obvious discrepancy between Singapore's governance and democracy ratings raises the question on how e-governance ratings point accurately to either good governance or bad governance (in the case of the UN and Waseda) when the inclusion of the citizens in the affairs of the state, which is

possible through a democratic system, is highly underdeveloped.

Singapore has continued to travel a path towards increasing restriction of vital freedoms among its citizens when it recently required public assembly of all sizes to obtain government permission, changing its previous policy of allowing a maximum of four to five people to freely assemble. The government likewise restricts political activity in the area of voting as observed in two prominent practices: the continuous domination of the People's Action Party (PAP) characterized by suppressing opposition candidates when it filed a defamation case against the Far Eastern Economic Review (FEER) after it published an interview with an opposition leader; and the repercussions for voting for opposition candidates that are well known and acknowledged by the people (O'Hara & Stevens, 2006). Despite this, Ha and Coghill (2008, p. 112) hailed democracy in the country's e-government system as one that is fully developed and utilized by the citizens: "Users can enjoy the freedom of giving feedback via the Internet without fear of being traced." However, this is a direct contrast to the 2008 imprisonment of a prominent lawyer and blogger who was said to have "insulted" judges on the Internet as reported by Freedom House.

#### Malaysia

Malaysia, next to Singapore, is the highest rated in e-government among the five countries. The predominantly Muslim nation is said to have been the earliest among developing countries to develop strategies and formulate policies to improve its ICT infrastructure through its Malaysia Vision 2020 spearheaded by Prime Minister Mahathir. According to Xue (2005, p. 243), Malaysia's strong push for ICT development saw "attempts to improve all aspects of economic and social development by utilizing the Internet and other information technology". Furthermore, Malaysia was quick to recognize the problems of digital divide by initiating ICT-supported programs in the rural areas in the form of providing PCs and free internet services.

This is probably why Malaysia, like Singapore, was rated highly in e-government: 32<sup>nd</sup> in the UN's E-government development index and 24<sup>th</sup> in Waseda's. The country was also 12<sup>th</sup> in the e-participation index from the UN. However, like Singapore, Malaysia was rated poorly in democracy indicators: 123rd by Freedom House and 68th by The Economist; and was not among the top ten countries rated for e-participation by Waseda. Freedom House reported that the government conducted a massive crackdown on bloggers in 2007 and the attempt to filter the internet as signs that the government, albeit committed to improving the political and social dimensions of ICT development, is not about to relinquish control of the cyberspace as a venue for participation. Similar to Singapore, Malaysia places heavy restrictions on public assembly.

#### Thailand

Thuvasethakul and Koanantakool (2002) of Thailand's Ministry of Science, Technology, and Environment outlined the development of ICTs in the country that started in the mid-1990s where government initiatives aimed to worked on the following agenda: 1) build an equitable national information structure, 2) invest in people to accelerate the supply of IT manpower and to develop an IT-literate workforce, and 3) to achieve good governance through the use of IT in delivering public services and in government administrations. However, Yoo (2007, p.) pointed to a study by Rananand (2003) that found democratic discourse as largely absent despite Thailand's efforts at improving communication between the government and the people. The country ranks poorly in some democracy indicators as well: 140th in the Freedom House; 142<sup>nd</sup> in the WGI's 'voice and accountability'; 110th in the UN's e-participation index. It did however fare well in The Economist's

Democracy Index at 54<sup>th</sup> place, way above the other four countries with Malaysia a distant second at 68<sup>th</sup>. Perhaps one of the most remarkable events in the country's recent history of the struggle for democracy was the much contested takeover of power by Prime Minister Abhisit Vejjajiva who ruled despite the absence of a voter mandate in 2009. Freedom House reported that laws to suppress freedom of expression exist in the country. These laws are used against those speaking against the government and extended to online discourse where content is heavily monitored and users run the risk of being identified.

# The Philippines

The Philippines ranks poorly in both traditional and e-governance measurements: 135th in the UN's; 26th out of 40 countries measured by Waseda; and below the top 100 countries (save for 'government effectiveness' at 96th) in all WGI governance dimensions. It did not do well either in traditional and e-democracy rankings: 114th in the Freedom House; 77th in the Economist (far from Malaysia's 69th, but ahead of Singapore's 82<sup>nd</sup>); and only 64<sup>th</sup> in the e-participation index of the UN (although well ahead of Indonesia's 86<sup>th</sup> and Thailand's 110<sup>th</sup>). Not surprisingly, the country is categorized partly free by Freedom House although the country has had a couple of successful attempts at overthrowing former presidents who were believed to have abused power (Ferdinand Marcos in 1987 and Joseph Estrada in 2001). Each event was followed by the usual general elections that were seen by its citizens as the exercise of one's right to vote, a notion heavily influenced by Western democracy. However, elections in the country are known to be heavily bombarded with fraud and extra-judicial killings (Karan, Gimeno, & Tandoc, 2009). Furthermore, Freedom House reported that the Philippines is the most dangerous place for journalists with many of them killed during election campaigns. Access to ICTs remains low in the country and mainly

576

concentrated in metropolitan areas, which points to the widening digital gap between the urban and the rural. E-government initiatives especially in local government units have been slow in that, government websites do not offer the basic information pertinent to services (Alampay, 2005). On a positive note, there have been no major incidents of stifling of freedom of speech on the internet or blocking of certain websites as in the case of the other four countries.

## Indonesia

Among the five countries, only Indonesia is categorized by Freedom House as 'free' (the rest is partly free) and leads the pack in the WGI's 'voice and accountability'. As with Thailand, Indonesia only recently started implementing e-government initiatives following Presidential Decree 3/2003 that mandated the Ministry of Communication and Information to produce documents outlining the guidelines for e-government (Mirchandi, Johnson, & Joshi, 2008). As a result, Indonesia has made impressive strides towards the use of ICTs for governance. Suyatno (2007) stressed that government agencies have been very active in engaging the citizens in political activity by setting up websites as instruments of "consultation and communication with ordinary citizens" (p.108). However, Suyatno pointed to several challenges in the development of e-democracy in the country: 1.) a high concentration of internet access in the urban areas alone, 2) lack of adequate telecommunication infrastructure in rural areas, 3) unaffordable internet access, and 4) a premature technological know-how among the citizens. It is still, however, premature to assess e-governance and for that matter, e-democracy in Indonesia.

# DISCUSSION

When Singapore first topped the Waseda rankings in 2009, the results were met with enthusiasm in

the country. Waseda's press release of the findings remains posted on several government websites and discussion boards were abuzz proclaiming the findings a victory for the country. One particular online publication, MIS Asia, owned by an Australian company that maintains its Asia headquarters in Singapore, carried the title The citizens' voice when it published an article on the findings. However, very little was said of the country's not so impressive rating in the study's e-participation index the following year, except that the country topped the ratings in two straight years. Although it would be too much to speculate on such action, it nonetheless points to the Singapore government's contentious handling of democracy in the country. Thus, we are left with more questions as to whether existing measurements truly and realistically measure governance or for that matter, e-governance. More importantly, as the ICT industry is unlikely to stop development and introduction of new applications, the role of democracy in e-governance is quickly making its rounds among political scientists.

Chadwick (2003) observed that in the course of developing ICTs for governance purposes, people seem to have set aside the once glorified potential of e-government to democratize societies and argued "given that democratization is one facet of e-government and is of course at the root of e-democracy itself, there is scope for some convergence of the two (p. 450)". Given that e-governance measures need further honing of indicators, how do we reconcile traditional and e-governance especially when it becomes increasingly difficult to ignore democracy in egovernance? Chadwick suggested a starting point where we should integrate "e-democratic activities in civil society with policy-making processes at local and national levels" similar to how traditional governance welcomed democratic participation. He was also quick to point out that such integration may not be as easy in e-government because of the prevailing notions about the marginalization of government departments and the unprecedented

influence of the people on public policy. In the case of the Philippines for example, the decade-andhalf fight for a Freedom of Information Act that died in the hands of legislators in June 2010. The act would have required government agencies to release information to the public on demand and was expected to promote a more active participation among the people.

Integrating e-democracy with e-governance or e-government would probably decrease the obvious discrepancy of measurements between e-governance and e-democracy ratings. This is not to say that traditional governance ratings, such as the WGI, have not displayed somewhat confusing explanations of why a country ranked high in governance when it ranked poorly in democracy indicators; and though experts would go on to debate the merits and demerits of such measurements, we can only hope to approximate a genuinely effective system of rating.

For if we measure governance with democracy in mind and not do the same for e-governance, are we in effect saying that e-democracy is far removed from e-governance when the core difference between traditional and ICT-enhanced governance is mainly the presence of ICTs? Of course many would argue that this view is simplistic and that factors such as infrastructure development and digital gap, among others, account for poor participation in e-governance. But given the case of Singapore that scored almost perfect in many e-government indicators but continues to stifle e-democracy and that of the Philippines that performed poorly in e-government (poor infrastructure and massive digital gap) but did relatively better than Singapore in e-participation, is infrastructure really the crux of the argument? Or is it, as Waseda attempted to explained the difference between the lists of top countries in e-government and that of e-participation, the national character of the countries "in which citizens are more individualistic in nature, more outspoken in their views, and more demanding of their individual rights from their respective governments" accompanied by a suitable infrastructure? In the end, the difference between a passive and a participative people lies on how effectively the government opens up avenues for a truly participatory democracy whether ICT-enhanced or otherwise.

# CONCLUSION

I started this chapter by discussing how governance and democracy are viewed in the context of neoliberalism because it was during the re-emergence of this ideology that the importance of opening up economies to the world market changed the way the West and the international organizations framed governance and democracy. Furthermore, discussing the emergence of ICT-based governance and democracy can be attributed to the still dominant neoliberal orientation that promotes the development of ICTs. To be sure, many have already argued that the world has moved on from neoliberalism to new liberalism where governance has taken different approaches and democracy has been practiced in varying degrees. However, the point of this chapter is to argue for the importance of democracy in e-government or e-governance anchored on the principles of neoliberalism that call for the democratization of the nation-state.

In analyzing Southeast Asian countries based on their respective rankings in both e-government and e-democracy and by comparing them to the measurements of traditional governance and democracy, I have put forward a very important cause to look further into the gaps that prevent us from fully understanding the intricacies of measurements and benchmarks between traditional and ICT-enhanced governance and democracy.

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# **KEY TERMS AND DEFINITIONS**

**Democracy:** In a participatory context, highlights the active role of the citizens in governance that allows direct individual and collective participation in public policy making.

**E-Democracy:** The practice of democracy that is heavily ICT-aided and -enhanced; also called e-participation by the U.N. and other international organizations.

**E-Governance:** Governance that is heavily ICT-aided and -enhanced and believed to facilitate a more effective public policy-making and a more efficient delivery of public goods and services.

**E-Government:** Pertains to ICT-aided and -enhanced infrastructure characterized by government web portals with features varying from online application for services, online payment, and online customer feedback.

**Neoliberalism:** The decentralization and privatization of economic and political systems espoused and imposed by the West commencing in the late 70s to the early 80s; it paved the way for free market enterprises and minimal govern-

ment intervention; also known as the Washington Consensus.

**Southeast Asia:** A region in Asia south of China, east of India, and North of Australia. It is further divided into two regions namely Mainland Southeast Asia consisting of Cambodia, Laos, Myanmar, Thailand, Vietnam, and Peninsular Malaysia; and the Maritime Southeast Asia or Malay Archipelago that includes Brunei, East Malaysia, East Timor, Indonesia, the Philippines, and Singapore.

**World Governance Ranking:** Periodic surveys of government performance conducted mostly by international organizations involving several countries. Prominent reports include those from the UN Department of Economic and Social Affairs, the World Bank, and the United States Agency for International Development (USAID), to name a few.

# **ENDNOTES**

i

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Chomsky further elaborated that "governing institutions", within the realm of neoliberalism, function according to the distribution of power. Therefore, although neoliberalist philosophy promotes the individual as the main decision-maker in the market and the government as merely a support system, the question is whether there is equal distribution of power among the classes in society that reflects a genuine neoliberal practice.

I will refer to "governance" in this chapter in the same vein as Mark Bevir's definition (p. 364) in the *Encyclopedia of Governance* (CA: Sage, 2005) to be understood in the context of the changes that occur in the public sector during the 1980s to the 1990s or during the rise of neoliberalism. This is to account for the idea behind rating or measuring governance promoted by international organizations as one of the central ideas in this chapter.

- <sup>3</sup> Swyngedouw (2005, p. 1992) argued that the pressure to change from state-centered approach to one that is citizen-centered affected the dynamics of "state-civil society relations" at the expense of a weakening democracy.
- <sup>4</sup> Larner (2000) defined "post-social" as "the idea that we are no longer governed through unitary conceptions of society" (p. 22).
- <sup>5</sup> See more, 'Chapter 2: Classical Greek Political Philosophy: Beginnings' in Michael J. White's *Political Philosophy: An Historical Introduction* (Oxford: Oneworld Publications, 2003).
- <sup>6</sup> Still, a great body of literature differentiates 'governance' from 'government' (see Bache & Flinders, 2004; Bang, 2003; Heywood, 2003 found in the encyclopedia of governance); but Finer conceived of 'government' as existing at three levels and these share similar features with contemporary views of 'governance'.
- <sup>7</sup> The World Bank identifies three descriptions of exercise of authority for common good:
  1) the process by which those in authority are selected, monitored, and replaced, 2) the capacity of the government to effectively

manage its resources and implement sound policies, and 3) the respect of citizens and the state for the institutions that govern economic and social interactions among them (see more at the World Bank Government website, http://web.worldbank.org/ WBSITE/EXTERNAL/WBI/EXTWBIG OVANTCOR/0,,menuPK:1740542~pag ePK:64168427~piPK:64168435~theSite PK:1740530,00.html).

<sup>8</sup> The Washington Consensus is another term for neoliberalism that was coined based on the dominant belief that specific approaches of neoliberalism were identified and implemented by the United States (see Chomsky, p. 19).

<sup>9</sup> See complete description of dimensions and indicators at http://info.worldbank.org/ governance/wgi/faq.htm#2

- <sup>10</sup> See complete description of indicators at http://www2.unpan.org/egovkb/global\_ reports/10report.htm
- <sup>11</sup> According to Chadwick (2003, p. 12), the UK Hansard Society is "one of the key movers in defining and, more significantly, operationalizing e-democracy."

# Chapter 29 ICT, Unique Identity and Inclusive Growth: An Indian Perspective

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### ABSTRACT

Government of India has recently sought to establish identity of country's each resident including migratory population from one state to another through IT-enabled unique identification (UID) numbers under the aegis of Unique Identification Authority of India (UIDAI), which shall lead to inclusive growth. UID numbers offer diverse benefits to each resident, such as quick opening of bank accounts, speedier issuance of passports, efficient administration of the PDS (public distribution system) for food grains at subsidized rates to the BPL (below poverty line) families by preventing 'leakage' to open markets, rapid enrollment to and efficient disbursal of wages under the 'Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) 'for guaranteed employment for every household, et cetera. The chapter reviews the role of ICT and UID numbers in achieving inclusive growth, achieving food security, augmenting employment opportunities, efficiently accessing public services, and achieving higher standards of livelihood and quality-of-life sustained though different welfare schemes.

#### INTRODUCTION

Government of India has embarked upon an ambitious initiative to provide a UID to every resident of India for which it has created Unique Identification Authority of India (UIDAI). The UID has been given an Indian name in Hindi (country's official language) as *Aadhaar* (Foundation). According to the UIDAI Chairman, Mr. Nandan Nielkani, its new name was chosen to convey the scheme's "transformational potential and its promise to residents". UIDAI has opened head office in New Delhi and technology center in Bangalore. UIDAI plans to evolve the unique ID into an attractive brand to spread social awareness. The UIDAI has formed a media awareness and communication council that will spread awareness

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about the chosen UID brand name among masses (Sharma, 2010).

The UIDAI will provide each Indian resident a 12-digit unique number in phases beginning August 2010. UIDAI plans to assign the 12-digit universal identity numbers to more than 600 million citizens over next four years (Agarwal, 2010). UID is based on biometric attributes of the residents (face, all ten fingerprints and iris) to capture uniqueness of individuals. Demographic and biometric information of the residents are collected at the time of enrollment. UID number is unique and easily verifiable in an online costeffective way. UID system is robust enough to eliminate large number of duplicate and fake identities in government and private databases.

The UID number will be stored in a centralized database and linked to the basic demographics biometric information photograph, ten fingerprints and iris of each individual. The number will be unique and would be available for online and of-fline verification, which will prevent the possibility of duplicate and fake identities from government as well as various private databases (TOI, October 4, 2010). By imparting unique identity to all individuals the UID Project aims to achieve multifarious objectives such as inclusive growth, social security, electoral reforms, monitoring of social schemes, minimizing wastages and pilferages under various socio-economic schemes, etc.

GOI plans to give a push to its 'inclusive agenda' by linking benefits of different welfare schemes with the 12-digit UID numbers for which the first UID number was issued only recently on September 29, 2010. Country is currently going on with a massive programme of enrolment of huge population with UID numbers. For instance, poor infrastructure and limited employment opportunities retards the growth of rural economy making rural habitants migrate to urban areas, and contributing to the growth of urban slums further. Government of India (GOI) plans to check such trends by providing urban amenities in rural areas (PURA). The National e-Governance Program seeks to transform public delivery system in India by setting up one lakh common service centers (CSC) through private-public entrepreneurship. These centers run by rural entrepreneurs, not only generate employment opportunities, but also enable the government to deliver services such as making birth and death certificates and land records available at the doorstep, give relevant *mandi* (common market place) related information to the farming community, create online systems for filing IT returns, and facilitate judicial processes through electronic record keeping. By March 31, 2010 already 76,000 CSCs have been set up (Pilot, 2010).

GOI is improving infrastructural facilities in rural areas both through public investments and following public private partnership (PPP) route. PURA is basically a program to revamp infrastructure and public services in rural areas. Urban amenities that are equally vital for rural areas include: electric supply, drinking water, sanitation, drainage, solid waste management, transport, education, healthcare, fire services, etc. However, over and above this, the PURA also aims to promote skill development and vocational education, decentralized energy systems such as community biogas plants, solar street lighting systems, solar water pumps, wind pumps, solar ponds, solar crop dryers, solar lanterns, etc, which are typically more appropriate in a village setting.

National Rural Employment Guarantee Act (NREGA) is another important government initiative that aims to create minimal employment opportunity for each rural household. This new legislation is slowing down migration from rural to urban areas by improving employment opportunities in villages. There is dramatic turnaround in rural economy in favour of rural units which is evident with agriculture constituting bare 15 per cent and services 63 of the GDP as compared to scenario in 1950-51, when the situation was vice versa. However, decline of agriculture share in GDP is also a matter of concern than elation as more than 60 per cent of the country's workforce depend on agriculture for survival and growth of agriculture is vital for food security.

PPP model is an appropriate route to revamp rural infrastructure as due to vastness of the country the government alone cannot do all for social development without some contribution by other groups in the society as well. GOI is keen to test effectiveness of PPP model for developing and maintaining rural infrastructure assets with predetermined service delivery standards set for urban infrastructure (Mayaram, 2010).

Growth of rural economy has not received the same attention by business organizations considering that industrial products and services are more oriented towards meeting needs of urban areas. In fact, business initiatives targeting growth of the bottom of the pyramid offers an opportunity to participate, learn and profit from sustainable rural ventures. With this objective in mind, CII (Confederation of India) way back in 2004 formed a partnership with the Ministry of Panchayati Raj, to promote Rural Business Hubs (RBHs) for providing fillip to rural economy.

Each hub provides support to rural units by improving market access and improving profitability across the value chain. Every RBH venture aims to improve quality of farm and non-farm produce in select rural business hubs (approximately the size of a village block) by using modern training and business processes. The rural output typically includes agro-produce, food and drinks, herbal products, clothing, handicrafts, handloom, and other items native to the select rural areas. The RBH scheme is growing and spending in a big way in the country.

Organizations in India need to be both global and rural, which is the need of the hour considering the socio-economic needs of the society, country and world at large. In an interview with the *Times of India*, India's leading daily published from several cities of the country, late C.K. Prahalad, world-renowned management guru and author of one of the best sellers "*The Fortune at the Bottom of Pyramid*" observed (Prahalad, 2008):

"Organizations have strategic intent to serve both global and rural, simultaneously. It means they want to serve the large clients, global clients but also want the ability to serve the poorest of the poor with self-help groups, community banks and rural microfinance. The only organizing principle between those two is very resilient business processes that can be continuously changed at a low cost, commitment to information and communication technology (ICT) and social infrastructure where experimentation and desire to win within the broad goal of being simultaneously global and rural. It also demands a deep understanding of how technology can be used to reduce cost and improve service".

