Innovatives Markenmanagement

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Ulrike Arnhold

User Generated Branding

Integrating User Generated Content into Brand Management

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Innovatives Markenmanagement

Herausgegeben von
Professor Dr. Christoph Burmann,
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Marken sind in vielen Unternehmen mittlerweile zu wichtigen Vermögenswerten geworden, die zukünftig immer häufiger auch in der Bilanz erfasst werden können. Insbesondere in reiferen Märkten ist die Marke heute oft das einzig nachhaltige Differenzierungsmerkmal im Wettbewerb. Vor diesem Hintergrund kommt der professionellen Führung von Marken eine sehr hohe Bedeutung für den Unternehmenserfolg zu. Dabei müssen zukünftig innovative Wege beschritten werden. Die Schriftenreihe will durch die Veröffentlichung neuester Forschungserkenntnisse Anstöße für eine solche Neuausrichtung der Markenführung liefern.

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Preface

The increasing relevance of the internet has brought about significant change in media consumption, communication and social behaviour and thus evoked a debate in both business studies and practice. Brands, in particular, are affected by the developments in and around the internet since they stimulate and shape such behavioural patterns. Therefore, how to manage a brand in the era of the internet has been a topic of discussion for quite some time. First, success factors of so called "virtual e-brands" were searched for, then "internet-based brand management" was explored and finally one was acknowledged as an "expert" by only using the buzzword "brand management in Web2.0." Many of the papers and books published at that time, however, dealt only superficially with the subject, distinguishing themselves through sequences of empty words rather than in-depth knowledge of the matter. Unfortunately, this even led to the case that the editor of a topic related Special Issue of the "Marketing Science" journal preselected all submitted manuscripts according to the fact whether he personally liked or disliked the used terminology.

Against the background of this situation of as much shallowness as subjectivity, Dr. Ulrike Arnhold analyses the state of the art of research within her dissertation with great care and intellectual finesse. She reveals that many of the brand management insights claimed as "new" in the era of social media by those alleged experts have been actually known in business studies for a long time – even though under different terms. Having truly identified the open and relevant research problems, Dr. Arnhold focuses on the conception and conduction of an extraordinarily complex and challenging empiric study in order to respond to the raised questions. She thereby collaborates with three brand-owning companies: FRoSTA, a very successful medium sized frozen food producer from Bremerhaven; Germany; InBev, the worldwide leading brewery; and one of the biggest car manufacturers in the world which prefers to stay anonymous in this study. For all three industries and brands, Dr. Arnhold conducts multiple face-to-face consumer interviews both offline and online.

The considerable depth and breadth of this empiric study reflects to my knowledge a unique accomplishment in this research field. Hence, the results of the dissertation at hand have in fact an exceptionally high level of explanatory power. In the end, the very high quality of the presented results is the outcome of the just as unusual as impressing curriculum vitae of the author. I am not allowed to reveal more at this point. The interested reader might find it out him- or herself.

The PhD thesis at hand represents **Volume 21 of the edited book series entitled "Innovative Brand Management"** published by Gabler (Deutscher Universitäts-

Verlag). These book series document research projects conducted by Germany's first and only Chair of Innovative Brand Management (LiM®) at the University of Bremen and the Chair of Marketing Management at Leipzig Graduate School of Management (HHL). Our goal is to stimulate further research on innovative brand management topics and evoke a vivid exchange of experiences. My co-editor Prof. Dr. Manfred Kirchgeorg and I are looking forward to getting all types of feedback (please email to burmann@uni-bremen.de or mkirchgeorg@t-online.de). Also in future we intend to publish at least three dissertations per annum within these book series in order to revitalise the growing interest in "innovative brand management" topics by presenting new ideas in short sequence.

Finally, I wish the thesis of Dr. Arnhold a very broad distribution in theory and practice given the excellent conceptual and empiric quality of this study. The publication in English language will surely facilitate the circulation and maybe even motivate some foreign academic colleagues to read through it (even if the one or other term used by the author does not meet their personal taste).