Business interest in rural sector typically relates to activities such as sourcing agro-produce for further processing; working with rural units to improve quality of handicrafts and locally made products involving rural artisans to properly package local products for sale in urban markets; working with dairy farmers to improve quality, consistency and packaging of dairy products, setting up IT kiosks for knowledge dissemination, working with rural entrepreneurs to develop effective cold storage and supply chains using local transport, setting up community biogas plants, establishing landfill gas based decentralized power generation units, utilizing village wastelands for biofuels/ medicinal plant cultivation, poultry farming and so on.

Proper village connectivity and new channels of communication are engines for rural growth. While rural road projects make it easier and faster for farmers to transport their produce to markets, modern communication tools facilitate access to weather forecasts and critical inputs. As a case in example ITC's e-Chaupal reaches 3.5 million farmers giving them instant access to data on new varieties of crops, pricing and markets (Bobb, 2010). The chapter reviews the role of Information and Communication Technology (ICT) and the UID numbers in achieving inclusive growth agenda for a large country like India by limiting the discussion within six broad groups: ICT, Unique Identification (UID) and Inclusive Agenda; Panchayats, Technology and Knowledge Economy; Rural Markets, Bottom of the Pyramid and Inclusivity; Rural Banking and Financial Inclusion; Microfinance and Financial Inclusion; National Rural Employment Guarantee Scheme & Livelihood Security; and Public Distribution System & Food Security.

### ICT, UNIQUE IDENTITY AND INCLUSIVE AGENDA

Scope of the UID project is enormous particularly in the context of inclusive agenda for the country, which aims both inclusive growth and financial inclusion. GOI in recent years has accorded high priority to inclusive growth (Singh, 2010). According to Dr. Manmohan Singh, Prime Minister of India, "India is firmly and resolutely on the path of inclusive growth. This is recognized all over the world. Nothing must be said or done and nothing must happen that may cause us to deviate from our goals and our objectives".

GOI has already selected 'Mind Tree' and 'Intelenet' as identified agencies for application development and BPO services, respectively, for the UIDAI Project. The 'managed service provider' will integrate all applications and plan outbound logistics for delivery of the Unique ID number. It will manage the logistics network for 'UID letter dispatch centre'. It will also have to oversee forecast, budget transit (of vendors), manage security and change for the entire project. It will also be responsible for documentation, training and knowledge transfer (Julka, 2010). See figure 1.

## UID Project Objectives: Outreach, Identity, Inclusivity & De-Duplication

GOI plans to use UID numbers for various welfare and development schemes introduced by the GOI and state governments (Figure 1). UID numbers help government streamline its delivery mechanisms benefiting both the government and residents. UIDAI is accordingly developing and implementing necessary institutional, technical and legal infrastructure to facilitate effective public service delivery such as PDS (Public Distribution System) and MGNREGS (Mahatma Gandhi National Rural Employment Guarantee Scheme). Strategic management framework for planning and implementation of the entire UID Project is pictorially depicted in Fig. 2, which divides the UID project strategic intent into three broad groups, project objectives, and project planning and project execution.

UIDAI plans to integrate UID numbers with institutions, banks, insurance companies, telecom companies, PDS, MNREGS, etc for effective public service delivery. UID numbers would facilitate to transfer any subsidy or cash benefit directly into the beneficiary's bank account that would ensure that money reaches the rightful claimant only as his bank account is linked with the UID. This is possible because the UID numbers are essentially unique for the number holder with no duplication. Linking a public service with a UID number is an assurance against de-duplication as the number is unique.

Public service delivery in India is often criticized for unethical conduct of people at the helm, funds diversion, fake claims, delayed payments, scalability issues, non-delivery of intended service, etc. UID numbers enhance outreach of public service delivery across length and breadth of the country. UID numbers ensure public service delivery to rightful claimants. As an example under *Janani Suraksha Yojna* (Female Welfare Program) women are provided financial assistance Rs. 1000 for each child birth. However, a fake baby scam

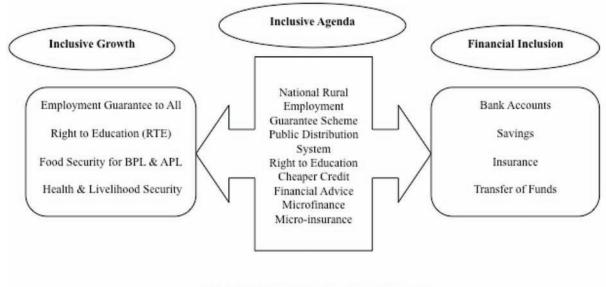


Figure 1. Broad goals and objectives of the 'Inclusive Agenda'

BPL: Below Poverty Line; APL: Above Poverty Line

was unearthed in the state of Bihar, whereby some 300 odd women were paid for delivering up to 5 babies in a span of 60 days! (Julka, 2010). UID numbers can minimize such occurrences by achieving de-duplication of beneficiaries and releasing payment only when it matches with their UIDs.

# UID Project Planning: Centralized Policy Formulation & Decentralized Execution

In a massing project which involves assigning UID numbers to all country residents, there can be no effective alternative framework than the system of centralized policy making and decentralized implementation. UIDAI as such cannot make much headway howsoever big government make it except envisioning the whole project centrally and ensuring that necessary infrastructure in different regions for its successful execution is in place which is decentralized and outsourced.

UIDAI has opened a centralized office in New Delhi and an IT driven technical centre in Bangalore, which is a hub of ICT revolution in the country. UIDAI is headed by the Infosys Technologies Ltd co-founder, Mr. Nandan Nielkani as its Chairman. Mr. R.S. Sharma, an IIT Kanpur alumnus turned bureaucrat is the Director General of UIDAI. While Rs. 1470 million are already spent in the first phase, GOI has allocated Rs. 19000 million to the UIDAI during 2010-11 for the second phase, whereas the third phase it is yet to begin, and no further fund allocation at the time of writing was known. The year 2010 was the starting year for UID Project execution.

UID number assignment is mammoth and challenging task beset with multifarious problems. A very challenging issue relates to obtaining finger prints of children up to 15 years age who form a sizeable part of the population, but whose finger prints do not show a very stable pattern and create problems of unique identity. Identification of children is important as GOI is interested to monitor the execution of various child welfare schemes by linking their UID numbers. GOI has made huge outlays for different child welfare schemes such as the *Sarva Shiksha Abhiyaan* (Rs. 13,1000

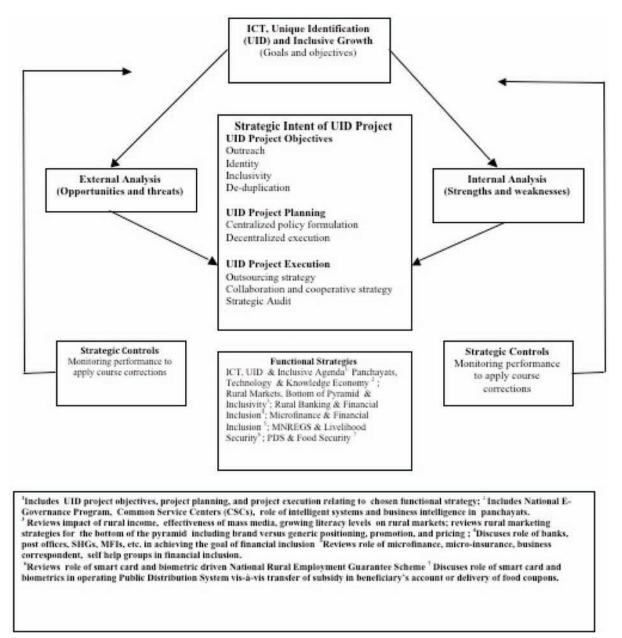


Figure 2. A strategic management framework for planning and implementation of the UID Project

million), *Integrated Child Development Schemes* (Rs. 6,7050 million), *Mid-day Meals Scheme* (Rs. 8, 0000 million), etc (Julka, 2010).

Fingerprints are very feeble in children and difficult to capture (Khanna, 2010). Iris scan and fingerprint examination are used for a process called deduplication to verify if an applicant has already been issued a number. An iris, the coloured portion of the eye that is to be used to issue a unique identity number, too does not develop before seven years. An iris starts achieving 90 per cent stability in size only after six years of age. A normal iris starts assuming stability only by eight years (Gupta, 2010). Fingerprint patterns assume stability often beyond 15 years (Julka, 2010). Similarly, many farmers or industrial workers have worn out fingerprints and accordingly the UIDAI may need high quality finger print readers to read the biometrics properly. It will be a challenging task for UIDAI authorities to convince agencies like banks, telecos, etc to rely on its authentication service based on UID numbers verification.

# UID Project Execution: Outsourcing and Collaborative Strategy

Outsourcing and collaboration is the key for implementing such a massive project which involves linking UID numbers with each and every resident in the country. UIDAI has accordingly awarded the contract to implement the core biometric identification system to a consortium led by 'Mahindra Satyam' with 'Morpho',' Accenture' and 'LI Identity Solutions' as partners, in a fair and impartial manner after inviting the bids. The initial phase of the contract will run up to two years and a total of 200 million residents are expected to be de-duplicated by a combination of the three biometric solution agencies in the first stage of the program. Identification of the three agencies for biometric solution involving selection of multi-modal system and allocation of de-duplication transactions was, among others, based on their performance with regard to identity resolution system (The Economic Times, July 30, 2010).

The work of the three identified agencies in the first phase involves: design, supply, installation, commissioning, maintenance and support of multi-modal automatic biometric identification subsystem, and multi-modal software development kit for client enrolment station, verification server, manual adjudication and monitoring function of the UID application. This will facilitate UIDAI to ensue de-duplication during allotment of the UID numbers to the residents based on biometric information picked up from them by the data enumerators (*The Economic Times*, July 30, 2010).

As part of its collaborative and outsourcing strategy in view of mammoth size of various activities involved, UIDAI has signed an MOU (Memorandum of Understanding) with different states of India including several public enterprises and professional associations for necessary coordination, which will act its registrar. UIDAI has registered 220-odd enrolment agencies, who will collect data on behalf of the registrars (*The Economic Times*, September 25, 2010).

In order to streamline several wage disbursement related issues of national rural employment guarantee scheme, Ministry of Rural Development, which is the implementing agency for the scheme, has signed an MOU with the UIDAI, which is an example of its collaborative strategy (see also Figure 2). The Ministry of Rural Development plans to check the progress of all schemes under its charge down to the block level online, for which it is busy creating necessary ICT infrastructure in place for all the 619 districts of the country.

Apart from signing a collaborative agreement with the Ministry of Rural Development, the UIDAI has signed MOUs (Memorandum of Understanding) with the Ministry of Petroleum and Natural Gas, Indian Railways, Life Insurance Corporations of India (LIC), and several banks for integrating UID numbers with their respective databases for achieving 'de-duplication' for minimizing the chances of fake claims.

The UIDAI and the Ministry of Petroleum and Natural Gas (MP&NG) in an example of collaborative strategy in checking pilferage of subsidized cooking fuel from petroleum companies. De-duplication and online authentication offered by UIDAI shall enhance efficiency of OMCs in serving their customers. MP&NG and the UIDAI have entered into an MOU to facilitate the close cooperation between UIDAI the Oil and Marketing Companies (OMCs) to authorize the OMCs to be registrars for issuance of UID numbers to their residents (*The Times of India*, September 28, 2010).

Oil marketing companies - Indian Oil Corporation Limited, Hindustan Petroleum Corporation Limited and Bharat Petroleum Limited shall act as registrar. Distribution of cooking gas and kerosene (fuel for the poor) through biometric smart card in Andhra Pradesh and Karnataka (two states of India) in partnership with MP&NG is another example of collaborative strategy (*The Economic Times*, July 31, 2010).

UIDAI has also signed series of MOUs with several banks including Allahabad Bank, Bank of Baroda, Indian Bank, Punjab National Bank (PNB) and Punjab & Sind Bank (PSB), all of which would act as the Registrar for the UID Project to facilitate exchange and integration of their customers data to scale up the UID enrollment (The Times of India, September 28, 2010). As a case-in-point of collaborative strategy evolved between the UIDAI and commercial banks, the United Bank of India in past launched awareness campaigns on financial inclusion in India by collaborating with the NABARD (National Bank of Agriculture and Rural Development) through credit linkage to Joint Liability Groups (JLGs) and adoption of Farmers' Clubs as business facilitators (The Economic Times, 2 June, 2010).

UIDAI has recently signed an MOU with the National Coalition of Organizations for Security of Migrant Workers (NCOSMW), a consortium of 23 organizations that work with migrants in key originating states, undertaking to work together to facilitate the enrolment of migrants for unique identity numbers under the UID Project. According to Mr. N.K.Sinha, UIDAI's Deputy Director General, who co-signed the MOU, "Suppose a migrant laborer is working in Gujarat and he had a dispute with his employer; he is not able to get work in another state because he has no proof that he used to work anyplace. This is the migrants' main concern – they want an official ID so they can prove they are who they claim to be". Several industries in Maharashtra and Gujarat are dependent are dependent on the skills of migrant labor. The total number of migrants in Maharashtra from other states is over seven million. The number of migrants from Maharashtra to other states is 2.16 million. In India, according to the 2001 census the number of inter-state migrants was 42.34 million, indicating that vastly greater number move between cities, villages, and districts within a state. In terms of motivation, movement within regions and states of a country is no different from international migration (N.K.Singh, 2009, p.98).

Migrant workers, a traditionally poor and marginalized group, could be brought further into the mainstream, with access to services such as banking, microfinance, PDS, MNREGS, etc. NCOSMW member organizations have longstanding relationships with migrant communities in key states where they originate from – Bihar, Uttar Pradesh, Orissa, Rajasthan and Maharashtra. NCOSMW plans to activate resource centers aimed at serving migrants at the block level in source states and the city level in key destinations. By going directly to migrant communities, launching educational campaigns about the importance of UIDAI and helping migrants with the registration process, NCOSMW plans to reach a population what could be rightfully called invisible population.

As per some rough estimates, there are 120 million odd such undocumented migrants working outside their states of origin. Most lack bank accounts, and are unable to easily remit money home. According to Mr. Rajiv Khandelwal of NCOSMW: "One of the big crises that migrants face is a lack of identity. If they cross the state border, they become undocumented aliens in the state. They cannot open a bank account, cannot access legal services, may be denied PDS, cannot access rations – often at times cannot even access a place to stay. This is the core of the problem. One way to solve this is offer an ID that establishes a person is who they say they are."

# PANCHAYATS, TECHNOLOGY AND KNOWLEDGE ECONOMY

In India *panchayats* (village governing body) are arranging capital needs for developing both farm and non-farm sectors, providing 'know how' for all available processes and techniques such as innovative farm practices and rural industry projects, training for ICT-enabled knowledge management tools, framework for developing KM indices – all for the service of the poor under bottom of the poor/ inclusive growth. *Panchayats* and associated community information centers can play useful roles in information dissemination in villages. India's 2.5 lakh panchayats are developing expertise how knowledge is created, used and dispersed for societal benefits.

Addressing the First Annual Conference of the Chief Secretaries in New Delhi on February 1, 2010, Dr. Manmohan Singh, Prime Minister of India, said: "Inclusive growth is the centre-piece of our development process... There is a need for strengthening the Panchayati Raj Institutions as a means for an effective decentralized planning system for inclusive growth". Addressing a function on National Panchayati Raj Day held at the Plenary Hall of the Vigyan Bhavan in New Delhi on April 24, 2010, Prime Minister of India further clarified: "Panchayats not only make direct participation possible for the marginalized sections in governance but also play an important role in ensuring transparency and accountability in the functioning of the government institutions and officials."

According to C.K.Prahalad, the cutting edge for organizations to serve both at the 'bottom of the pyramid' and reach global markets lies in the resilience and flexibility at workplace. Most leading organizations compare well at all fronts in so far as securing inputs are concerned – material, technology, capital, talent, energy, etc. as their systems are based on best practices often put in place through benchmarking. What in fact is the cutting edge of a company over its competitors is the uniqueness of its processes and 'organization culture' that differentiates it from most others, and the work culture is something that cannot be easily copied by its competitors. In his interview with *The Times of India*, (India's leading daily), the Global Management Thinker said (Prahalad, 2008):

"The real differentiating factor is the ability to be flexible, to change. We need resilient, flexible growing processes. It is not enough to have processes. We need analytics. I need to be able to understand the behavior of a customer among 100 million. I need large data bases and analytics to focus on the behavior and needs of the individual... Needless to say all investment in ICT architecture is useless you focus on the skills, behaviors, mindsets and training of managers and all employees. One of the biggest impediments to make people change is not necessarily technology. It is the mindset."

As industry fundamentals are changing from revenue generation from natural resources to intellectual assets, corporate entities find it increasingly important to examine the knowledge underlying their processes and how that knowledge is used. In the information age, availability of the computer networks has enabled to codify, store and share accumulated knowledge more easily and inexpensively than ever before. Knowledge management (KM) helps organizations to find, collect, select, organize, disseminate, and transfer information and expertise.

In villages, rural folk may thus possess enormous process knowledge relating to biotechnology, bio-energy, biodiversity, sustainable farming, rural infrastructure, irrigation and water management, crops and animals upkeep, medicinal plants, herbal remedies, rural industries, etc., knowledge of which may facilitate improving efficiency of business processes in future. This data thus needs to be recorded, processed, documented, disseminated and utilized. A large portion of such tacit knowledge is in people's mind which is never written down, but simply carried forward by word of mouth, and accordingly much of it is lost in the transit.

Data once captured would ensure continuity of work for future even when the key people might have left the institution in between. Stored data may create multiplier effect by undertaking similar work at other places as well e.g. welldocumented experience of 'pani panchayat' or 'water panchayat' in Maharashtra in seventies could stimulate similar projects at other places. In the rural economy context, data represents facts or values of results for different rural development initiatives, which may include experiences of the panchayats, NGOs, or social entrepreneurs.

An intelligent system is one that learns from the environment and its past actions. An entity is called intelligent when it reacts flexibly and appropriately to change in environment. An intelligent system perpetually documents the present situation as it unfolds and the resulting actions that follow. Given this description, there is as much scope for intelligent systems in rural units as in a business unit in urban setting. There is thus enormous potential for popularizing intelligent systems in rural areas considering their large numbers - six lakh odd villages. Intelligent business is business intelligence integrated into operational business processes; in the same manner as decision support system is needed for implementing operations research based solutions on sustained basis.

Land records are accessible online in several states in India such as Gujarat and Maharashtra and banks accept them for sanction of loans. Availability of such databases with panchayats can also pave the way for having 'expert systems', which are also called knowledge based systems. The most important ingredient in any expert system is knowledge. While knowledge management needs only experiential knowledge, expert systems require high quality knowledge.

KM facilitates continuity of work in an organization; no matter someone is working or left the organization. Artificial Intelligence (AI) is a branch of computer sciences that helps to create intelligence systems. In rural development context, AI capabilities need to be integrated with ICT capabilities in panchayats, such as databases for rural development planning, village project management schedules, village employment statistics, villagers' health history, land records, farm yield, rural units output, etc. AI systems can help village panchayats in financial planning, technology selection, resource allocation, etc (Behl, 2010, p.410).

Agriculture is the backbone of India's food and livelihood security in rural economy. Environmental burden for agriculture is outcome of population which consumes food grains, economic status of people who consume food, and farming practices (technology) which farmers employ. While controlling population and consumption are societal issues for which government intervention is necessary, farming technology is the business of agri-business.

In order to bring harmful impact on environment, it is not possible for individuals to limit population which perhaps only government supported by civil society organizations can do, but what industry or a corporate farm can do is to adopt more advanced technology such as GM (Genetically Modified) seeds, modern irrigation systems, and improved farming technology for cultivation and harvesting of crops.

As a case in example apart from using new seed variety, change of farming technology is another option for enhancing farm productivity. At Anksapur village in Nizamabad district in A.P., drip irrigation has changed their lives. Farmers cultivate not only all 2,000 acres of arable land in the village but also 1500 acres in the neighboring villages. Modern water management techniques like drip irrigation give farmers enough water to irrigate three crops a year and earn Rs. 10 to 15 lakh each. Farm yields at Anksapur are 30 per cent more than elsewhere in the region and its superior quality enables the farmers to find markets for it in Sangli, Maharashtra. In 2010, the value of the farm produce for Anksapur has been placed at Rs.

30 crore a year and new prosperity is reflected in the better wages placed to the farm labor.