Univ.-Prof. Dr. Christoph Burmann

Foreword

"Markets do not want to talk to flacks and hucksters. They want to participate in the conversations going on behind the corporate firewall."

The Cluetrain Manifesto (1999), Thesis 62

This provocative thesis was raised in The Cluetrain Manifesto already a decade ago. The authors anticipated a development which breaks the paradigm of branding and opens up a new world – **user generated content**. In the participatory world of Web2.0 millions of common people have started publishing own brand related content. As evidenced by YouTube videos, Facebook groups, Twitter messages, Wikipedia articles, Amazon book reviews and other social media activities, such amateur pieces may achieve significant reach and thus represent serious brand touch points to consumers – with or without the consent of the brand-owning company.

In order to cope with this emerging phenomenon of consumer created brand messages, brand managers have basically four choices: They can fight against it, just ignore it, somehow monitor it or actively exploit the creative power of consumers. The last is the focus of the thesis at hand. The study shows how brand-owning companies may involve consumers in interactive programmes such as corporate blogs, brand communities and online challenges in order to strengthen the consumer's relationship to the brand. The thesis thereby introduces the term **user generated branding (UGB)** understood as the management of such brand related artefacts created by consumers. It documents not only the theoretical basis of UGB but also the development and empiric validation of an explanatory UGB model.

Though penned through my own hand, completing this thesis would not have been possible without the contributions of various people. First of all, I would like to thank my PhD adviser Prof. Dr. Christoph Burmann from the University of Bremen who granted me the opportunity to pursue a doctoral thesis in my favourite speciality. With his unwavering support of my innovative PhD topic, he allowed a very efficient and effective research and graduation process. Many thanks also to the assistants and PhD students of the Chair of Innovative Brand Management who made me feel at home.

I would also like to express my gratitude to my reviewer Prof. Dr. Marcus Schögel from the University of St. Gallen who inspired me with his compassion for interactive branding topics. Special thanks also to my former employer The Boston Consulting Group and notably Senior Partner Dr. Antonella Mei-Pochtler who opened up the

field of branding to me in the first place as well as to my current employer Swarovski and Senior VP Markus D. Lampe for letting me apply my branding knowledge to daily business.

Furthermore, I am indebted to the companies and managers which allowed me exploring their Web2.0 communication initiatives as 'real life' study objects: I would like to thank the owner of FRoSTA Felix Ahlers for his outstanding willingness to cooperate; Käthe Reichert and Dr. Markus Zeller from AB InBev (Beck's) for their straightforward support as well as the online marketing unit of our automotive research partner.

A special toast to my spouse Áki Hardarson for promoting my inspiring visit to Japan and supporting me in all moods and circumstances. Another toast to my brother Ivo Arnhold and my Berlin friends Axel Sommer, Mareike Jung and Susan Schagen for spending happy after-work hours with me.

Last but not least I would like to express my deepest gratitude to my parents Reinhard and Steffi Arnhold who never let me forget my promise to pursue doctoral education. To them, I dedicate this book.

Dr. Ulrike Arnhold

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Index of abbreviations

Aad	Attitude toward the ad
abbr.	Abbreviation
ad	Advertising
AGOF	Arbeitsgemeinschaft Online Forschung (Working Committee for Online Research)
AJAX	Asynchronous JavaScript
AMA	American Marketing Association
AMOS	Analysis of Moment Structures
approx.	approximately
ARG	Alternate reality game
Asymp. Sig.	Asymptotic significance
Att	Attitudinal effects (variable)
AVE	Average variance extracted
B	Billion
BC	Brand commitment
BCB	Brand citizenship behaviour
BCQ	Brand community quality
Beh	Behavioural effects (variable)
blog	Weblog
BRQ	Brand relationship quality
B2C	Business-to-consumer
CAGR	Compound annual growth rate
CBR	Consumer-brand relationship (variable)
aCBR	Consumer-brand relationship regarding actual customers (variable)
pCBR	Consumer-brand relationship regarding potential customers (variable)
CGM	Consumer generated media
coeff.	Coefficient
CRM	Customer relationship management
C2C	Consumer-to-consumer