In 2001, Fatehpurapilvai, a village in Mehsana district in Gujarat, in the aftermath of 2001 earthquake introduced drip irrigation system to minimize dependence on rain fed agriculture. All its 780 hectare farmland is under drip-irrigation system cultivating horticulture products such as potatoes, pomegranate, papaya and several vegetables. The other source of revenue is milk collection center. The heart of the village is the milk collection centre, managed by the village milk cooperative society between 4800 and 5500 liters of milk every day which is sold in adjacent towns. The society took a loan of Rs. 13 lakh in 2006, and installed a bulk milk cooler plant for preserving milk.

At Santhivila, a village on the outskirts of Thiruvanthapuram, a group of 16 village women have changed the rural economy. They are members of Karunya, a women's self-help group registered with Kudumbasree, Government of Kerala's Poverty Eradication Project. None of them had a job till they formed Karunya in 2007. The village panchayat gave the group Rs. 1 lakh and space at the local vegetable market. With the seed money, they availed a bank loan to start a unit making paper boards, cloth bags, office files, pens, pencils, etc. Kudumbasree Mission provided them technical training, and finally everything resulted in making 'Karunaya', one of the most popular brands for paper files and paper boards, which are their premier products.

# RURAL MARKETS, BOTTOM OF THE PYRAMID AND INCLUSIVITY

A recent CII (Confederation of Indian Industry) -Technopak knowledge paper estimates that rural markets in India will grow to \$1.9 billion industry by 2015 from the current \$487 million. Rural markets are however not single homogenous markets. Based on level of development and availability of infrastructure, different rural areas have different markets for durable products. Thus, segmentation is a key strategy for targeting different rural markets (Velayudhan & Sridhar, 2009). Companies like ITC and Hindustan Unilever (HUL) are veterans in the art of reaching out to rural markets.

ITC's major interface with rural India started way back in 2000 with its e-Choupal initiative, which links the company directly with farmers for procurement and cultivation of specified crops that provide valuable feedstock to the company (*Choupal* is Hindi name for assembly of people). Besides such prominent examples there are several other initiatives for tapping rural markets such as DCM's '*Hariyali Kisan Bazaars*' (Green Farmers' Market), Pantloon-Godrej's joint venture '*Aadhars'* (Foundation), Tata's '*Kisan Sansars*' (Farmers' World), RIL's 'Reliance Fresh', etc.

Airtel has also made large inroads into rural markets and over 60 per cent of its new subscriber additions are from rural areas. Tata Chemicals saw a business opportunity in water purifier segment with technology development. Realizing the problems of power supply in villages, the company launched the Swatch brand of water purifier which runs without electricity, to target the bottom of the pyramid customers. The key in rural areas is to use low maintenance, simple technology that works with less or no dependence on electricity.

According to C.K. Prahalad, the late Global Thinker (*The Economic Times*, November 5, 2009):

"There is no denying that India needs to do more to eradicate the abject poverty in the country. Yet, we have notice of the success stories all around us in reaching out to the poor. The Self Help Group System, ITC's e-Choupal model, or Amul's dairy plant are successful experiments of using the ecosystem for reaching out to the poor masses. Cell phones, too, have penetrated rural markets, and now a million kirana shops (small retail outlets) are selling telecom products. If the telecom boom can happen, what is stopping us from achieving similar success in other areas? It is all about mindset ... how you look at it."

According to late C.K. Prahalad, one of the greatest Management Gurus of the 21<sup>st</sup> century and originator of the idea that future market lies at the 'Bottom of the Pyramid', a phrase which he had coined and which has been adopted world over. According to him (*The Economic Times*, November 5, 2009): "Co-creating products and services around the needs of the poor will involve creative solutions and can open up a whole new set of opportunities for business."

C. K. Prahalad observed (*The Economic Times*, November 5, 2009):

"Over the last five years (2004-09), there has been a broad acceptance that the bottom of the pyramid (BOP) is a viable market. And if you look at BOP, it is a viable market. It is not monolith, it is a whole number of segmentations. At least in India, this is not a debate anymore for me. These are our markets. The 800 million people are our markets. So the companies are recognizing it and launching products aimed at these consumers".

C.K. Prahalad, in his interview with *The Economic Times*, way back in August 2003 had said:

"Increasingly, it is clear that the bottom of the pyramid in India will be the new engine of change and growth. Again five years ago when I started talking about the poor of India as an asset, it looked somewhat strange. But if you look at what has happened in the growth of wireless, it is very clear that we moved from 2 million to 20 million in less than a year because lower middle-class people started using wireless; because we made it easy for them to consume the product by reducing the cost, up from cost as well as creating the ability to pay per use. China has 250 million installed base of wireless, we have 20 million. We are growing rapidly. The entire growth, in not just India and *China but worldwide, of wireless will be because of the bottom of the pyramid.* 

Thus, if you add 250 million from China, 20 million from India, 35 million from Brazil right now and look at it 2-3 years down the road, it may be 500 million and suddenly United States looks like a small market with about 125 million users. So, the bottom of the pyramid, I think, can become a source of rapid economic change and that is the basic key – Not to look at the poor people as poverty alleviation and subsidy but treat them with respect as consumers."

As part of the inclusive agenda, shopping malls need be built at smaller sub-towns which are intermediate between urban cities and villages. These malls can be a grand success if they attract both urban and rural consumers. Location is thus key for the success of these malls serving both urban and rural consumers. When the problem of distance cannot be minimized with best of locations, shop owners in halls can organize *haats* (periodic markets) at somewhat distant villages. Research has shown that despite the same products being available in the village shop, a large segment of villagers prefer to buy these from a *haat* in view of better price, quality and variety offered (Velayudhan & Sridhar, 2009).

As per the vision of C.K.Prahalad towards inclusivity (*The Economic Times*, April 10, 2009): "Rural and Urban is an age-old distinction. The farmer sitting in his small house in MP and checking his soya prices in Chicago Board of Trade is my dream. All that rural should mean is that logistics is a little more cumbersome and expensive, nothing more. We have to start with this vision."

Corporate entities need to innovate to develop customized and cost-effective products and services for under-penetrated markets for achieving the goal of inclusivity. Tata's one lakh rupees 'nano' car is example of technological innovation that will not only enhance company's profit margins but will also be a step towards achieving inclusive growth by raising the standard of living of a particular population segment. According to Bruce Nussbaum, development of 'Nano' represents two salient forms of innovation, 'frugal engineering' and 'inclusive innovation'. Frugal innovation is a whole new management philosophy, which integrates specific needs of the 'bottom of the pyramid' markets as a starting point and works backward to develop appropriate solutions which may be significantly different from existing solutions designed to address needs of upmarket segments (Kapoor, 2010).

# RURAL BANKING AND FINANCIAL INCLUSION

RBI (Reserve Bank of India) is in the process of rolling out a road map for financial inclusion in partnership with banks and financial institutions for individuals which have UIDs. UIDAI has devised a system where an NGO or an introducer can stand guarantee for persons, who do not have any proof of identity (*The Economic Times,* September 25, 2010). To address the question of identity, UIDAI linked the coordinators of the Homeless Resource Centres, night shelter and NGOs involved in the survey as introducers for enrolment during the biometric stage – who also submit their biometrics along with every person they introduce (Nichenametia, 2010).

Despite having amongst the world's largest network of about 79,000 banking outlets, India has barely 150 million saving bank accounts for a population of 1180 million. Access to a saving bank account is one very basic indicator of financial inclusion (Kapoor, 2010). As of 2010 in very broad terms only 5 per cent of around 6 lakh habitations in the country had bank branch. Barely 30 per cent of bank branches operate in rural areas but which shelter 72 per cent of the population.

Rural India accounts for barely 9 per cent of total deposits, 7 per cent of total credit, 10 per

cent of life insurance and 0.6 per cent of non-life business. Out of the 600,000 habitations in the country, only about 30,000 have a commercial bank branch. Only 40 per cent of the population has bank accounts in India. GOI is involving all agencies including banks, post offices, self-help groups, microfinance institutions, farmer clubs, and panchayats for achieving the goal of financial inclusion (Tiwari, 2010a).

India Post is a strong contender for banking license given its spread across the country. Post Offices in India already work as a quasi bank, providing scores of savings products, postal life insurance, pension payments and money transfer services through its 1.55 lakh branches, more than any other bank (*The Economic Times*, August 3, 2010). A government committee on financial inclusion had also recommended that India Post, with its inclusive reach should actively position itself to offer a low cost, light weight bank account to anyone enrolling for a Unique Identity Number (Tiwari, 2010b).

India by March 31, 2010 had 584 million mobile phones and the number is further growing by leaps and bounds. A study shows that barely 40 per cent of the phone owners have bank accounts. The remaining 60 per cent can be persuaded to open bank accounts on the basis of the verification done when they were given mobile connections. This route can also facilitate opening of accounts by large number of residents and move towards financial inclusion. GOI has set up a high-level committee of top-notch corporate leaders to suggest ways to achieve financial inclusion (Tiwari, 2010 b). The purpose of financial inclusion is not merely for goals sake, but for such applications like cash transfer into accounts of rural poor without letting intermediaries make any 'cut' in the financial assistance provided under different government sponsored welfare and development schemes.

One of the main objectives of the branch licensing policy in India in 1960s was extension of banking facilities to rural and semi-urban areas. This policy helped State Bank of India (SBI), India's largest public sector bank, and its associate banks to open large number of branches in rural areas though other banks did not pursue as vigorously in this direction as the SBI. Following social control of banks and nationalization of 14 leading private banks in 1969, GOI gave further push to opening of bank branches in rural areas though the word 'financial inclusion' was not known then.

RBI later appointed a committee of bankers to evolve a workable outreach programme for setting up banks in the under banked districts in the country. In pursuance of the committee recommendations, RBI introduced the Lead Bank Scheme. In 2007-08 GOI earlier set up a 'Financial Inclusion Fund' and a 'Financial Inclusion Technology Fund' within the NABARD (National Bank on Agriculture and Rural Development) to extend banking services to the unbanked areas.

More recently, the RBI has advised all public sector banks to set up bank branches in all unbanked or under-banked rural areas even if it leads to some drop in their profitability. RBI has advised to use innovative solutions such as the 'business correspondent (BC) model' to reach out to villages with a population of 2,000 or more by March 31, 2012. Availability of BCs enables banks to extend banking services to the hinterland without setting up a brick-and-mortar branch, which if done could be an unviable proposition. BC model promoted by the RBI is another example of 'frugal' innovation within the realm of financial inclusion.

Banks can appoint BCs in villages, who can work like a human bank. Banks use various types of hand-held devices (often nicknamed micro ATMs) to authenticate micro-transactions at the identified BC location, the transactions of which are linked with the bank's main database. BCs may move to different villages, use a mobile phone, plug it with a finger-print reader, and then authenticate individuals. When not using a finger print reader, the system may involve simply using two mobile phones for making cash transfer. UID can be integrated with the bank's system on the bank end. This way, when one inputs a mobile number along with a PIN code and another authentication code, this can facilitate instant transfer of cash from one entity to another via mobile phones transaction but only after UID authentication. This plan even if it succeeds only partially would achieve goal of financial inclusion to considerable extent in a country of India's size (Sharma, 2010).

There are more rural poor who have access to mobile phones than banks. Accordingly, RBI has permitted, Airtel, India's first telecom operator, to start a particular kind of mobile payment service. In fact, RBI had been contemplating on these lines since October 2008, when it notified rules to allow banks to transact with customers using their mobile networks. Called a "semi-closed wallet", it permits a subscriber to exchange physical cash for virtual money, to pay for third party goods and services up to Rs. 5,000. Without needing access to a bank account or credit card, the subscriber can use the prepaid virtual balance to, for instance, buy a movie ticket. As a successful story, Kenya's M-Pesa may have leveraged every bit of its mobile network to allow subscribers transact using mobile networks. RBI sees little problems to allow telecom operators function as 'business correspondents', to help with the last mile (Mint, September 21, 2010).

UIDAI has evolved Micro ATM model for being adopted by banks. A working group set up by the RBI for developing common open standards for such devices has suggested the possibility of nationwide networking of such micro-transaction devices at some stage in foreseeable future operated under the common authentication system of the UIDAI (Kapoor, 2010).

Organizations like Reliance Capital, Tata Finance, Airtel, Mahindra Infotech, etc can utilize ICT and mobile telephony experience to focus on universal access, gender parity, and quality banking services in rural areas. Corporate entities are in a better position to design business models for financial inclusion (Rammohan, 2010). Companies such as Reliance Capital and Tata Finance, whose sister concerns have deeper penetration of mobile telephony in rural areas, can create spread of banks in rural areas faster.

Given an opportunity even organizations such as Airtel (Bharti Enterprises), which have successful track record of pushing mobile telephony in rural areas in significant, may succeed in pushing rural banking in unbanked rural areas as well. MFIs have potential to open floodgates for development in rural areas as rural entrepreneurs can access capital without any collateral (Mital, 2010a).

ICICI Bank as part of its strategic objective to provide banking facilities in rural areas; offers loan facility for expanding school infrastructure, making school purchases, including investments on innovative measures and teachers' training. The bank also offers loan facilities to poor students including issuance of loan vouchers that allow low income families to access education of their choice, whether public or private.

Indian banks in order to meet the target of financial inclusion need to open about 500 million accounts, a fivefold increase from the current level. Over the past few years, banks have been reaching out to poor people through so called "no frills accounts", designed to meet basic banking needs at low or zero cost. As per the RBI (Reserve Bank of India) sources, 50.6 million "no frills" accounts were opened between November 2005, when they were launched, and March 2010 – with an outstanding balance of Rs. 5,3860 million (Shankaran, 2010).

Currently, banks typically use 'business correspondents' to provide last mile connectivity with the unbanked. Banks have already started designing the "no-frills" build-up to accommodate customers with UID numbers. Banks issue biometric smartcard to "no-frills" customers, which have different "pockets" to meet specific needs such as withdrawals and deposits. The issued cards typically have extra pocket to store a customer's unique identity number whenever it is generated (Shankaran, 2010).

One of the commercial banks in India is using a combination of its mobile money service and the BC (Business Correspondent) model for converting physical currency into digital currency (and vice versa) at BC outlets at dispersed locations. This is facilitated by using a consumer's mobile phone for storing the financial transaction but in a secure manner. The customer can use this digital currency for varied applications and making remittances to family and friends through mobile network through self-authentication. Modalities of the system are being jointly developed by Nokia and Obopay and the system is in pilot stage at Pune in Maharashtra. This ICT-enabled solution has a potential to emerge as a low cost fund transfer solution that might provide substantive fillip to financial inclusion and outreach to people at the 'bottom of the pyramid' (Kapoor, 2010).

# MICROFINANCE AND FINANCIAL INCLUSION

Microfinance is a system of providing small loans to entrepreneurs who may be poor enough to qualify for traditional bank loans. In India microfinance is provided through Self-Help Groups (SHGs). The first major breakthrough in financial inclusion came when MYRADA, an NGO working in Karnataka developed the Self-Help Group (SHG) system to link the unbanked rural population to the formal financial system through the local bank branches. In Kerala, The Dhanlakshmi Bank, took lead in extending microfinance to poor. Banks lend micro-credit through SHGs and local micro-finance institutions that maintain links with villages or urban slums that generally show interest in microcredit. The biggest challenge to financial inclusion is how to reduce the transaction cost of micro-transactions such as authentication and cash handling.

NABARD (National Bank of Agriculture and Rural Development), RRBs (Regional Rural Banks), commercial banks, HDFC (Housing Development Finance Corporation), SIDBI (Small Industries Development Bank of India), etc, are some of the mainstream financial institutions that provide micro-finances through SHGs. NABARD in 1992 started the SHG-Bank Linkage Program. SHGs act as a conduit between the bank and beneficiaries. SHGs are rudimentary banking institutions engaged in saving and lending business like mainstream banks (Singh, 2009).

With active support and effort of RBI, NA-BARD and civil society organizations, in India over 86 million households have access to banking through SHGs. Women in rural areas receive micro-credit through 5 million micro-finance groups with 50 million women members. GOI policy of 50 per cent reservation to women in panchayats is providing further impetus to women drawing more micro credit for entrepreneurial activity.

There is growing realization among commercial banks in India that microfinance is a bankable proposition the penetrative outreach of which can be enhanced through ICT-enabled solutions. Private commercial banks both indigenous and foreign banks have been using ICT-enabled solutions in enhancing financial inclusion through microfinance. Banks which have been using ICT-enabled solutions are ICICI Bank, HDFC Bank, Axis Bank, etc including some foreign banks operating in India such as ABN Amro, Standard Chartered, HSBC, Citibank, etc. ICT applications also facilitate social entrepreneurs introduce 'single-window, on-demand' best quality banking services, information and knowledge at dispersed locations to suit needs of rural poor, thus enabling India to move closer to the 'Millennium Development Goals'.

A criticism often voiced against the functioning of MFIs in India is high interest rate charged between 18 to 30 per cent per annum on a declining balance basis, as against the interest between 11 to 14 per cent charged by the commercial banks. At this interest rate, MFIs are able to recover costs and earn a reasonable profit necessary to maintain the capital adequacy ratio of 12 per cent mandated by the RBI. One argument in favor of higher interest rate charged by MFIs is that they function without a subsidy or financial support by the government and their number is multiplying at a phenomenal rate every year which is helping achieve the goal of financial inclusion in a significant manner (Mahajan, 2010).

MFIs generally incur higher operating expenses as loan disbursement officers have to move from village to village disbursing loans and collecting EMIs personally often on their motor bike, which adds to their operating expenses that vary between 6 to 12 per cent depending on volume of loans and the remoteness/ density of the area served. A significant part of operating expenses relate to salaries of field staff, transport expenditure for field travel, branch administrative expenses involving expenditure on IT systems, accounting, fund raising, cost of overdue loans debts/ risk management, monitoring and audit,, etc. Sustainable microfinance is that MF which is provided by institutions that deliver financial services to the poor at interest rates that enable the institutions to cover all costs and risks and still generate decent profit. However, with growing popularity of MFIs and economies of scale reached, several MFIs have started reducing rates which were higher than the sustainable limits (Mahajan, 2010).

In December 2009, a new microfinance industry association called the Microfinance Institutions Network (MFIN) was formed by the top 35 MFIs, which are registered with RBI as NBFCs (Non Banking Financial Company). Part of the money collected by the MFIN from its members is invested with the RBI-approved credit information bureau. By obtaining information from the Bureau about the prior borrowings of the customers, MFIs will be able to curb multiple borrowings which can result in over-indebtedness (Mahajan, 2010). Historically, MFIs started as non-profit NGOs. As they depended on donations for expansions, they could not grow fast enough. SKS Microfinance Limited is among very large microfinance companies in the country. The bank has succeeded in reaching out to people who previously had no access to micro-credit. The company by transforming itself into a public limited company but otherwise retaining all essential features of microfinance company has redefined the business of microfinance in India, and emerge as path finders for other MFIs and set new standards how such companies should be managed and governed.

SKS was set up what philanthropists call a 'social enterprise' - a business based on the principle of doing well by doing good (Strom & Bajaj, 2010). The Company was incorporated as SKS Microfinance Private Limited on September 22, 2003 under the Companies Act, 1956, which following shareholders resolution on May 2, 2009 was later on converted into a public limited company, with effect from May 20, 2009. The company issues loans as small as \$20, which some banks may consider too risky and tiny to deal with. The bank has recently raised a whopping \$350 million (Rs. 16000 million) though an IPO. SKS and other MFIs which will follow its footsteps may demand a bank status, on the footsteps of Bangladesh's Grameen Bank which is a regular bank (Aiyar, 2010). Proponents of commercial micro-finance say the money raised can provide even more loans to the needy (Strom & Bajaj, 2010).

A study by the NCAER (National Council of Applied Economic Research) shows that most MFIs are credible and committed to providing affordable financial services to India's 150 million financially excluded households. Overall, the MFI sector represents the fastest growing sector in the Indian banking and finance landscape. With low levels of non-performing assets, it has been able to generate interest among investors. It is difficult to estimate the quantum of funding needed by MFIs in the country as the sector needs higher capital on a regular basis. MFI segment which is viewed as a strategy to alleviate poverty is however not free from difficulties. Cases are coming in growing numbers that borrowers are finding it difficult to repay loans. Rural households in many cases are very poor and if by any chance the earning member of the household falls sick repayment of microcredit availed becomes risky. Tendency on the part of MFIs to push loans to poor needs to be resisted. Loans have to be provided only after ensuring fair chance of their repayment. It is certainly desirable to provide micro loans to poor but only when they can repay. UID numbers will help address these issues by having some basic prior knowledge of the applicants (Rajshekhar, 2010).

Equitas, a Chennai-based new generation microfinance institution has adopted high-end software solutions and centralized operation systems used by mainstream retail banks that involve higher initial capital outlay but offer promise of significant cost reduction. This system enables MFI's top leadership to supervise about one lakh micro transactions conducted by over 2,000 field staff on a daily basis. Technology is not only an aid for financial transactions for the success of the MFIs, but it also provides support for healthcare of households as quite often when the earning member in the household is sick default rate for loan repayment is bound to rise. Realizing that ill-health of family members is the most common cause of non-voluntary default in its customer segment, Equitas has also launched a health helpline which looks into healthcare needs of its members through a network of 54 hospitals (Kapoor, 2010).

Savings is the key for dealing with problems of fund repayments. Saving is a core principle of risk management for households. Insurance is an effective measure for coping with risk, which has made micro-insurance as related activity of microfinance. Personal savings at home is often the best assurance against risks and keep some money aside at home as savings.

Personal savings are however not sufficient when the earning member falls sick for a longer spell. Savings can help people from negative shocks, however, some shocks such as serious disease or the death of cattle are common and can reduce income in subsequent years. Large medical expenses and the death of income earners followed by the selling of productive assets often lead to poverty. Several large sized MFIs along with offering savings and loans, thus also offer micro-insurance products to the poor. Microinsurance is insurance for the poor. It keeps the premium low by limiting the coverage of the insurance (Kono & Takahashi, 2010).

# EMPLOYMENT GUARANTEE SCHEME AND LIVELIHOOD SECURITY

The growth in rural India is spurred by improved infrastructure that enables outreach, awareness of brands and a steady growth in household income from the initiatives such as MGNREGS (Mahatma Gandhi National Rural Employment Guarantee Scheme), which facilitates increased spending and consumption. Growing incomes in rural household is making substantive contribution for improving standards of living. MGNREGS provides 100 days of guaranteed employment to employable youth in every rural household. By December 31, 2009 the scheme had completed nearly 4 years of its existence. In 2010-11, GOI increased the budgetary allocation of MGNREGS to Rs. 40,1000 million from Rs. 39,0000 million in 2009-10.

In 2009-10, nearly 50 million families were provided over 3000 million mandays of employment. In four years of its operation till 2009 end it had provided nearly 6000 million mandays of employment at a total expenditure of around Rs. 70,0000 million. GOI plans to create higher value assets and impart newer skills to the beneficiaries such as watershed development and farm productivity enhancement schemes. GOI is planning to create a secretariat within the Ministry of Rural Development with a full fledged board with state representatives on the board for expanding its ambit for bringing additional activities within its fold (Sen, 2010).

While initially the MGNREGS objective was 150 days of guaranteed employment to one employable member in every rural household, but over the years besides meeting this initial objective the scheme also encourages to develop self reliance and enhance earning capabilities in their respective family occupation, be it, agriculture or some rural trade. With this enlarged objective GOI has created a cadre of social mobilizers to enhance awareness for developing rural infrastructure. As a case in example in a village where water recharge facilities were created (i.e. where the MGNREGS money is used for developing permanent livelihood assets) - water is automatically conserved, farm productivity is enhanced, and micro-finance facilities are made available for meeting the capital needs without any government assistance, people revert back to farming which they might have abandoned earlier due to poor irrigation facilities, or availing 150 days of part time employment offered by MGNREGS (Sen, 2010).

GOI is planning to introduce National Rural Livelihood Mission (NRLM) by planning to set up 28 lakh new BPL (Below Poverty Line) Self Help Groups (SHGs), each SHG having on an average 10 members (one from each family) by the end of 12th Plan (2012-2017). The mission shall work with a three-tier interdependent structure at the national, state and panchayat level and controlled by a governing council at the national level. While as per 2001 census, 27.5 per cent of the population was estimated to fall under BPL, as per the Tendulkar Committee findings 37.5 per cent of the population fall under BPL, and as per the N.C. Saxena Committee report people BPL are as high as 50 per cent.

GOI plans to upgrade skills of 75 lakh BPL families annually by creating adequate number of rural self employment training institutes in every district. GOI plans to initiate special projects for providing innovative methods for skill development and consequent income generation. Mission mode for a program implies achieving desired targets in a time bound manner. GOI plans to achieve universal mobilization of the rural poor communities into SHGs and include at least one member from each BPL family in a time bound manner and put in place a dedicated implementation structure for the program (Singh, 2010).

The proposed NRLM aims to restructure the ongoing 'Swarnjavanti Gram Swarojgar Yojna (SGSY)' - which if translated in English means 'Golden Jubilee Rural Self Employment Scheme' with a view to reduce the poverty among the rural BPL families by promoting diversified and gainful employment, and enhancing their income on a sustainable basis. GOI also plans to cover introduction of interest subsidy for ensuring availability of credit from public sector banks to the beneficiaries of the SGSY. During a decade of the SGSY as on March 31, 2009, 34 lakh SHGs were formed and more than 12 million beneficiaries assisted with an expenditure of Rs. 2,71,830 million. On an average around Rs. 27000 million is spent on SGSY every year (Singh, 2010).

Government statistics show that agricultural growth and rural income have largely been unaffected by the recent economic slowdown, despite the fact that contribution of agriculture to total income is declining over the years. This is largely due to the micro management of crop productivity. Sunil Katkade, a farmer in Nayagaon, a small village in Nasik district, initially grew rain-fed crops like bajra and wheat, which was barely enough to feed his family. In 2005, he installed a micro sprinkler irrigation system and switched to vegetable farming, which are less rain dependent. He entered into a contract agreement with a private firm for purchase of his produce at a rate higher than the mandi (Common Market Place) price (wholesale price) thus freeing him from market risks and achieving significantly higher returns for his produce.

In Barabanki district in UP, Mritunjay Sharma, a farmer in Chandauli village improved his economic plight by making full use of land asset by cultivating in between the vacant period of land (after harvesting of rabi crop in April and sowing of kharif crop in June prior to monsoon. Farmers generally keep the land uncultivated waiting for the cultivation of wheat and paddy as the *kharif* crop. Sharma and many other farmers with similar plight gainfully utilized this interval for cultivation of mint. The interval was used in cultivating menthe oil (mint). As per broad estimates of yield, one acre of land produces 40 litres of menthe oil, which is used in preparation of medicines, toothpastes and cosmetics. One litre of this oil enables the farmer to earn between Rs. 500-575 (Bobb, 2010).

Nearly 90 per cent of the Bihar population lives in rural area, much more than the country average of around 70 per cent. Government of Bihar has launched the *E-Shakti* (Power) Project for implementing MGNREGS for employing contract workers for various development projects. The project was launched in February 2009 in Patna involved issuing 10.7 lakh *E-Shakti* cards to contract workers located in 1300 villages benefiting 21.81 lakh families.

Government of Bihar has adopted ICT-enabled progressive approach in implementing the MGN-REGS in the state. A biometric smart card with relevant details of beneficiaries is provided to contract workers for processing data with regard to registration, payments, receipts, job demand, wage disbursements, etc. In next four years the project is planned to be extended to the 37 districts to cover 24 million MGNREGS beneficiaries in 39,000 villagers spread over 534 blocks.

GOI for the country as a whole is also instructing different states to make disbursement of wages to rural workmen biometric driven. Ministry of Rural Development, GOI, is working towards putting in place a system of biometric identification, which is aimed at bringing more transparency in the implementation of the scheme, and will be duly linked with the systems evolved by the UIDAI. The Department of Posts plans to introduce smartcards for disbursing wages to workmen under the MGNREGS. GOI is also planning to open zero-deposit post office saving accounts for beneficiaries under the MGNREGS as well as other social sector schemes (Sanyal & Surabhi, 2010).

# PUBLIC DISTRIBUTION SYSTEM AND FOOD SECURITY

PDS (Public Distribution System) makes available essential supplies at fixed prices, which protects the poor from buying at higher rates in open market. Effective PDS can thus also stabilize open market food grain prices besides achieving food and nutritional security for BPL (Below Poverty Line) families. GOI vide 2010-11 budget has simultaneously accorded high priority for minimizing food wastages in warehouses and during transits through increased spending on cold storage and cold chain facilities. Dr. Manmohan Singh, Prime Minister of India, recently highlighted the need for competition in both the channels for food transportation (2010). He emphasized: "We need great competition and need to take firm view on opening up of the retail trade. It will help in bringing down considerable difference between the farm gate prices, wholesale price and retail prices".

Apart from extending technical support for re-engineering the PDS, private sector needs to put up series of organized retail and supply chain networks all over the country in parallel with the PDS, which will introduce an element of competition in supplies and reduce differences in prices at the farm gate and consumer end. The PDS needs to be revamped to plug leakages in commodities supplies which can be effectively done through private sector participation only. Private enterprises which specialize in the area of warehouse and supply chain management can facilitate augmenting storage and warehousing space for food grains (cold storage); and also reengineer public distribution system (cold chain). PDS also needs to be expanded by including supply of pulses, oil and basic vegetables (Jain, 2010).

Government is serious to streamline both the channels – PDS backed efficient warehousing; and efficient cold chain linked organized retail that maintains food grains both during transit and storage stage in refrigerated conditions. This will also ensure higher prices to farmers for their agro-produce by eliminating or reducing the income of middlemen – commission agents (*aartis*). FDI in organized retail needs to be encouraged for expanding organized retail food distribution network for doing away with age old practice of commission agents, which will open flood gates for food security for both people below poverty line (BPL) and above poverty line (ABL).

NCAER (National Council of Applied Economic Research), a New Delhi based research institution vide one of their studies found that about 40.6 per cent of PDS kerosene is being diverted and finding its way into the black market or purchased by households without a card. Similarly, there is huge diversion of wheat, rice and sugar from the PDS following misuse and duplication of ration cards. According to some estimates, around 30 per cent of the foodgrains and other commodities allocated for poor families do not reach them. In several cases, fair price shop owners even run their personal grocery stores, thus creating avenues for diversion by unscrupulous owners (Sharma, 2010).

PDS is often criticized as a very 'leaky' delivery system as based on results of a study that 70 per cent of subsidized wheat earmarked for BPL families does not reach beneficiaries but instead get diverted to open markets. Accordingly, it is alternatively proposed that the subsidy should be handed to poor households by way of subsidized 'food coupons'. Coupons can be used at any store and redeemed at a bank for cash by the shop owner. With a fixed cash value, it can be left to the household to decide its food mix at a certain rate. Food coupons could be given to adult women members of a household on an experimental basis. Food coupon system needs to be dovetailed into the UID system and eventually food coupons could be replaced by smart cards linked to a mobile banking system. Women household heads will hardly resort to malpractice at the cost of keeping their families hungry (Deshpande, 2010b).

Given the state of PDS in India, the suggestion for food coupons instead of food grains delivery though a very 'leaky' deserves merit for serious consideration. PDS thus definitely needs to be overhauled if not completely replaced. Some states are already experimenting with the idea of food coupons. Under PDS, ration cards using false names - ghost cards - are a big problem. Selling food at market rates reduces the incentive for profiteering through diversion by officials, transporters, and fair price shops. Based on a suggestion of Mr. Kaushik Basu, Chief Economic Advisor, Finance Ministry, the country needs to move to the system of redeemable food coupons, which will divest shop owners to divert cheap food grains to open market. According to Mr. Basu, "In the current system (through PDS), the subsidy is with the storekeeper. In the coupon system it will be directly with the poor" (The Times of India, October 28, 2010).

Earlier, eleven states in India had forwarded their suggestions for revamp of the PDS, which included identification of beneficiaries, augmenting storage capacity at all levels, timely distribution of rations, ensuring delivery to consumers and plugging leakage. GOI is advising states to replicate successful models of the PDS revamp in other states, where it is week on the pattern. Both the state of Punjab and Haryana in north India are implementing pilot schemes replicating the model of Chhattisgarh for identifying consumers for the PDS, the state in central India. Other suggestions for the PDS revamp included identification of beneficiaries, augmenting storage capacity at all levels, timely distribution of rations, and ensuring delivery to consumers and plugging leakage (*The Economic Times*, July 13, 2010).

GOI is examining all options such as removing the cheaper or differential pricing to BPL family planning at fair price shops. Food grains have to be supplied to BPL consumers at subsidized rate of Rs. 3 per kg with plan to credit the subsidy amount directly into the shopkeeper account. The BPL consumer will use a smart card containing his UID number that will enable him to buy the commodity and register the transaction, which will entitle the shopkeeper to receive the subsidy. Separation of subsidy from the food grain will have no scope for illegally diverting the grain to the open market by unscrupulous individuals (Deshpande, 2010a).

The success of the Food Security Act thus directly depends on success of the UID introduction i.e. assigning identity to individual beneficiaries. The smart card for BPL families can also be utilized for buying food items like pulses, coarse grains, oil, milk, sugar and eggs. Application of the smart card may not be restricted to just fair price shop, but can also be utilized for availing commodities served to the poor under integrated child development services and mid-day meals (Deshpande, 2010a).

By linking fair price shop prices with MSP (minimum support price) in future GOI looks forward to limit the amount of food subsidy to the difference between economic cost and the MSP. Thus, at some later stage it may pave the way for replacing the selling rate of Rs. 3 kg of food grain to BPL families as well with the MSP (minimum support price) i.e. when MSP is enhanced the selling price to BPL consumer may be automatically revised as the government otherwise will have to raise the subsidy. This, a fixed selling rate to BPL families does not seem very rational sense as the government often revises the MSP under the Food Security Act to procure more to meet the growing food needs of the society (Deshpande, 2010a).

GOI however proposes to restrict the subsidized food grain delivery scheme under what it calls 'Universal PDS' to the poorest of the poor in initial phase. Accordingly, it plans to restrict to the quarter of the blocks (2000) out of a total of 8000 blocks. Each district is divided into a number of blocks for development purposes, with block having a number of assigned villages. While time-bound universalization of food grain entitlements across the country is desired by the GOI, initial universalization is limited to one-fourth of the most disadvantaged districts or blocks in the first year, where every household is entitled to receive 35 kg per month at Rs. 3 per kg (Tiwari & Ghosh, 2010).

In the remaining 8,000 blocks, extension of 'Universal PDS' will be based on "differential entitlements" in which both quantity of food grains and price would vary flexibly. While there will be a guarantee of 35 kg of food grains per household at Rs. 3 kg for all socially vulnerable groups including SC/STs, it could be 25 kg of food grains for ABL (Above Poverty Line) families, to be uniformly supplied at some rate close to the MSP but is likely to be much lower than the open market price (Tiwari & Ghosh, 2010).

UID can be easily integrated with PDS which will help minimize rampant duplication in the system. PDS is often criticized for grains diversion in open market and inefficiency. Money is often demanded by the unscrupulous fair price shop owners to obtain a ration card and there is rampant open market reselling of goods meant for beneficiaries. Users often see portions of their rations diverted to the black market through unregulated fair price shop owners, many of whom overcharge and under weigh goods. UID coupled with adequate systems analysis can go a long way to stop ration diversions to open markets; and address issues of timely grain distribution, food ration storage, monitoring of PDS centers and achieving the goals of food security (Leigh, 2010).

UID authentication at the delivery point would allow officials to transfer rationed suppliers to recipients electronically. Under an ICT-enabled UID system grain allocation would be linked to a citizen's UID. When a particular UID number is presented at the fair price shop, the concerned person would be given the allocated quantity, eliminating fake claimants who take away rations due to fake identity occasionally in connivance with PDS shop owners. UID linked food grains delivery system would also offer flexibility to select a fair price shop of their choice – the current set-up allocates users to a location not of their choice. Integration of the UID with the PDS is not as formidable task as carrying out systems analysis and revamp of the PDS (Leigh, 2010).

Government of Haryana, a north Indian state, has taken lead in providing biometrics-based smart cards ahead of implementation by the UIDAI in tracking down misuse of rationed items. Fingerprints of each household member (above the age of 12) are stored in the smart card along with details of their monthly entitlements. At fair price shop, the smart transaction terminal (STT) matches the fingerprint records on the smart cards with the fingerprints available its end and authenticates the transaction. At district level consumer supply offices and FCI (Food Corporation of India) warehouses also maintain STTs, which make them to issue further supplies after due verification of previous consumption figures. Haryana experiment is a sequel to similar success story in the central Indian state of Chhattisgarh earlier.

## CONCLUSION

Corporate citizens, NGOs and public and private banks can enter into strategic partnership for funding rural development activities in diverse areas such as education, healthcare, energy, roads, shelter, farm infrastructure, and water supply and sanitation (WSS). Addressing social issues by promoting public private partnership will lead to self-sustaining solutions that do not depend on government subsidies. When a well run business applies its vast resources, expertise and management talent to problems that it understands and in which it has a stake, it can have greater impact on social good than any other institution or philanthropic organization (Porter & Kramer, 2006). Embracing innovative and low cost services have wider benefits for the economy such as 'nano' as low-cost car, low-cost housing, affordable educational hubs, micro health insurance, etc (N.K.Singh, 2009).

When agricultural growth needs to keep pace with growing population, economic growth is necessary for attaining higher standard of living and cannot be slowed, it is the technology development that can reduce environmental burden. In fact, enhancement of farm productivity is inseparably linked with growth in farm technology. As long a farmer depends on historical competencies, it may not bring any significant impact but when it is combined with new technology such as switchover to newer forms of chemical fertilizers, biocrops developed through advances in biotechnology, only then it can make a real breakthrough (Hart, 1997). MGNREGS which is primarily an employment generation scheme in rural areas is at the same time also involved in creating more valuable rural assets, especially in the area of water conservation and micro-irrigation projects.

UID provides an effective platform for direct cash transfer to the beneficiary's account instead of routing it through traditional channels under different socio-welfare schemes. As a case in example in PDS supply of food grains is often plagued with numerous malpractices such as diversion to open market, selling subsidized food grains either to non-ration card holders or individuals with fake ration cards. Smart card linked PDS facilitates delivery of allocated grains to the cardholder at subsidized rates but entitles him to receive subsidy only when food is delivered to the cardholder as per his entitlements. Advantages of UID Project are enormous considering that welfare and development needs are unlimited.

Implementation of UID scheme however poses some legislative problems. In the absence of stringent data protection laws, data security is one serious issue with which UIDAI has to grapple. Several Acts in India such as the Article 21 of the Constitution, the Hindu Marriage Act, the Copyright Act, Juvenile Justice (Care and Protection of Children) Act 2000, the Code of Criminal Procedure, etc. in some form or the other support the viewpoint that individuals cannot be constrained to put biographical information on a system from which it can be accessed by others (TOI, October 4, 2010).

Country's census which is done at an interval of every ten years is also due to be completed in 2011. Beginning 1872, the Census of India has been the most comprehensive and unbiased source of data on population, economic activity, literacy, housing, amenities, assets, and a variety of socio-economic and cultural parameters. It is the basis on which the past progress of the nation is evaluated, the ongoing progress is measured, and the future is planned. In parallel with the first phase of the UID Project, Census 2011 is compiling the National Population Register, and the two projects are working in coordination and tandem. Census 2011 will collect biometrics to collect part UIDAI requirements as well.

GOI plans to issue UID numbers to 600 million people by 2014. First 12-digit UID number was issued to Ranjana Kadashiv Sonawane, a tribal woman from Tembhli village in Maharashtra on September 29, 2010, which was personally handed over to her by Dr. Manmohan Singh, Prime Minister of India, in presence of Mrs. Sonia Gandhi, the ruling Congress Party President. At this occasion, while Mrs. Sonia Gandhi, Chairperson UPA (United Progressive Alliance) said: "This number will remove the problems of fake ration cards, duplication of jobs and MGNEGS cards", Dr. Singh observed: "The UID number will remain with cardholders till their lifetime. It will help in availing scholarships, pensions and wage payments under the MGNREGS, among others." This is an indeed representative and invaluable gift to an estimated 100- million odd inter state migrants in the country, who have no identity (*Mint*, September 30, 2010). The challenge before the UIDAI is to scale up the enrollment process and replicate the protocol device tested all over the country.

Prima facie the inclusive agenda of the UID Project will drive more business for financial institutions and telephone companies (Bapna & Sundararajan, 2010). The UID Project targets that every individual with a UID number will have bank account. As a result a large part of transaction shall be through banking system instead of cash. UIDAI is also developing a system that will enable verification over mobile network and use simple devices like mobile phones attached with biometric equipment (The Economic Times, September 25, 2010). Telecom company employees are also well placed to play the role of 'business correspondent' for banks as banks cannot have branches everywhere and shall have to depend on BCs for help. Telecom companies shall benefit as the concept of mobile-wallet gains momentum. UID Project will thus not only provide identity to over one billion people but will create new jobs for them. As per rough estimates some 3,50,000 jobs are likely to be created following assignment of UID numbers (Shivpriya, 2010).