DPMA	Deutsches Patent- und Markenamt (German Patent and Trade Mark Office)
DSL	Digital subscriber line
€	Euro
EBIT	Earnings before interest and taxes
ed.	Editor
eds.	Editors
e.g.	exempli gratia (for example)
et al.	et alii (and others)
etc.	et cetera (and other things)
et seq.	et sequens (and the following one)
et seqq.	et sequentes (and the following ones)
EV	Eigenvalue
eWOM	Electronic word of mouth
GfK	Gesellschaft für Konsumforschung (Organisation for Consumer Research)
H	Hypothesis
HH	Household
HTTP	Hypertext transfer protocol
ibid.	ibidem (in the same place)
IKV	Institut für Konsum- und Verhaltensforschung (Institute for Consumer and Behavioural Research at Saarland University, Germany)
Inno	Innovativeness
Inv	Product category involvement
ISDN	Integrated services digital network
LiM	Lehrstuhl für innovatives Markenmanagement (Chair of Innovative Brand Management)
LISREL	Linear Structural Relationship
M	Million
MB	Megabyte
MIT	Massachusetts Institute of Technology

NWOM	Negative word of mouth
n.s.	Not significant
OECD	Organisation for Economic Co-operation and Development
OL	Opinion leader/opinion leadership
OPA	Online Publishers Association
OS	Open source
p.	Page
PASW	Predictive Analytics Software
PLS	Partial least squares
PoS	Point of sales
pp.	Pages
PWOM	Positive word of mouth
P&G	Procter & Gamble
P2P	Peer-to-peer
r	Reversely coded
R&D	Research & development
RBMA	Red Bull Music Academy
RSS	Really simple syndication
SEM	Structural equation model
SMS	Short message system
SPSS	Superior Performing Software System
TV	Television
UGA	User generated advertising
UGB	User generated branding
UGC	User generated content
URL	Uniform resource locator
US$	US Dollars
VCAM	Viewer created advertising messages
Vol.	Volume
vs.	versus
WWW	World Wide Web

WOM	Word of mouth
WOMMA	Word of Mouth Marketing Association

Index of symbols

α (alpha)	Significance level
B/β (beta)	Standardized path coefficient (effect) inbetween latent endogenous variables
Γ/γ (gamma)	Standardized path coefficient (effect) between latent exogenous and endogenous variable
δ (delta)	Measuring error with respect to measurement model of latent exogenous variable (indicator variable X)
ε (epsilon)	Measuring error with respect to measurement model of latent endogenous variable (indicator variable Y)
ζ (zeta)	Measuring error with respect to effects on latent endogenous variable (structural model)
η (eta)	Latent endogenous or dependent variable
λ (lamda)	Factor loading of latent variable to its indicator variable
ξ (xi)	Latent exogenous or independent variable
D	Omission distance (regarding blindfolding)
df	Degrees of freedom
E	Sum of squares of prediction errors (regarding blindfolding)
f^2	Effect size
N	Number of cases
R^2	Coefficient of determination
R^2incl	Coefficient of determination of a latent endogenous variable if examined latent exogenous variables is included
R^2excl	Coefficient of determination of a latent endogenous variable if examined latent exogenous variables is excluded
O	Sum of squares of observations (regarding blindfolding)
Q^2/q^2	Predictive relevance (Stone-Geisser criterion)
Q^2incl	Predictive relevance of a latent endogenous variable if examined latent exogenous variables is included
Q^2excl	Predictive relevance of a latent endogenous variable if examined latent exogenous variables is excluded
X/x	Indicator variable for latent exogenous variable

Y/y	Indicator variable for latent endogenous variable
Z	Moderator variable

A User generated branding (UGB) as a field of study

The first chapter is designed to provide an introduction and overview of user generated branding[1] as the subject of this thesis. Before presenting the direction of the research endeavour, the relevance of user generated branding as emerging field of study is pointed out. Major shifts in the branding environment are briefly introduced, resulting in new challenges for brand management practice and theory. From this the overall need of research is derived, leading to the specific problem definition of this thesis. The chapter closes by presenting the overall study outline and placing the thesis in research theory.