Aadhaar when successfully launched would put India in a group of 50 countries where citizens have national identity cards. These include most continental Europe barring few countries, China, Brazil, Japan, Iran, Israel and Indonesia (TOI, October 4, 2010). UID-cellphone-bank account triad will emerge as epitome of public private partnership (Sabharwal, 2010). Real benefits of the UID project which was launched on September 29, 2010 in Maharashtra in India will be felt in the long run. UID numbers will surely emerge as catalyst for social transformation in India.

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## **KEY TERMS AND DEFINITIONS**

**Aadhaar:** The most important characteristic of Aadhaar (Foundation) is its universality and it is assumed that the biometric card with the number will be gradually accepted across the country as the identification number by all service providers and government agencies. UIDs will also minimize problems of repeated identity verification for availing different facilities like opening bank account, enrolling for a course, obtaining passport or driving license, utilizing public services, etc Following introduction of identity cards to sizeable population, the identity cards will increase the trust between private and public agencies and minimize chances of service denial to people, who have no identification (TOI, October 4, 2010).

**Biometrics & UID Numbers:** Biometrics comprises methods for uniquely recognizing individuals based on intrinsic physiological or behavioural traits. Generally, biometric characters are divided into main groups, physiological or those based on fingerprints, face, DNA, palm prints, iris recognition; and behavioural, which can include anything from gait or voice to typing rhythm. UID comprises name, date of birth, gender, father's name, sample of fingerprints and both the irises. It takes few seconds to authenticate identity as 'yes' or 'no' on online verification system (*The Economic Times*, September 25, 2010). The iris as a criteria was included as fingerprints are either feeble or not unique for children and hence not very reliable for children's identification. Similarly, people working at places like firework factories or *paan* (beetles) shops often damage their fingerprints.

**UID Numbers & Inclusive Growth:** UID numbers enable to achieve inclusive growth by enhancing outreach of state sponsored welfare schemes in every part of the country as per the specified eligibility criteria. Financial inclusion on the other hand implies that financial services such as banking, insurance, or some other are available to all citizens uniformly without exclusion. The Central ID Data Repository is the core of Unique ID project. UIDAI plans to assign all responsibilities to a 'managed service provider' who will act as the integrator to all other technology companies that will help provide a unique ID service to Indian citizens.

Inclusive Agenda: In pursuance of the country's inclusive agenda, GOI has created entitlements backed by legal guarantees for an individual's Right to Information; and Right to Work. This has been followed up with the enactment of the Right to Education in 2009-10, which is again a step towards inclusive growth. As the next step, GOI is ready with the draft Food Security Bill, which guarantees availability of food grains to every family below the poverty line. To fulfill these commitments, spending on social sector has been increased to Rs. 13, 76,740 million, which now stands at 37 per cent of the total plan outlay in 2010-11. Another 25 per cent of the plan outlay is earmarked for developing rural infrastructure. GOI also wants to empower academic institutions at the bottom of the pyramid. GOI proposes to allocate more funds to empower state universities for building infrastructure and imparting quality education, which are engines for higher education. Institutions of higher learning are being given greater autonomy to facilitate their speedy transformation (Sibal, 2010). GOI in 2010 has also approved Rs. 5,9900 million for National Knowledge Network (NKN), which will connect institutions of higher learning and research laboratories in India with a high speed information network. The NKN will function in tandem with National Mission on Education through ICT linkages (Pilot, 2010).

ICT and UIDAI Enactment: GOI plans to bring a UIDAI Act to provide for statutory powers and responsibilities to the UIDAI. In the US initially it was not mandatory to have a Social Security Number (an equivalent of a national ID) but later on it was made mandatory even for visiting foreign students to have a social security number for availing different public services and benefits. The UK, which passed the Identity Cards Act in 2006 faced considerable public and political backlash on concerns of privacy and data issues (Mishra & Julka, 2010). GOI is thus fully seized of issue and the UIDAI Act would address the of privacy and data security of the UIDAI database. Implementation of the UID scheme may thus require some further legislative changes in future. Union Cabinet has on September 16, 2010 approved proposal to introduce the UIDAI bill (2010) in Parliament. The bill seeks to create a statutory authority with requisite power and functions of an authority such as issuing UID numbers, scope for penalties and other related matters through an Act of Parliament. The UIDAI Act following enactment would authorize the UIDAI to collect identity information such as name, gender, date of birth, parents' name, address and finger prints from people but on voluntary basis and with enough safeguards for data privacy and security (The Times of India, September 25, 2010). Aided by information and communication technology for creating an effective tax administration and financial governance system, GOI has recently set up a Technical Advisory Group for Unique

Projects (TAGUP). The move lays the ground for major structural reforms in the taxation structure - goods and services tax and direct taxes code. TAGUP headed by Nandan Nilekani, Chairman, UIDAI, will advise on the ICT architecture and ways for coordination between centre, states and local governments, possibility of introducing open protocols and utilization of open source components of other e-government projects, security challenges of malicious attacks on the system from outside, etc. TAGUP will make recommendations on human resource including modification in government rules, procedures, appropriate placement of tasks and allocation of responsibilities within the government, contracting, commercial terms and charges including procedures for competitive bidding, pricing models and suggestions on user charges. It will also suggest a road map from start up to going concern for each of these projects, which would also focus on legal or regulatory change, if any and protection of individual's right to privacy with focus on safeguards in the IT systems to protect legal and constitutional rights (The Economic Times, June 8, 2010).

Knowledge Management: KM is concerned with codification and sharing of knowledge using KM repositories and portals and IT enabled KM tools. KM is the access, retrieval and distribution of human experiences and relevant information between concerned individuals and work-groups. Accordingly, KM focuses on people - background, knowledge, skills and abilities, and their role in organizational performance and productivity. An 'explicit' knowledge can be easily expressed and documented in reports and fact sheets, 'implicit' knowledge is more difficult to express as it is often culled out from intuitions, unelaborated experiences, values, skills and habits. Success of KM largely depends on people who relate past experiences and generate new ideas; processes that generate large volume of information; and technologies that push business processes. KM contributes towards building intellectual capital of the organization, streamlines business processes by eliminating redundant processes. All information is not knowledge, and all knowledge is not valuable. The key is to search worthwhile knowledge from plethora of information available all around. No knowledge is knowledge unless it is lived and experienced. KM interfaces with other emerging HR related concepts such as 'learning organizations' and 'intellectual capital'.

Microfinance: RBI defines microfinance as a system for "provision of thrift, credit and other financial services and products of very small amount to the poor in rural, semi-urban and urban areas for enabling them to raise their income levels and improving living standards". Microcredit basically represents small loans to poor to enable them start small scale entrepreneurial activity. Outcome of microfinance is essentially microcredit. A microcredit is symbolized by small loan, smaller EMI, shorter and flexible repayment periods, etc. Realizing its importance for poverty alleviation United Nations had declared 2005 as the "International Year of Microcredit". Furthermore, a leading MFI, the Grameen Bank (Rural Bank), and its founder Mohammed Yunus, received the Nobel Peace Prize in 2006 'for their efforts to create economic and social development from below'. Most MFIs in India follow the Grameen Bank model of Bangladesh. As MFIs expand financial service opportunities to the poor, their growing popularity is leading to financial inclusion.

**Microinsurance:** Micro-insurance is defined as the protection of low-income people against specific perils in exchange for regular monetary payments (premiums) proportionate to the likelihood and cost of the risk involved (Churchill, 2006). As with all insurance, risk pooling under micro-insurance attempts to allow many individuals or groups to pool risks and redistribute the costs of risky events within the pool (Churchill, 2006). It is the pooling of risks, which makes the concepts of SHGs (self help groups) in India at center stage. The definition of micro-insurance does not differ from conventional insurance except for the target, namely, low income people. However, micro-insurance is not merely a scaleddown version of conventional insurance. As the conventional, market-based distribution system has not served low-income people adequately, the establishment of a different distribution channel is needed. Distinctive features of micro-insurance are: group pricing with links to other services, limited period and scope of coverage, limited screening on pre-existing conditions, simple and easy to understand policy document, and smaller indemnity (Hamada, 2010).

Rural Markets: Rural markets are emerging as critical area for marketers in all segments in view of market size and growth potential they offer. Increasing rural income, effectiveness of mass media and growing literacy levels impact rural markets. In rural areas poor logistics seriously impact reach of the mass media where opinion of friends and relatives matter much more than formal advertising in influencing consumer behavior. However, tapping these markets poses considerable challenge following diversity and vastness of markets and limited infrastructure to access them. In order to utilize the immense potential of rural market in India, companies need to develop specific marketing strategies and action plans to match consumers' behaviour of rural households.

Panchayats: Panchayat (village governing body) of a village/block acts as facilitator, knowledge repository and a trouble shooter. Over 28 lakh elected representatives are managing country's 2.5 lakh panchayats. A scheme of 33 per cent representation in panchayats has made it possible for 10 lakh odd women to participate in country's Panchayati Raj Institutions (PRIs) and when this representation goes up to 50 per cent, the women proportion would swell to 14 lakh. GOI has come out with a two volume report (2010) on status of PRIs, which has special focus on empowerment and accountability of village panchayats. Government of India observed the period between October 2, 2009 and October 2, 2010 as the "Year of the Gram Sabha (the upper level of village council) - for Empowered People and Accountable Panchayats." (October 2 is the date of birth of Mahatma Gandhi, Father of the Indian Nation). In the rural economy context, a village panchayat is best placed for capturing and storing the knowledge of successful experiences for benefit of rural society. Local village libraries also in some cases collect and record information about specific local resources, practices, and innovations for wider dissemination.

# Chapter 30 From E-Government to E-Governance: Winning People's Trust

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## ABSTRACT

With the e-Government concept, government services, which were normally delivered from physical infrastructures of public offices, now move closer to the clients via Information and Communication Technology (ICT). Recent advancement of mobile computing devices has made the idea of omnipresent government highly likely where the government services can be accessed by everyone anytime-anywhere. This chapter begins with the discussion of the current development of e-government followed by the evolution of e-government models. The chapter also addresses how the good governance features have been incorporated as guiding principles in e-governance practices in different societies in recent years. Finally, as its focal interest, the chapter examines and analyzes the issue of building people's trust through e-governance. Elements of trust are discussed thoroughly, and a trust model for e-governance is put forth and proposed as a guideline to develop a trusted e-governance system.

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### INTRODUCTION

The use of information technology (IT) in government institutions is not a new phenomenon. Prior to the development of the Internet and the World Wide Web (the Web), IT was used to store and process data (especially for statistical purposes), supporting government operations and to some extent to support in decision making. The use of the Internet for communication by government institutions, especially in the North America and Europe, is not new either. It was governments, research institutions and universities that use the Internet, especially through applications such as email, file transfer and remote login before the business communities actually acquired it. However, the use of information and communication technology (ICT), was merely for internal operations, meaning that citizens and businesses need to visit government offices in order to process their government related matters such as registrations, certificates, licenses and others.

With the development of the Web in early 1990s, the opportunity to provide better delivery service via the Web to citizens and businesses was recognized and the term e-government was widely discussed in the late 1990s and 2000s. The developed countries, where the computerization of government operations are well developed, quickly embraced e-government and developed electronic services to citizens and businesses via their websites or portals. The developing countries also joined the bandwagon, observing and realizing that through e-government they could improve government efficiency and provide better services to citizens and possibly cut the cost of service operation in the long run. Some governments identify e-government as one of the key factors in enhancing their competitive advantage.

E-government is an evolutionary process that started with using ICT in government to improve business processes in government organizations as well as to provide better services to its stakeholders. As such, e-government can be considered as a concept of using ICT as ways to not only organizing and managing but also facilitating government's administrative processes, especially the interactive processes between government and public. However, proper government services can only be materialized if the interactive processes (front-end processes) are linked or integrated with the related administrative or business processes (back-end processes).

The main concern of computerization of administrative process in government is efficiency. With improved efficiency of administrative processes, service delivery can be improved and enhanced. With the Web, service delivery can be further improved significantly, since services can be accessed anywhere-anytime. However, improving service delivery through the Web requires the transformation of government processes to get benefit of the Web capability. The transformation process starts off with the critical review of existing processes followed by process improvement or process reengineering depending on how far the process of improvement is expected, as well as the capacity and capability of the government organizations in managing the changes resulting from the transformation.

In essence, improving government service delivery through the Web is definitely not a simple matter, although technology to support the delivery is widely available. It needs a careful plan, coordination, leadership and proper management (including change management) to make sure the transformation process can be successfully implemented. In other words, it is not merely putting "e" to "government", it requires fundamental re-think of how to organize and integrate the various processes in a way to achieve superb delivery services electronically in a one-stop service entity (portal). Eventually, e-government should be directed to achieve citizen-centric and most importantly the involvement of citizens in the government affairs (participatory governance) to help the citizens improve their lives and to

embrace them in decision making process that affect their future well-being.

Recently, the term "e-governance" has been introduced and discussed by several authors. Some argue that the scope of e-governance is wider than e-government. This chapter will highlight the difference between them; however we will concentrate on another issue: how good governance can be embedded in current e-government systems. Therefore in our opinion, when designing an e-government application, one should consider features of good governance to be embedded on the e-government applications. So, our e-governance definition is practically embedded good governance in e-government. E-governance will not only be concerned with efficiency on process and service delivery, but also on how the system provides empowerment to citizens as well as incorporating good governance features such as transparency, responsibility, accountability, participation and responsiveness. By incorporating good governance features, e-governance should be able to improve trust to government from its stakeholders. A key thrust of this chapter is also to look into one of the key challenges facing e-governance today - building people's trust in governance. Some societies are moving ahead faster than others in realizing the importance of addressing this agenda.

The main objective of this chapter is to present an evolving concept of e-government – e-governance and then to argue that good governance features must be embedded to e-government in order to build a highly trusted e-government system. This chapter is organized as follows: after the introduction, we offer a discussion on the current development of e-government in section two. Some models of e-government as well as the evolution in e-government practices are discussed here. In section three we explain e-government vis-à-vis e-governance and the link between the two concepts. Here important features of good governance are also highlighted as the key ingredients of e-governance. In section four, we address how good governance features have been incorporated as guiding principles in developing e-governance applications in some countries in the recent past. Section five examines the role of e-governance in building people's trust. Elements of trust are discussed thoroughly and a trust model for e-governance is proposed as a guideline to develop a trusted e-governance system. We then conclude this chapter in section six with some way forward ideas.

# E-GOVERNMENT: AN EVOLVING CONCEPT

The narrative of this section is based on United Nations Global E-Government Survey in 2001 (Ronaghan, 2002), 2003, 2005 (readiness report), 2008 and 2010 (United Nations, 2003, 2005, 2008, 2010). Before we explore the development of egovernment based on the UN surveys, we would like to discuss the evolution and development of e-government models.

The use of ICT in government is not new. Many e-government initiatives are basically the continuation of computerization projects in government agencies in 80s and 90as. For example, during 80s until mid 90s the government of South Korea (ranked 1<sup>st</sup> in United Nations E-Government Survey 2010) utilized computers to store government and related information in digital format.

Various administrative databases and infrastructure were constructed to provide basic government service to public and private sectors. The basic information technology to support computerization projects are powerful hardware such as mainframe computers, centralize database management systems and computer networks. Most of the systems developed were focus on back-end processes, since front-end technology was not well-developed. With this system, government services can be improved since information was available in digital format and information retrieval was done much faster compare to manual system to support government services to clients.

Previously direct access to such services via computer network was very limited since dedicated computer terminals need to be provided. However, after the development of the Web in the early 90s coupled with the widespread use of the Internet has made direct access to services (e-services or online services) highly possible. Some governments (such as Singapore and South Korea) even instituted campaigns to gain greater use of the Internet and e-government services by its citizens (IDA, 2006).

With the development of the Internet and the Web technology, innovations in business and government have started to flourish in a high speed. According to Drucker (1999) the truly revolutionary impact of the information revolution is ecommerce where the Internet (in this case the Web) emerges as the major global distribution channel for goods, services, managerial and professional jobs. The fast development of e-commerce in the business world has an enhancing effect on the usage of ICT is government. Similar to e-commerce that change the way in which business interact with their stakeholders, e-government transforms the ways in which the government and the public at large (individuals and organizations) interact with one another. E-government in essence has provided a new way of delivering government services to its stakeholders.

With the development of the Web, myriad of the front-end processes that took advantage of the Web technology developed, and at the same time the client-server technology also has mature enough to support advance e-service with relatively low cost since a very powerful computer such as mainframe is not needed. In addition, the low cost the internet infrastructure can also be used immediately. As a result the government services can be accessed anywhere-anytime. Over the years we have witnessed the fast development of the e-government systems. E-government has now been fully adopted as a way to delivery better service to government clients.

There are several development models for egovernment proposed in the literatures (Hiller & Belanger, 2001; Layne & Lee, 2001; Ronaghan, 2002; Wescott, 2001). According to Coursey and Norris (2008) these models have similarity in many aspects; they propose linear and stepwise development of e-government starting from a web presence to full integration, seamless and transformation. A typical stage model proposed is the Web Presence Measurement Model used by United Nations (Ronagan, 2002; United Nations, 2003), which has five stages as follows:

- Stage 1 (Emerging): Limited web presence
- Stage 2 (Enhanced): Easily accessible information on policy
- Stage 3 (Interactive): Online services and interactive portal sites
- Stage 4 (Transactional): Two-way interactions and online transactions
- Stage 5 (Connected): Seamless online service and integrated back-office infrastructure

In Stage 1, e-government provides disseminating information to public via the Web in a limited way. Much of the information in the Web is static. Link to ministries, departments and other agencies and contact numbers are normally provided.

In Stage 2, e-government provides more information, including public policy and governance. Updated to this information are done frequently. Links are arranged properly and archives of information are accessible through links. Government publications, legislations, newsletters are available. Search features and email addresses are also available.

In Stage 3, e-government provides varieties of online service including downloadable forms or filling forms online. Content of information are frequently updated. Some interactions via various means such as email and post comments area are normally provided. Search engines are normally available.

In Stage 4, e-government provides secure and efficient on-line transactions to substitute manual and complex transactions. Examples of on-line transactions are license registration or renewal, passport/visa application, electronic payment, on-line procurements, on-line tender and others.

In Stage 5, e-government reaches to the highest level of service capability. It includes transformation of operational processes to provide the best service (more efficient, integrated, unified, and personalized service). Various governments' organizations are connected and organized to provide seamless service to citizens and other stakeholders. Various connections are established to support efficient and seamless service delivery, such as horizontal connections (among government agencies), vertical connections (central and local government agencies), infrastructure connections (interoperability issues) and connections between governments and citizens and connections among stakeholders

It is important to note that the stages models do not strictly be additive (linear and stepwise). This is confirmed by finding in United Nations E-Government Survey in 2003 (United Nations, 2003). The report states that "There are no evolutionary development stages in e-government. Countries can - and do - jump from the stage of emerging or enhanced presence with limited information to the transactional stage or networked stage in a short time."

United Nations Survey in 2001 (Ronaghan, 2002) discovered among 190 UN members surveyed, the majority of e-government was in stage 1, 2 or 3. Only 17 countries reached stage 4 and none reaches stage 5. This is perfectly normal since e-government in the early 2000s was at its infancy. Interesting to note that even at the early stage, single point of entry (portal) was adopted by many countries. The survey report also mentions and defines e-governance. Governance is defined

as the process by which institutions, organizations and individuals guide themselves.

Most of the e-government websites surveyed in 2003 (United Nations, 2003) indicate that they were advancing to higher stages (stage 3). But the number of e-government websites that were advancing to stage 4 and 5 were still limited. In general, e-government was still at its early stages.

It is interesting to find that the survey also measure e-participation through the web presence. E-participation Index is a measurement of the quality, relevance, usefulness and willingness of government websites to provide information and participatory tools and services to people on the Web. In 2005 the measurement of e-participation is extended to include the willingness of citizens to participate on e-government program through the available participation tools (United Nations, 2005).

Measuring e-participation indicates that involving citizens in e-government activities is considered important. Developing participation tools is aimed to engage citizens' involvement in various government affairs, especially those decisions which may affect their well-being. Involving citizens is a good development to embrace good governance in e-government, hence moving toward e-governance.

Citizen participation is one of the key features of good governance. E-participation is a good way to increase participation of citizens in any public affairs. In addition, it encourages citizens to participate in public decision making which may affect their well-being. Three objectives of e-participation mentioned (United Nations, 2005), which are:

- 1. Increasing e-information to citizens for decision making.
- 2. Enhancing e-consultation for deliberative and participatory processes.
- 3. Supporting e-decision making by increasing the input of citizens in decision making.

There was quite a significant progress of egovernment in 2005 compared to 2003 based on the surveys conducted by United Nations. Large number of public services provided by e-government websites, and there are many services that provide the interactive and transactional capability. For example, 25% of the UN member states (44 countries) offered online payment. It was stated that the majority of United Nations member states (93.7%) have embraced electronic delivery through the Web. However, the majority of UN member states still do not use the full potential of e-government (United Nations, 2005).

Based on United Nations World Summit in 2005 that outlined a vision of "building a peoplecentered and inclusive information society, putting the potential of information and communication technologies at the service of development and addressing new challenges of the information society", United Nations E-Government Readiness Survey 2005 (United Nations, 2005) introduced the concept of e-inclusion.

E-inclusion is to embrace all citizens through using ICT in addressing the issues of access-divide and promote opportunities for economic and social empowerment for everyone. E-inclusion can become a key tool for socially inclusive governance in establishing an information society.

Further development in e-government moving toward connected governance is captured in United Nations E-Government Survey in 2008 (United Nations, 2008). The advantage of employing ICT to deliver public service highly recognized and myriad of public services through the Internet and the Web have been offered by many countries.

The need to improve the service delivery with emphasizes on achieving cost savings and enhancing efficiency through integration was realized. There was a shift of focus from providing e-services offered by each public organization to providing integrated e-services offered by coordinated and collaborated public organizations through sharing of infrastructures, data and business processes. With connected governance related inter-governmental processes can be integrated vertically (agencies within the same organization/ institution at various levels) as well as horizontally (between agencies at the same level, but from different organization/institutions) with possible inclusion of private sectors or other stakeholders.

Obviously moving away from traditional silo based governance to connected governance offer some advantages including cost-saving and efficiency services as connected governance implies better coordination, collaboration, integration and efficiency of back office systems and at the same time providing improved service delivery and better capability to respond to citizens need.

Many developed countries such as US, Western Europe, Singapore, South Korea and Japan embraced the idea of connected governance. Connected governance requires good infrastructure, integration and transformation and the developed countries do not have difficulties to provide them. Many developing countries face problems rooted in infrastructure; however, there are growing examples of integration and transformation in the developing world as well, such as, those done by United Arab Emirates, Mexico and Malaysia. In general, the survey indicates that governments were moving forward in e-government, although those advancing toward connected government were still limited.

Based on the recent survey conducted by United Nations E-Government (United Nations, 2010) the number of government e-services continues to grow rapidly. The survey measure digital foundation for citizen empowerment and inclusion of using four benchmarks: 1) providing basic information service online, 2) the use of multimedia technology and the promotion of two communication with citizens, 3) the use of Internet to deliver public service and solicit occasional input on matters of public interest and the connection of public service function and consultation with citizens routinely on matters of public policy. Nowadays, we are experiencing the growing use of mobile communications and Web 2.0. In line with this development, the survey found the growing use of mobile technology by governments in engaging citizens through SMS, alert notification or full-fledged mobile service. Mobile technology is considered as a powerful tool for public service provision and delivery. It seems mobile service is becoming more popular in the near future. Some countries, such as South Korea, are moving toward ubiquitous government (u-government).

There is also a trend to use Web 2.0 for eparticipation linked to public service delivery. Many countries (especially developed countries) use Web 2.0 to create more interactive environment for their e-government websites. Web 2.0 is a powerful interactive tool that cannot be missed by e-government.

An interesting finding is that governments start accepting the term customers for citizens and some countries actively seek customer satisfaction for their online services. They actively engage citizens to response on their customer satisfaction survey in online polls, blogs and social network tools.

Treating citizens as customers is indeed a paradigm shift in providing service to citizens in which citizens' concern and their satisfaction on the service provided is highly considered. And providing such customer service excellence including service recovery is also very strategic (Low, 2006, 2002, 2000). Osborne and Gaebler (1992) introduce entrepreneurial government in which government reduces bureaucracy, focuses on results, decentralizes authority, and promotes competition inside and outside government. To improve efficiency and improve services, government privatises their services. Government clients are redefined as customers who are empowered to choose better service providers. Customer-focused services are implemented as people-centred government, which is responsive to people (customer) demand.

As such, in e-government/e-governance context, governments, through better coordination of its various departments and ministries, offer richer online content, better website designs, interaction and e-service to serve customer better. Government portals are becoming more integrated, attractive and user friendly.

It is quite clear that it is not the citizens who are promoting the development towards a true e governance such as Singapore's eCitizen and e-government systems in South Korea, but rather most governments are leading, campaigning, persuading, surreptitiously or indirectly dragging the citizens into e-government/e-governance. Besides, citizens are also pulled and get attracted to egovernment/e-governance such as the availability of more information, greater transparency as well as the delivery, responsiveness and efficiency of the public sector.

# THE JOURNEY FROM E-GOVERNMENT TO E-GOVERNANCE

With the advent of rapid and unprecedented ICT, governments from North to South have embarked on e-government strategies. Some of them such as Canada, U.S, U.K., South Korea, and Singapore have succeeded in implementing e-government reforms somewhat rapidly than other nations. These countries have tried to achieve stage 4 and 5, as noted above. In fact, a movement away from stage 3 (*Interactive*: Online services and interactive portal sites) to stage 4 (*Transactional*: Two-way interactions and online transactions) can be labeled as a journey from e-government to e-governance.

To tinge further the transformation from egovernment to e-governance, one has to look at the linkage between government and governance. Silverman views "Government" as a formal organization and "Governance" as being a social function which can be performed by both formal



Figure 1. Eight characteristics of good governance

and non-formal organizations. That distinction is important if we are to give proper notice to and build on the strengths of existing non-formal organizational capacities among the people. Distinctions are also made among several terms that are often used synonymously, such as "welfare" versus "development," "beneficiaries" versus "consumers," and "participation" versus "mobilization." Such distinctions help clarify the need for legitimate governance structures and processes in which civil society and the people in particular have an essential role. Thus, "development" inherently involves relationships, processes and organizations (Silverman, 2000). The aspiration of the top performing countries in getting to stage 4 and 5 is a reflection of embracing the good governance elements in e-government strategies.

According to United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), good governance has eight major characteristics (Figure 1). It is participatory, consensus oriented, accountable, transparent, responsive, effective and efficient, equitable and inclusive and follows the rule of law. It assures that corruption is minimized, the views of minorities are taken into account and that the voices of the most vulnerable in society are heard in decisionmaking. It is also responsive to the present and future needs of society (UNESCAP, http://www. unescap.org/pdd/prs/ProjectActivities/Ongoing/ gg/governance.asp)

Haldenwang (2004) observes that the discussion involving e-government and good governance connect well with each other because both concepts share the same objectives, even though their respective focus may be different. Administrative efficiency, the quality of public services and democratic participation are core principles of both. E-government, however, offers the chance to overcome a certain particularistic focus prevailing in many good governance initiatives in favor of a more integral understanding of state reform. Although the World Bank and UNDP have different project portfolios and diverging views on some aspects of state-society relations, it can be argued that the World Bank's understanding of good governance constitutes a basic vision shared by both organizations. This vision embraces democratic and legitimate political institutions, efficient and accountable public administrations, the rule of law and the guarantee of human rights, as well as an effective public regulation of markets. Other multinational actors, such as the Organization for Economic Co-operation and Development (OECD), have taken on similar positions.

Haldenwang (2004) sees that the reason for egovernment being introduced as a vehicle for the promotion of good governance lies in its dualistic approach to state modernization: it combines an internal focus on administrative reform with an external focus on state-citizen (or state-customer) relations. In the context of rapidly changing roles for public and private actors in the development process, e-government is seen as an instrument to simultaneously (i) increase the efficiency of public administration, (ii) improve public service delivery, and (iii) strengthen the openness and transparency of political processes.

Bhatnagar (2004) discussed various positive impact of e-government on good governance. The summary of e-government impact on good governance according to Bhatnagar is shown in Table 1.

It is important to note that an e-government application has to be designed with clear goals of

Good governance goals	How e-government can help
Increasing transparency	<ul> <li>Disseminating government rules and procedures; citizen's charter; government performance data to wider audience.</li> <li>Disclosing public assets, government budget; procurement information.</li> <li>Making decisions of civil servants available to public.</li> </ul>
Reducing administrative corruption	<ul> <li>Putting procedures online so that transactions can be easily monitored.</li> <li>Reducing the gatekeeper role of civil servants through automated procedures that limit discretionary powers.</li> <li>Eliminating the need for intermediaries.</li> </ul>
Improving service delivery	<ul> <li>Having less time in completing transactions</li> <li>Reducing cost associated with travel for citizens to interact with government.</li> <li>Improving government's ability to deliver service to larger segment of population.</li> </ul>
Improving civil service performance	<ul> <li>Increasing the ability of managers to monitor task completion rates of civil servants.</li> <li>Improving the efficiency of civil servants by automating tedious work.</li> <li>Increasing the speed and efficiency of inter- and intra-agency workflow and data exchange.</li> <li>Eliminating the redundancy of staff.</li> </ul>
Empowerment	<ul> <li>Providing communities a new channel to receive government service and information.</li> <li>Reducing the brokerage power of intermediaries.</li> </ul>
Improving government finance	<ul> <li>Reducing cost of transactions for government processes.</li> <li>Increasing revenue by improving audit functions to better track defaulters and plug leakages by reducing corruption.</li> <li>Providing better control of expenditure.</li> </ul>

Table1. E-government impact on good governance

Source: Bhatnagar (2004)

good governance in mind to turn the potential benefits into real benefits for government and its stakeholders.

Many of those who participate in the debate on e-government and e-governance are convinced that the new ICT will lead to a fundamental change in the relation between state and citizens, with a concurring redefinition of their respective roles. These expectations are based on the observation that the intensification of information and communication flows that characterizes e-government strengthens the capacity of public institutions as well as the transparency and openness of political processes. If this is taken as a general trend, states will be able to improve their governance significantly through e-government, while at the same time civil society will be better equipped to articulate its interests and hold public agents accountable (Haldenwang, 2004).

E-governance therefore goes far beyond the initial concept of e-government. It is more than just the application of the ICT to improving service delivery (too often of change 1 level only), something we have also labeled the "digitalization of the existent". Rather e-governance is a much broader framework for considering the co-evolution of the information and communication technologies with the political institutions, taking in particular into account how these political institutions and the State more precisely are evolving in the context of globalization and by doing so, crystallizing all other (Rossel & Finger, 2007).

With regard to the linkage between e-government and e-governance, an UN e-Government survey conducted in 2001 (Ronaghan, 2002) perceived the three following modalities

- 1. **E-Government:***Inter-organizational relationships* 
  - Policy coordination
  - Policy Implementation
  - Public Service Delivery
- 2. **E-Administration:***Intra-organizational relationships* 
  - Policy Development
  - Organizational Activities
  - Knowledge Management
- 3. **E-Governance:***Interaction between citizens, government organizations, public and elected officials* 
  - Democratic Process
  - Open Government
  - Transparent Decision-Making

It is apparent that e-governance facilitates the interactions between citizens, government organizations and elected officials and how the internet can improve the governing and policy making process in a range of areas such as e-federalism (e.g. changing relationship among the levels of government); administrative professionalism (e.g. e-ethics; increased transparency); e-democracy (e.g. enhancing citizen participation; online voting); policy-making environment framework (e.g. implications of initiatives like recognizing the legality of e-signatures; greater citizen participation in the policymaking environment) and so on (Ronaghan, 2002).

In the past, citizens presented themselves to governments that stood between them and the information and services they wanted. In contrast, e-governance ensures citizens direct access to information and services on their own terms without regard to the government agency behind the counter or service. This requires the bureaucrat that used to control that information, and indeed all government, to take on a whole new role in serving the citizen. Instead of being served at arm's length as a customer, the citizen now has assumed their rightful place as the proprietor and must be regarded and respected as a shareholder in the business of government. And it is this citizen who will define the details and determine the future and nature of digital government, e-governance. This is in line with the view citizens as customers, which implies the need and well-being of citizens will shape e-governance systems.

Therefore some societies have witnessed a steady shift from the e-government focus of "improved service delivery" to e-governance focus of "connecting citizens and society with government" to develop and strengthen state-society relationships and build people's trust and confidence in policy leadership. E-governance concerns about the interaction between the public sector and society, involving society in making decisions of their concern and provides the transparent mechanisms for observing those decisions. E-governance is thus defined as the public sector's use of ICT for delivering improved service, reliable information and greater knowledge to all citizens to facilitate access to the governing process and to encourage more citizens' participation.

# ACHIEVING GOOD GOVERNANCE AGENDAS THROUGH E-GOVERNANCE APPLICATIONS

E-government has been utilized by many countries as an enabling tool to achieve good governance (Bhatnagar, 2004). With plenty examples on how some good governance features embedded to egovernment, there is no doubt that e-government is becoming an excellent vehicle to bring about or enhance good governance. There are many examples of e-government applications that address good governance features. We will explore some applications that address good governance features: participation, transparency, accountability, effectiveness and efficiency, responsiveness, and equity.

## Participation and Equity

Participation and equity are two important concepts related to citizens in relation to government in good governance context. In any e-governance system, these concepts should be included in the system to empower citizens and to treat them fairly.

Participation is the involvement of a citizen in any public affairs and given a chance to voice his/her concern in decision-making either directly or indirectly, in which decisions made may affect his/her well-being.

Equity is fairness of treatment of fairness of opportunity for everyone regardless of gender, skin color, race, language, etc. For example, equity access of information is to provide information to everyone, hence to reduce the gap between those who can access with those who cannot or has difficulty to access. One of the prominent issues is digital-divide.

United Nations introduces the concept of eparticipation since the early 2000s and a concept of e-inclusion in 2005 to address participation and equity in accessing information as discussed in Section 2.

E-participation has been considered as one of the key element of e-government by United Nations since 2003. United Nation (2008) proposed a framework of e-participation which contains three elements:

- 1. **E-Information.** The government website offers information on the list of elected officials, government structure, policies and programmes, points of contact, budget, laws and regulations and other information of public interest. Information is disseminated through a number of online tools such as: community networks, blogs, web forums, text messages (micro democracy), news-groups and e-mail lists.
- 2. **E-Consultation.** The government website provides the tools necessary for e-consultation. It allows citizens to set the agenda

for the debate through e-petitioning. The government ensures that its elected officials have a website to communicate directly with their constituents. It maintains an archive of their discussions and provides feedback to citizens.

3. **E-Decision making.** The government is willing to take into account the e-inputs of citizens into the decision making process. The government informs its citizens on what decisions have been taken based on the consultation process.

In 2010, South Korea achieved the full score (1.000) of e-participation followed by, Australia, Spain, New Zealand and United Kingdom. Among the developing countries that are considered to have a good e-participation are Bahrain, Malaysia and Kazakhstan. Here are some good examples of e-participation implemented in countries such as South Korea and Malaysia.

E-People (http://www.epeople.go.kr) of South Korea integrates e-participation with all the available e-services. It is an online portal that was designed for the concern of the people. It integrates petition, proposal, corruption reporting, administrative, and policy discussion services operated by 303 governmental organizations including central administrative organizations, local autonomous bodies and public institutions.

The Government of Malaysia developed mySMS which is an SMS-based that enable eparticipation (http://www.mysms.gov.my). The system allows users to receive information or documents on demand. It has the capability to broadcast information from government agencies, including emergency information to basic notifications such as an expired notification. In addition, it allows users to submit complaints to government agencies.

A good example on how equity access of information is e-Seva, which was dedicated for Women in rural India. This is an excerpt from 2010 United Nations E-Government Survey 2010 regarding e-Seva (United Nations, 2010):

Government centers for e-Seva (e-services) have been set up in rural areas across India. The e-Seva effort in West Godavari district, Andhra Pradesh, was initiated to introduce C2C (citizen-to-citizen) and C2G (citizen-to government) services in rural areas, particularly to women. Internet kiosks or e-Seva centers at the block level were put under the control of women's self-help groups. Over time, women became active users of the services and technologies offered at the centers, and the kiosks became an important interface for communication and transactions between the local administration and the community. The women managing the e-Seva centers have become information intermediaries and information leaders in their villages, with improved standing and increased influence as a result. Members of the e-Seva collective also travel from village to village with a portable receipt printer to provide utility payment services.

In the United Kingdom, local authorities have not only created e-participation activity on their own websites but also attempted to connect with and to facilitate e-participation activities with citizens and civil society groups within their own area. These are organized into four key sections:

- local authorities' perception of their own activity
- citizen feedback via the internet on service delivery issues
- use of the internet for citizen input to policy consultation and debate, and
- current e-participation efforts and the Good Practice Guidelines

Two best practices in e-government projects involving local authorities and citizens are presented below.

# Rutland County Council, UK

www.rutnet.co.uk

Rutland County Council's website is hosted by Rutland On Line Ltd. as part of 'Rutnet'. Discussion forums on Rutnet are administered by Rutland On Line Ltd. and provide a space where any person or group is allowed to set up their own forum or to introduce a new topic within existing forums. Rutland County Council has an interest in some of the topics, such as local transport and infrastructure, which are discussed in the forums. For this reason, several of the authority's employees visit the discussion forums regularly in order to note what is being discussed and to make sure that any relevant issues are brought to the attention of the appropriate officer. In addition, elected members frequently post messages both as private individuals and also in an official capacity in order to put the authority's point of view on the issue being discussed. In most cases it is clear whether or not elected members are speaking on behalf of the authority. Although these councillors have chosen not to reveal their email addresses in the discussion forums, these are available elsewhere on Rutnet, allowing citizens to e-mail them privately if they wish.

# Nottingham City Council, UK

www.nottinghamcity.gov.uk

The press office at Nottingham City Council is responsible for identifying online discussion spaces being used by Nottingham residents. Officers working in the press office monitor the online discussion forums introduced by BBC Nottingham and the Nottingham Evening Post in order to identify concerns raised by citizens that relate to the authority. These websites can be reached by a link from the Nottingham City Council website and their bulletin boards cover topics from local public transport to the effect of pigeons on the city centre. Those monitoring these websites don't generally wish to post messages

themselves as it is felt that doing so might be seen as an attempt to control debate. The forums are usually just monitored with information being e-mailed to the appropriate officer if it is felt that the authority needs to take a specific action. Occasionally though, a response from the authority is posted to ensure that accurate information is available for citizens participating in the debate. Nottingham City Council also has a partnership with Nottingham Web Resources, a local, noncommercial website. Nottingham Web Resources maintains a list of links to local websites and these links are then placed on the City Council website. In addition to identifying locally relevant websites, Nottingham Web Resources hosts a discussion forum on its own site, which can be reached via a link from the City Council's website. The forum is similar to that on Rutnet and, although not particularly well used, is also monitored by council officers.

### Transparency & Accountability

Transparency is the freedom to access information related to public affairs and can be accesses easily when needed and the information should be easily understood. Decisions taken and their enforcement must be based on laws and regulations and decision making process must be transparent. Accountability is the responsibility of decision-makers (either in public sectors or private sectors) to whatever decisions made. She/he is accountable to decision making process and the outcome decisions to public as well as to institutional stakeholders.

Many e-government applications, even a simple web presence can be used to promote more transparency and accountability. For example, online availability of laws, regulations, procedures and tariff can reduce bribery and cut unnecessary intermediaries and red tapes. Disclosure of public asset, budget and procurement information will reduce corruption. Electronic procurements will definitely speedup the procurement process. Besides, it can help to fight corruptions if it is designed properly. Electronic transactions on administration and finance must be traceable and auditable easily and any anomaly can be detected quickly. During the financial crisis in 2009 and 2010 many governments use large amount of stimulus fund to calm down the crisis. To enhance the transparency and accountability of the stimulus fund and to keep track of the spending, many governments use online tools to let the public monitor the spending (United Nations, 2010).

Here are a couple of notable examples when e-government applications are designed to fight corruptions and to promote transparency and accountability. OPEN (Online Procedures ENhancement for civil applications) and E-procurement in some developing countries.

OPEN (Online Procedures ENhancement for civil applications) is a Web-based e-government application that designed to combat corruption in Seoul, the capital city of South Korea (Bhatnagar, 2004; Cho & Choi, 2005). Operated in 1999, the OPEN system is designed to heighten transparency and accountability by providing open access for anybody, anytime, anywhere to file applications (such as permits, registrations, procurements, contracts and licenses) and to monitor the review and approval process at real-time online.

E-procurement increases transparency by keeping traceable electronic records of procurement transaction online. *Compranet* is e-procurement system developed by Mexico Federal Government to make procurement more efficient and transparent (Bhatnagar, 2004; Estrada, 2001). The system includes information and registration, e-purchasing and e-tendering.

# Effectiveness, Efficiency and Responsiveness

Effectiveness is basically fulfilling the needs and efficiency is to produce the intended results by using the available resource optimally. Responsiveness is to respond to a request within a reasonable timeframe. ICT-based applications, including egovernment, must be designed with effectiveness, efficiency and responsiveness in mind. Even a simple static web-based e-government can provide very effective and efficient access to information. In general the higher the stage of development of the e-government applications are, the more effective, efficient and the more responsive they are in responding to queries. Some examples below illustrate the effectiveness, efficiency and responsiveness of e-government applications.

The eCitizen Web Portal in Singapore (http:// www.ecitizen.gov.sg) is a citizen-centric to improve government services. It is an example of one-stop shops for citizens of Singapore to access information and services from various government departments in a fast and convenient way. The portal offer many government services such as licenses, school registration, tax return, payment fees and fines, etc. This portal won the acclaimed Stockholm Challenge Award in the year 2002 (Parks, 2005).

The Philippines Custom Bureau has developed online systems to process clearance of imports, payment of duty, and delivery of release orders for shipments to leave the docks. The system was implemented using a standard software package ASYCUDA, developed by UNCTAD. The new system works very well. It has improved the efficiency of cargo processing of 8 days with the manual system from 4 hours to 2 days with the new online system. The new online system has not only improved efficiency of processes but also has reduced the cost of trade for related businesses, minimized fraud, and helped the Bureau to maximize revenue (Bhatnagar, 2001, 2004).

The municipality Vijaywada of India has developed The Vijaywada Online Information Center (VOICE) to deliver the municipal services such as building approval, birth and death certificates, collection of property, water and sewerage taxes. The VOICE system uses five kiosks located close to the citizens. Some information can be accessed from an Interactive Voice Response System. Those with an Internet connection can also connect to the Web server and retrieve information.

The system has provided benefits both for the municipal government as well as citizens. It reduces corruptions, improves services (faster and more convenient), and as a result, the municipality has become more responsive. It was reported that in just under a year, the system issued 15,000 birth/death certificates, 2,100 building approvals and 224,000 demand notices for taxes. Nearly 7,700 grievances were registered, of which 97% were resolved. The commissioner can view these statistics by wards and departments, making monitoring more effective (Kumar, 2001).

# E-GOVERNANCE AND PEOPLE'S TRUST

This section examines e-governance and the people's trust. The elements of trust will now be examined and discussed. A trust model for e-governance is also put forth and proposed as guidelines in developing highly trusted e-governance systems.

To have trust is to have confidence, hope or good feeling and overall being happy with what is given or provided for by the target. To have trust in a target is to have belief and/ or faith in the object/person/organization, and thereby feeling secured or comfortable with the object/ person/organization (the target). What more, trust supplies the basis of relationship between customers and organizations. Trust diminishes feelings of insecurity, binds people together, and allows confidence of the target.

According to an Organization for Economic Cooperation and Development (OECD, 2000) report, civil service is a public trust. The citizenry expect civil servants to serve the public interest with fairness and to manage public resources properly every day. Fair and reliable public services inspire public trust and create a favorable environment for businesses, thus contributing to good-performing markets and economic growth.

E-government surely helps to improve the confidence and trust of the citizens and businesses of the government. Confidence in the effectiveness and efficiency of government procedures and/or services when dealing with government departments certainly help to build and grow the stakeholders' trust of the government. Though trust is not earned overnight, it can take some time to be built upon. This also implies that trust needs to be nurtured or grown. The level of trust will continue to expand with each successful positive online transaction and interaction.

### Elements of Trust

Human beings, on the personal level, are social beings who cannot live alone; therefore they need to interact or relate with one-another to fulfill their individual or respective needs. To interact positively, a level of trust is needed. On the corporate (in this case, government) level, a trust between a corporate (government) and the citizenry as a whole and (any of) its stakeholders must be established in order to create mutual benefits.

In *Trust: A Sociological Theory*, Sztompka (2000) discusses trust in detail. Accordingly, there are three basis of putting trust to targets (either persons or social objects such as businesses/ stakeholders) and they are reputation, performance and appearance.

#### Reputation

Putting trust is said to be largely centered on reputation. And reputation or standing is basically a track-record of past actions. A good track-record implies a good reputation and vice-versa. Among other things, reputation is based on the government of the day – its credibility (the quality and believability of the government leaders' words) and dependability (doing what they said they would do or whether the government delivers its promises), and the ability of the public organization or the civil service to make good of its service delivery.

In the case of e-governance, the authors would argue that valuing the common good is critical in contributing to its reputation when building trust. Valuing the common good is basically demonstrating the ability to put aside self-interest for the good of the bigger team (organization/nation) as whole, customers (citizens/businesses) and other stakeholders. Because e-government/governance is essentially a public body, and it involves a range of services to the citizenry as well as their wellbeing, valuing the common good is all the more important in contributing to reputation.

Good or effective leadership is also another critical reputation factor; it lays the groundwork and good-quality implementation of the egovernment/governance (Kifle and Low, 2009). Good leadership is responsible for augmenting or boosting the reputation component of trust. The strong political will, doing what it sets to do (as in the case of Canada, Singapore, South Korea and the United States), and championing of the cause, the setting up and implementation of e-government and e-governance and having a clear vision also expand the reputation and increase the people's trust of e-governance.

Where the reputation of e-governance is concerned, the effectiveness and efficiency to deliver its services are also very critical. Digital government procedures have the capacity in developing and transforming citizen to government interactions in two ways. E-government improves service delivery, including costs; and it also improves communication between the citizenry and the government (Fountain, 2001; Siefert & Peterson, 2002). When services are well delivered, the citizens are satisfied; and this promotes confidence which builds up trust. Without communication or with little communications, there are ordinarily little information and much suspicion. But with greater rapport, increased communications, explanations and clarifications, greater flow of information is in place, and this breeds familiarity. And familiarity breeds more confidence, and in turn trust grows.

# Performance

The key concern in the Internet world (that is, ebusiness and e-government) is how to trust that we are buying from the right shop, we are paying the right person, no duplicate payment, we are dealing with the right entity, the goods will arrive after we have paid for them, our privacy is well-protected, our personal files and records are kept securely, our business process transactions are treated professionally, and that there is nobody monitoring our credit card details or our login credentials. Such issues of the networking environment have to be resolved by the performance of the e-governance systems before the people can put our confidence and trust in the e-transactions system.

Trust of the e-government is very much based on its performance. Performance is the results of measurement of current actions. Having trust based on performance is riskier than having trust based on reputation since performance does not consider past actions.

To e-perform well, governments, among other things, certainly need to ensure, for example, availability of any potential customers (anyone with Internet capability), cost-effective delivery channel and ensuring streamlined enrolment such as accepting applications via a secure Web site, and through it, businesses can speedup application processing, reduce processing costs, and improve customer service. Governments need to also ensure widespread of services through better customer knowledge and need. Performance can also be improved by making government eservices friendlier so that more people will know how to use it.

Based on the researchers' interviews with various e-government agencies/ stakeholders in Singapore and South Korea, "the leadership that drives", "the Government's good example" and "(the government's) pro-business stance or attitude also ensure....good performance of egovernance systems" really help to promote the people's trust of e-governance systems. Besides, the close government and business relationships and partnerships result in better understanding of the businesses' e-needs and their working together to seek mutual benefits.

Improved performance comes hand in hand with betterments, service recovery and excellence. E-Government agencies need to "Think Like the Customer" (TLC) to satisfy them (IDA, 2006; Low, 2006; 2002, 2000). Complaints and feedback are attended to. Service and care needs to be made to attained service excellence, and that the customers are satisfied. And that a steady stream of customers – existing and new, is satisfied. And because of service excellence, suspects become prospects, prospects become customers, and existing customers become advocates and champions, moving up the service ladder (Low, 2006, 2002; 2000).

Among these factors, hope, a critical 'distilled' factor, appears to contribute, in the main, to ('better') performance and it helps to increase the trust of the people on e-governance systems, the latter also builds or secures a futuristic landscape; and from the citizens' viewpoint, it gives expectations of things to come to them; these the authors found it true and relevant in their current studies in both Singapore and South Korea. It gives optimism and faith to the people, of better or greater things to come, so to speak, perhaps, more e-services, more convenience, a better lifestyle and a host of other benefits. In short, it enhances the people's trust level of the e-Governance systems.

Besides, there should be strategic maintenance and continuous improvement of logistics, support and the overall systems (Low, 2009) not only for smooth, actual functioning, but also to provide the sizzling or Public Relations and Marketing effect. Governments should not only be interested, but also proactively monitor their actual practices. They should check their e-government performance through surveys and/or other measurements made by various international bodies such as the United Nation surveys so that they are aware of its standing, ranking and reputation. Besides, they can update its technology, and upgrade and better its e-services. The Government of island-Republic of Singapore, for example, is always interested in surveys involving or measuring Singapore's e-government/governance. Singapore's efforts in information-communications (infocomm) have not gone unnoticed; Singapore was ranked top in the world in 2004-2005 by the World Economic Forum's Global Information Technology Report and second in 2005-2006. In 2005, Singapore was ranked third in the Annual e-Government Leadership Study of 22 countries by Accenture (IDA, 2006).

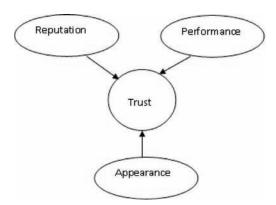
#### Appearance

Trust is also based on appearance, that is, relying trust on external characteristics, demeanor, or labels, assuming those characteristics, demeanor or labels reflecting personality, identity, or status. In the case of e-government, the appearance includes its portals, logos and its layout and designs. Here, there is a need to give government websites a more "cool" image as well as making them easier to understand by having video content and provide avenues for greater interactivity.

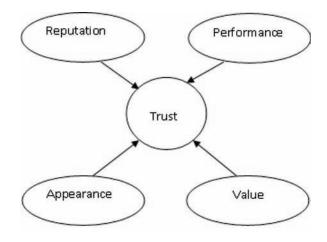
#### Value Match or Congruence

To the three fundamentals of trust (Figure 2), the authors would wish to add the fourth fundamental or base, that is, of value match or congruence. To begin with Caildini (2008, 1984) speaks of people like people who like them. [At the individual level, one is inclined to be easily influenced by people one likes.] In other words, we are inclined to be easily influenced by people we like.

To extend this further, we could also say that we would like people who share or have the same values as us. They who share our values can be



*Figure 3. Low-Almunawar-Rahman-Mohiddin's four fundamentals of trust* 



our friends or buddies. People who share the same values as us share our core beliefs, and in most ways, we feel secured/ safe, if not comfortable, talking and mixing with them (Figure 3).

Citizens also like the system when there is no or little corruption, reinforcing the basis of trust as provided by reputation, performance and appearance. E-government can also contribute or help monitor corruption and hence better enforce laws and policies that ensure accountability and transparency by standardizing data collection methods, tracking actions and decisions and developing a feedback/complaint mechanism. This needs to be complemented with the development

#### Figure 2. Three fundamentals of trust

of institutions, laws and practices that protect "whistleblowers," imposing of powerful disincentives for corruption and punishment for those involved in corruption (Bhatnagar, 2007). Take the case of South Korea, in 1998 Seoul's Mayor kicked off an anti-corruption program, the Online Procedures Enhancement for Civil Applications (OPEN) Initiative, which opened up governmental procedures to the public. This project is widely acknowledged as an effective example of political and managerial commitment to transparency and for its impact on corruption.

Value match or congruence is critical in building, if not reinforcing, the public trust of the egovernment/governance systems. The national values, if they fit or match with the values of egovernment/governance, will enhance the people's trust of the e- government/governance systems. In the United States of America, for example, if the e-governance enables much privacy and respect for individual's confidentiality, and that values are shared and upheld by the citizens, then there is greater trust of the e-governance systems, procedures and service delivery.

To cite another example, take the case of Singapore, the Civil Service is both effective and efficient, and there is a national or shared value of governmental support and involvement (Low, 2009a; 2008). Like a father, the government serves as a facilitator building good infrastructure and facilities, including good airports and good telecommunications systems, to assist and grow businesses (Low; Habibur Rahman; Almunawar; Mohiddin; and Ang; 2010; Low, 2009a, 2008; 2006a), and unlike the West, is not seen as interference. There is nothing ominous about this; and in fact such governmental support and efforts are welcomed by the public. Because of this synchronicity or matching of values, there is the people's trust of the e-Governance, especially when e-Government/Governance delivers the goods as well as bringing Government to the people and vice-versa.

It is axiomatic that value match is enhanced by acceptance of Information Technology (IT), surfing Internet habits and people's lifestyle, and that there should be, at least, some liking if not preference to e-lifestyle. And a case in point, as in Singapore, the Government also builds a culture of acceptance of technology and the local populace perceives technology favourably, and sees it as an enabler to achieve greater things. Hence e-Government is seen as favourable by the people. The students also use computer for school work especially writing essays and research and these are certainly useful. It is worthy to note that with information-communications being so pervasive, people and organizations in Singapore are willing to be early technology adopters. Many businesses too use Singapore to test new products and services. Yahoo, for instance, selected Singapore as one of 15 countries to beta test the interoperability between its Messenger and Microsoft's Windows Live instant messaging service (IDA, 2006).

It is worthy to mention, at this point, that in Confucian-influenced countries such as South Korea and even Singapore (Low, 2009a), relationships (guanxi) and ties can play an important part. Values match, to some extent, can perhaps be a big thing, if not fitting and relevant in these countries. After all, Confucianism also stresses on relationships and reciprocity (shu), and one good act deserves another, building trust between friends and business associates/ partners (e-Governance agencies and citizens/businesses) is common and expected. In doing all these, peace, harmony (her ping), and loyalty (zhong) exist among friends (e-Governance and business owners/ managers and stakeholders/ citizens); and there is prevailing trust (xin) and good business relationships (and trust (xin), indeed, grows the relationships) (Almunawar and Low, forthcoming).

#### CONCLUSION

The development of e-government in the public sector was ignited by the development of e-commerce/e-business in the private sector. Although the usage of computers in the public sector was common in developed countries and some countries had started computerization projects in the public sector in 1980s, like e-commerce/ebusiness, e-government was enabled by the development of the Web technology in the early 1990s. It is the Web and the Internet related technology that makes the delivery of government services to doors of citizens viable. However, e-government it is not merely putting "e" to "government", it requires fundamental re-think of how to organize and integrate various processes in a way to achieve superb delivery services electronically in a one-stop service entity accessible by citizens anywhere-anytime.

The development of e-government can be observed by using the stages model, where egovernment development is considered evolving through stages starting from a simple web presence to the transformation or connected stage that provide seamless online services. However, the development process does not necessarily follow the stage model in a stepwise and linier manner. This is confirmed by the United Nations survey (United Nations, 2003). It was found that countries can - and do - jump from the stage of emerging or enhanced presence with limited information to the transactional stage or networked stage in a short time.

Through its development, other than offering online services to citizens, e-government websites also provides a vehicle to engage citizens and encourage them to participate in implementing good governance; hence e-government is a good way to bring about good governance. In other words, e-government can be seen as a platform to carry out e-governance. Beside practising good governance via electronic means, e-governance should aimed to facilitate the interactions between citizens, government organizations and elected officials in improving the governing and policy making process in a range of areas such as e-federalism, administrative professionalism, e-democracy, policy-making environment framework.

E-government/e-governance should be developed in such a way to develop, enhance or strengthen trust between government organisations to their stakeholders. It is of great importance to upkeep and raises the trust of the people of the e-governance/government. Reputation, performance, appearance and value match/congruence serve as the basis of the trust infrastructure of e-governance systems. Trust will, without doubt, enhance the relationships between the egovernance (government) and the people as well as up the bonding of the people to the government, creating a better sense of national unity.

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#### **KEY TERMS AND DEFINITIONS**

**e-Government:** Refers to the use of information and communication technology, especially the Internet and the Web technology in running government activities in relation with government stakeholders.

**Good Governance:** Implies accountability and transparency to promote people's welfare by empowering and engaging them in development process.

**e-Governance:** applying good governance principles through e-government.

**Core Values:** Are also the key beliefs and convictions reflected by a society to achieve its collective goals. Blend of morals, ethics and principles that shape a national culture.

**Culture:** Shaped by the core values of a society, it is the way a society behaves that determines how things ought to be shared amongst the people. It is a set of core values held by people.

**Public Policy:** A multi-layered political process involving contestation over the agenda (or 'problem formulation'), over procedure, and resource mobilization and access, and as engaging a variety of actors (Harriss, 2001).

**Policy Implementation:** Developing appropriate systems, structures and tactics for putting strategies into practice.

**Trust:** Reciprocal relationship between two entities in order for them to have confidence in the strongest sense and belief in the mild sense in securing, establishing and strengthening other relationships and to create mutual benefits between them.

# About the Contributors

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# Index

#### Α

above poverty line (ABL) 603, 605 Administrative Procedure Act of 1946 (APA) 26, 317 Advocacy Technology 405, 407, 409, 415-416, 420 American Customer Satisfaction Index (ASCI) 137-138 American Recovery and Reinvestment Act (ARRA) 1-6, 9-17, 20 Animal and Plant Health Inspection Service (APHIS) 318-325, 327, 329-330, 336 ANOVA 198, 200 Application Mashup 509-511, 522 Artificial Intelligence (AI) 358, 441, 593 Authoring Tool Accessibility Guidelines (ATAG) 132

# В

Barriers to Participation 100, 403 Below Poverty Line (BPL) 584, 601-604 Billboard Websites 24 Biometrics 590, 596, 606, 609 blogs 20, 124-125, 145, 186, 252-253, 257, 259, 270, 280, 298, 356, 365, 372, 374, 376, 378-379, 408, 421, 424, 428, 431-433, 437, 443, 469, 478, 481, 489, 491, 505-506, 509, 512-514, 519, 527-528, 530-531, 538, 619, 623 Bovine Spongiform Encephalopathy (BSE) 322-323 Boycotting 489, 503 Business Correspondent (BC) 69, 185, 597-598, 607

## С

Campaign Finance 93-101, 103-111

Campaign Finance Regulations 95-96, 103-104, 106, 110-111 Campaigning 2.0 524-525, 527-530, 532-535, 537, 541-542 Child Advocacy 405-406, 410, 415-417, 420 China Electronic Commerce Association (CECA) 77 Citizen Engagement 1, 3, 5, 8, 15-17, 24, 29, 48-50, 64-65, 137, 144, 150, 166, 251-252, 272-275, 277, 280, 283, 291, 317, 417, 508, 546, 557 Citizen Participation 4-8, 16, 18-28, 32, 42-43, 48, 63, 76, 79, 88, 121, 137, 150, 152-153, 166, 173-179, 182, 196-197, 199, 208, 251-252, 254-257, 259-263, 267, 269-271, 291-299, 305, 307-309, 312-313, 321, 323, 327, 332, 344, 349, 381-383, 402-403, 464, 491, 541, 546, 557-558, 567, 573, 580, 617, 622 civic engagement 7, 18, 23-24, 68, 108, 123, 131, 136, 144, 174, 206, 224-225, 247, 251-255, 261, 265, 267, 270, 289, 339, 375, 420, 423-425, 427, 430-431, 434-436, 438-440, 442, 444-449, 461, 467-468, 470-471, 481-483, 485, 498-499, 532-533, 535-536, 538, 540-542, 580 civil rights 98-99, 101, 105, 129-131, 183, 384, 472, 573 civil service 40, 101, 626-627, 630 COMECON 219 Common Effective Preferential Tariff (CEPT) 569 common service centers (CSC) 585 Computerized System of Information Requests 57 Computer Self-Efficacy (CSE) 345-346, 354, 359 Concessionaria Servizi Informatici Pubblici (CON-SIP) 75 Confederation of India 586, 594 connected governance 176, 186, 206, 247, 618, 633 Content Syndication 505-506, 509, 511-512, 517, 519, 522

control for corruption (CC) 217, 569-570

coping and sense-making strategies 240, 248 Corruption Perception Index (CPI) 568 Country and Policy Institutional Assessment (CPIA) 564 CSS3 141 cyber activism 488-489, 503 cyrillic alphabet 211-212, 215-217, 222, 226-228

cyrillic content on the internet 226

# D

deduplication 589 Deliberative Democracy 5, 68, 91, 179, 184, 251, 257, 265, 269, 467-476, 480-483, 485 Democratization 49, 51, 166, 180, 223, 225, 385, 398, 403, 439, 445, 561, 567, 577-578, 580-581 dependency theory 194, 208 Digital Accountability 1, 16-17 Digital Community Centers 54 digital divide 8, 22-23, 48, 69, 108, 122, 129, 188-190, 192-196, 198, 202-208, 210-215, 217, 221-226, 235-237, 239-248, 259, 267, 274, 288, 296, 306, 310, 355-356, 375, 385, 417, 425-426, 439-442, 444-445, 500, 524-525, 532, 538, 575, 582 Disability 129-132, 141, 144-146, 381-382, 384-388, 391-392, 394, 398-404, 552

# Ε

e-administration 182, 184, 196, 293, 295, 622 e-advocacy 405, 417 eCitizen 619, 626 Economist Intelligence Unit 568, 579 e-consultation 138, 201, 617, 623 e-decision making 617, 623 e-democracy 2-3, 7, 13-17, 68-69, 145, 150, 166, 170, 173-176, 178-179, 182-187, 196, 204, 236, 266, 268, 293, 306, 309-310, 312, 341, 354, 359, 362, 374, 376, 378, 382, 393, 400, 435-436, 447, 450, 456, 459-461, 464-466, 468, 488, 490, 524-525, 537, 541, 561-562, 567, 571-574, 576-580, 582-583, 622, 631

e-disclosure 43, 93-94, 96-101, 103-106, 108

e-governance 1, 19, 68-69, 74, 76, 79, 88, 90-91, 112-113, 121, 124, 128-131, 136-137, 144-145, 149-150, 165-166, 173-174, 176-177, 182, 187, 189-190, 196-198, 204-206, 208, 266, 273-276, 278, 280, 282, 284-288, 290, 293, 295, 297, 306, 309, 332, 354, 359, 377, 432, 467, 558, 561-562, 566-569, 571-574, 576-582, 585, 613, 615, 617, 619, 621-623, 626-628, 630-631, 633-635 e-governance practices 613 e-governance readiness index 198 e-government 1-9, 14-25, 27, 29, 38-39, 42-43, 48-50, 53-55, 59, 65, 67-69, 73-79, 86, 89-92, 94, 96, 99-100, 103, 105, 109, 112-113, 116, 120-121, 123, 128, 134-138, 142-143, 145, 147, 176, 185-186, 189-190, 196-208, 235-248, 251-252, 254-255, 259, 261-263, 265-270, 272-275, 277-278, 280, 282-291, 293, 295, 297, 309-311, 315, 335, 340, 359, 366, 376-377, 408, 439, 447, 449-450, 458, 464, 468, 501, 505-509, 516-522, 545, 549-550, 558-560, 562, 566-567, 569-582, 611, 613-635 e-government capacity 198 e-government efficiency 522 e-government user convenience 522 e-information 617, 623 election reform 95, 110 Electronic Campaign Finance Disclosure Laws 111 Electronic Government 2, 20, 22, 53, 68-69, 75, 91-92, 107, 111, 126, 146, 205-207, 248, 268, 274, 288, 290-291, 309, 311-312, 408, 447, 501, 505, 519, 521, 523, 632-633 e-México initiative 54 entrepreneurial government 619 Envrionment-on-Call (EoC) system 172 e-participation 69, 167, 173, 175-176, 183, 187, 189-190, 199-202, 204, 208, 223, 225, 248, 293, 295-299, 303, 305-308, 310, 312-313, 338-346, 349-353, 356-357, 360, 488, 571-572, 574-577, 582, 617, 619, 623-624 e-participation index 176, 199-201, 303, 305, 575-577, 617 e-people 623 e-petitioning 338-339, 341, 345, 351, 373, 378, 623 e-petitioning tool 373, 378 e-petitions 338-339, 341, 349, 352-354, 358, 360, 362-363, 368-371, 373-374, 376, 378-379, 393, 395

e-procurement 72, 74-81, 83-92, 522, 549, 625, 632 e-reporting 544-545, 549-551, 556-557, 559 e-rulemaking 7, 21, 315-318, 330, 333, 335 e-Rulemaking Initiative (eRI) 315-318, 329-332, 335 e-services 237, 242, 248, 289, 506-507, 512, 521, 580, 616, 618-619, 623-624, 628-629 European Union (EU) 19, 44, 176, 178, 182, 215, 246, 269, 273, 296, 312, 333, 340-341, 353-355, 357, 359-361, 376-377, 379, 439, 450, 455, 465, 476, 485, 564, 635

e-voting 447-462, 464, 491, 571

# F

Facebook 251-253, 255-258, 263, 270-271, 330, 342, 366, 379, 391, 427-428, 431-434, 436, 439, 445, 461, 474, 476, 483, 492, 495, 498, 503-504, 511, 522, 527-531, 535, 540-541, 574 Federal Court of Tax and Administrative Justice

(TFJFA: Tribunal Federal de Justicia Fiscal y Administrativa) 62

Federal Emergency Management Agency (FEMA) 136.145

Federal Law on Transparency and Access to Public Governmental Information (LFTAIPG) 48-51

federal register 27, 41, 146, 317, 322

Freedom of Information Act (FOIA) 26, 41, 43-44, 66, 259, 513, 577

Freedom of Information Laws 26, 44-45, 65, 94

# G

Genetically Modified Organisms (GMOs) 319, 322, 336 geographic information systems (GIS) 150-151, 155-158, 165-170, 172, 415 global digital divide 189-190, 192, 194, 196, 204-206, 210-215, 217, 221-222, 226, 439-440 Global English 214, 216 good governance 49, 54, 561-564, 567, 572, 574-575, 578-581, 613, 615, 617, 620-623, 631, 633-635 Good Governance Agenda 54 Good Practice Guidelines 624 Government Accountability Office (GAO) 10, 22 government affairs 614, 617 Governmental transparency 16, 25-26, 28, 39, 42, 45, 166, 473 government clients 616, 619 Government in the Sunshine Act of 1976 (GSA) 26, 519, 521

Government of India (GOI) 584-588, 596-597, 599, 601-606, 610, 612 government services 33, 196, 220, 265, 277, 291, 367, 447, 449, 507, 509, 516, 547, 549-550, 559, 613-616, 626, 631 Government-to-Citizens (G2C) 238, 450 Government-to-Government (G2G) 238 Green Paper 466 Gross National Income (GNI) 190

# Н

horizontal connections 617 horizontal participation 177 Housing Development Finance Corporation (HDFC) 599 HTML5 141, 147 Hypertext Transfer Protocol (HTTP) 17-18, 20, 22-24, 42-43, 54-55, 66-69, 89-90, 106-109, 123-125, 132, 134, 143-147, 167-169, 171-172, 184-187, 222-227, 245-247, 255, 267-268, 270-271, 289, 296, 309-310, 334-337, 353-361, 374-377, 379, 399-400, 420, 439-444, 462-465, 484-486, 500-503, 519-522, 537-542, 550, 552-555, 565, 570, 578-580, 583, 620, 623, 626, 631-633

#### L

Inclusive agenda 585, 587-588, 595, 607-608, 610 **INFOMEX platform 55-58** infrastructure connections 617 Institutional Agenda 93, 97-98, 101, 103, 105, 111 Interactivity 19, 44, 142, 177, 184, 187, 197, 255, 261, 263, 268, 270, 407, 537, 629 internal digital divide 235-237, 239-245, 248 Internationalized Domain Names (IDN) 212 International Monetary Fund (IMF) 203, 563-564, 568-569 International Organization for Standardization (ISO) 132, 172 International Telecommunication Union (ITU) 66, 71, 74, 78, 81, 210-211, 216 Internet Corporation for Assigned Names and Numbers (ICANN) 132, 148, 212, 216, 222

# J

Joint Liability Groups (JLGs) 591

Judicial Transparency 112-113, 118, 120-121, 123-126

Justice Studies Center of the Americas 114, 124

# Κ

Knowledge Management (KM) 246, 592-593, 611, 622

# L

- language gap 123, 210
- Law on Access to Public Information 50-51, 53, 57, 62-63, 70
- linguistic diversity on the internet 210, 212, 217, 222, 226
- Live Broadcasting 112, 116-123, 126
- Local Government 18-21, 33, 42, 59, 73, 87, 156, 172, 245, 253, 255, 259, 261, 265, 267-269, 273-280, 283-287, 291, 296, 299, 311-312, 337, 384, 399, 401, 403, 448-449, 452, 455, 457-458, 460, 462, 465, 505, 521, 558, 576, 580.617

#### Μ

- Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) 584, 587, 601-603, 606
- Memorandum of Understanding (MOUs) 590-591
- Mexican Internet Association (AMIPCI) 60, 65, 492, 500
- Mexican Petroleum (PEMEX) 55
- Microfinance 586-587, 591, 596, 598-600, 607-609, 611
- Microfinance Institutions Network (MFIN) 599
- Microinsurance 611
- Millennial Generation 424, 433, 446
- Ministry of Petroleum and Natural Gas (MP&NG) 590-591
- Minority, Women, and Disadvantaged Business Enterprise (MWDBE) 86
- mobile subscriptions 192, 208
- mobile technology 571, 619
- Monitory Democracy 179, 364-365, 370, 378
- multicollinearity 46, 193, 208
- Multinational Corporations (MNC) 211, 214, 222
- multinomial logistic ("logit") regression 33
- Multi-Stakeholder (Multi-level) Governance 403 Municipal Website 25, 33, 45
- MWDBE 86

#### Ν

National Association of State Procurement Officials (NASPO) 74

- National Bank of Agriculture and Rural Development (NABARD) 591, 597, 599 National Commission on Human Rights (CNDH) 70 National Conference of State Legislatures 98 National Institute of Statistics and Geography (INEGI) 59-60 National Rural Employment Guarantee Act (NRE-GA) 585,608 National Rural Livelihood Mission (NRLM) 601-602 National Telecommunications and Information Administration (NTIA) 236, 427, 442 Neighborhood Participation 149-150, 170 neighborhood renewal 153-154 Neoliberalism 561-564, 566-569, 578-583 neoliberalist 561-563, 582 netizens 469, 482 new media 90, 92, 131, 145-146, 166-167, 169, 186, 214-215, 219, 222-226, 251, 257, 263, 365, 371, 378-379, 400, 402, 405, 418, 428, 433, 439-441, 445, 473, 484, 502, 524-525, 529, 538-539, 582 nomos vs. physis dichotomy 563 Nonprofit Advocacy 405-408, 411, 416, 421
- nonprofit organizations 405-406, 416, 418, 421

# 0

- Obama, Barack 2-3, 15, 26, 42, 104, 130-131, 142, 144, 146, 148, 331, 408, 416, 420, 431-432, 441, 443, 481, 498, 524, 527-528, 541, 569 Office of the Attorney General (PRG: Procuraduría General de la República) 55, 62-63 Oil and Marketing Companies (OMCs) 590 omitted variable bias 193, 208 One Laptop per Child (OLPC) 202 Online broadcasting 112, 117 Online Petitioning 489, 503 Online Political Space 503 Online Procedures Enhancement for Civil Applications (OPEN) 1, 4, 14, 23-24, 26-30, 38-45, 48, 76, 85-89, 94, 97, 114, 121, 125, 130-132, 136, 142-144, 146, 148, 160, 169, 174, 179, 182-183, 203, 215, 220, 223, 225, 252-253, 265, 268, 326, 347, 358, 360, 364, 367, 370, 373, 377, 396, 408, 456-457, 467, 471, 474-476, 481-482, 499, 509, 522, 546, 563, 584, 591, 595-598, 603-606, 611, 622, 625, 630
- Online Protest 489, 493-495, 497-499, 504

Online Spatial Displays 149-150, 153, 156, 160-166, 170
Open Government Initiative 14, 143, 148
ordinary least squares (OLS) regression 33, 101, 263, 277, 283, 285
organizational culture 10, 235-236, 243, 557
Organization for Economic Co-operation and Development (OECD) 23, 44, 50, 54, 60, 67, 69, 90-91, 174-176, 178, 183, 185, 236, 246-247, 252, 267, 294, 377, 587, 592-594, 596, 599, 601, 612, 620, 626, 633, 635

#### Ρ

panel corrected standard errors (PCSE) 101

- participatory democracy 94, 131, 161, 270, 312, 354, 465, 571, 578
- participatory governance 152-153, 179, 563, 581, 614
- party loyalty 529
- Performance Measurement 4, 10, 17, 29, 76, 84, 89, 521, 544-552, 557-560
- Performance Reporting 18, 548-550, 557-558, 560
- Plant Protection and Quarantine (PPQ) 319, 323, 327, 336
- Pluralism 381, 385, 393, 397, 399, 528, 537, 562, 572
- Policy design 447, 453, 455, 458-460, 466
- Policy Entrepreneur 95, 98, 111
- Policy Windows 111
- Political Campaigning 524-530, 532, 535
- Political Engagement 94, 169, 253, 265, 270, 401-402, 423-433, 436-441, 445-446, 450, 500, 532, 535, 540, 574
- political ideology 32-33, 38, 262-263, 481, 496
- Politics 2.0 524-525, 528, 532-536, 541-542
- post-communistic characteristics 215, 217, 226
- preference for traditional media 219, 226
- Proactive Dissemination 25, 27-33, 36, 38-39, 45, 88
- Professional Development Program (PDP) 139
- professionalization processes 242, 245, 248
- prosocial behavior 338, 346-347, 352-353, 360
- providing urban amenities in rural areas (PURA) 585

Public Administration (PA) 7, 10, 17-23, 27-28, 40-45, 51, 55, 57-58, 62-63, 67-70, 74-76, 87-91, 109, 123, 147, 149-150, 160-161, 165, 169-170, 182, 185-186, 204-206, 245, 248, 266-270, 276, 288-291, 310-312, 332-336, 339-340, 357, 374, 399, 418, 444, 450-451, 455, 458, 464-466, 498, 502, 519, 522, 545, 557-560, 581, 620, 632-635

public distribution system (PDS) 584, 587, 591, 603-606, 609

public policy 22, 26, 39, 55, 68, 99, 101, 108, 169, 184, 246-247, 267-268, 276, 297-298, 333, 400, 419, 430, 447, 452-453, 456, 459, 462-464, 466, 499, 503, 513, 546, 563, 577, 581-582, 616, 618, 633, 635-636

- public private partnership (PPP) 585-586, 605, 607-608
- Public Records 5, 45, 61, 238, 280, 513

public sector 2, 4, 22, 42, 57, 67, 72-74, 78, 88, 90-91, 94, 121, 181, 187, 196, 203, 268-269, 286-287, 290, 344, 355, 377, 454, 463, 514, 520-521, 544, 547, 549, 557-558, 582, 597, 602, 619, 622, 631, 633-635

- public service 28, 40, 54, 142, 176, 207, 372, 507, 516, 558, 571, 587, 618-620, 622
- Public Sphere 49, 174-175, 177-178, 182-184, 212, 294, 357, 377, 408, 467-472, 475-476, 480-483, 485, 539 Punctuated Equilibrium Model 93, 97, 104

# R

reform policy 105 Regional Rural Banks (RRBs) 599 regulatory policy 105, 195, 315, 317, 319, 322, 325, 332-333 request for proposals (RPSs) 79 Right of Access to Public Information 49-50, 54, 61, 69 Rural Business Hubs (RBHs) 586 rural markets 587, 594, 609, 612

# S

Self-Help Groups (SHGs) 586, 594, 596, 598-599, 601-602, 611, 624
silo based governance 618
Small Industries Development Bank of India (SIDBI) 599
Social Capital 174, 242, 267-268, 289, 355, 424, 433, 435, 439-443, 446, 470, 485, 503

Social Cognitive Theory (SCT) 345-346, 353, 359 Social Determinants 48

socially beneficial internet applications 226

- Social Media 112, 166, 183, 187, 206, 253, 255, 257, 263, 270, 342, 346, 351, 385, 403, 421, 428, 440-441, 476, 488, 490, 492-496, 498-500, 503-504, 508, 516, 524-535, 537-538, 541-542, 559
- social networking 252-253, 257, 259, 265, 268, 270, 330, 351, 366, 391-392, 395-398, 408, 410, 421, 424, 427, 429, 431-437, 439, 445-446, 485, 492, 497, 500, 502, 505-507, 509, 511-514, 519, 523, 527, 530, 540, 574, 580
- Social Networking Sites 252-253, 268, 270, 351, 366, 392, 396-397, 408, 410, 421, 424, 427, 429, 431-437, 446, 492, 511-512, 527, 530, 540, 574
- social protest 488-489, 493-494, 496, 500
- socio-economic status (SES) 135, 213, 236, 343, 426
- soft systems methodology (SSM) 235, 243-246, 248
- Students for a Democratic Society (SDS) 471
- Sunshine Law 43, 131, 148
- Swarnjayanti Gram Swarojgar Yojna (SGSY) 602
- swing voting 529, 532
- Systemic Agenda 97, 105, 111
- System of Fragmented Knowledge 152-153, 162, 164, 167, 170

#### Т

Tax System Administration [Sistema de Administración Tributaria] (SAT) 62, 67
Technology Acceptance Model (TAM) 138, 343-344, 353
thin-awareness 531, 541
Think Like the Customer (TLC) 628
third wave democracies 214
Transparency Obligations Portal (POT: Portal de Obligaciones de Transparencia) 54-55, 70
TV Justiça 112-113, 115-123, 125-126
Twitter 112, 118, 124, 182, 251-253, 255-258, 263, 270-271, 330, 416, 427, 431-432, 437, 446, 474, 483, 488-502, 504, 518, 528, 530, 541
two-step flow 474, 485

#### U

Ultra High Frequency (UHF) transmissions 116 Unique Identification Authority of India (UIDAI) 584-585, 587-588, 590-591, 596-597, 603, 605-611 unique identification (UID) 584-585, 587-591, 597-598, 600, 604-610 United Kingdom Disabled People's Council (UK-DPC) 404 United Nations Development Program (UNDP) 21, 193, 202, 205-206, 220-221, 224, 228, 562-564, 567, 620 United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) 620, 633

- United Nations Public Service Award 54
- United Nations (UN) 7, 21-22, 54, 67, 69, 78-79, 124, 174, 176, 186-187, 192-193, 197-199, 201-202, 205-206, 210-211, 220, 224, 226, 235, 247, 293, 309-310, 377, 563, 566-567, 569-572, 574-576, 580, 582, 611, 615-618, 620-621, 623-625, 631, 633
- US Agency of International Development (USAID) 220, 562, 564, 582
- usage rates 190-191, 430
- User Agent Accessibility Guidelines (UAAG) 132 User Experience Design (UX) 145, 148

#### V

- vertical connections 617 Veterinary Services (VS) 319, 323, 327, 336
- Videocasts 505, 509, 511, 523
- Viral Effect 490, 495-496, 504
- Voluntary Sector Organizations (VSOs) 381-385, 403

#### W

- water supply and sanitation (WSS) 605 Web 2.0 166, 251-253, 255, 263, 265-267, 270, 296, 355, 362-363, 365, 375, 379, 381, 384-385, 387-388, 391, 396-398, 400, 403, 407-408, 410-412, 415, 420-421, 424, 440, 489, 505-519, 522-523, 525, 527-528, 539, 541, 619 Web 2.0 Technologies 410, 415, 505-509, 511-512, 514-518, 522-523
- web accessibility initiative (WAI) 130, 132

- web content accessibility guidelines (WCAG) 130, 132-133, 144, 148
  Web Presence Measurement Model 616
  White House Office of Management and Budget (OMB) 14, 19, 327, 335
  White Paper 441, 466
  Wikis 252, 270, 339, 365, 379, 421, 505-506, 509, 512-514, 519, 523
  Working Group on Electoral Democracy (WGED) 95-96
  World Bank 20-22, 57-58, 67-68, 71, 190, 202-203,
- 206, 208, 220, 268, 375, 450, 485, 562-565, 568-569, 581-583, 620, 631-632
- World Governance Indicators (WGI) 564-565, 567-570, 574-577, 583

World Governance Ranking 582 World Trade Organization (WTO) 273, 489, 563, 569 World Wide Web consortium (W3C) 130, 132, 134, 142-144, 148

#### Y

young adults 265, 426-428, 433, 440-441, 445, 500, 529

young voters 439, 441, 461, 524

# Ζ

Zoom search engine 55