[1] User generated branding (UGB) is understood in short as the management of brand related user generated content. A detailed definition is elaborated in the course of this thesis.

U. Arnhold, *User Generated Branding*, DOI 10.1007/978-3-8349-8857-7_1,

1 Relevance of UGB

In recent years brand[2] management has been facing two opposite tendencies: loss of brand authenticity and consumer empowerment. This situation appears to be the breeding ground for the increasing creation and distribution of brand related user generated content[3] in a Web2.0[4] environment. In the following reasons and indicators for these changes in branding environment are briefly explained. It is shown by means of examples how brands have been affected by these consumer created messages – in a positive and negative way.[5]

1.1. Major shifts in the branding environment

As mentioned above, the balance of power between branded companies and consumers has been shifting.[6] Brands appear to have suffered a **loss of brand authenticity**[7] due to changes in the competitive brand environment. As shown by a BBDO consumer study, almost two thirds of German consumers (62%) do not see significant differences between brands anymore.[8] Such brand parity perceptions[9] are driven by an increasing functional product quality homogenisation between competing brands on the one hand and branded goods and private labels on the other hand.[10] Brand parity, in turn, was found to cause an erosion of brand loyalty.[11] Ac-

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2 Referring to the identity based brand management approach (see chapter B 2) a brand is understood in the following as a bundle of benefits with specific characteristics (in terms of communications, customer service, packaging, technological innovation, etc.) causing a sustainable differentiation regarding other bundles of benefits which meet the same basic needs from the perspective of relevant target groups (see MEFFERT/BURMANN/KIRCHGEORG (2008), p. 358; KELLER (2003), pp. 3 et seq.).

3 Brand related user generated content is understood in short as the creation and distribution of personal brand messages by non-marketers in a computer mediated environment.

4 Web2.0 is understood in short as the second generation of the World Wide Web referring to a fundamental mind shift in the ways developers and end-users use the Web. For a detailed explanation see chapter B 4.2.

5 For an in-depth consideration of relevance of UGB see BURMANN/ARNHOLD (2009), pp. 1 et seqq.

6 See amongst others WENSKE (2008b), p. 10; MAST/HUCK/GÜLLER (2005), p. 9; ROSEN (2006), p. ix.

7 For an in-depth consideration of brand authenticity see BURMANN/SCHALLEHN (2008), pp. 1 et seqq.

8 See BBDO (2005); study based on N=~2000.

9 Perceived brand parity is understood as "...the overall perception held by the consumer that the differences between the major brand alternatives in a product category are small" (MUNCY (1996), p. 411). It can be seen as the opposite of product or brand differentiation.

10 For details on perceived quality parity in saturised markets see amongst others ESCH/WICKE/REMPEL (2005), pp. 17 et seqq.; WELLING (2006), p. 46; STIFTUNGWARENTEST (2004), p. 92; GFK (2007), p. 91; BURMANN/WENSKE (2007), pp. 2 et seqq. For perceived quality parity of private labels see amongst others GFK (2000); GFK (2007), p. 91.

11 For empiric results see IYER/MUNCY (2005), pp. 222; 225 et seqq.; MUNCY (1996), p. 414. For a definition of brand loyalty see MEFFERT/BURMANN/KIRCHGEORG (2008), pp. 354 et seqq.

cording to a recent GFK consumer study, brands lost on average 43% of their first choice buyers within the last three years and did not succeed in winning as much new loyal customers.[12]

The phenomenon of perceived brand interchangeability and shrinking loyalty can be traced back to a number of factors symptomatically for a changing competitive environment.[13] First, a rising number of brands has made it more and more difficult to stand out in the sea of offers[14]. Second, due to the functional interchangeability a shift from product to communication competition can be observed.[15] As a result, consumers are exposed to an increasing number of brand messages in the media.[16] The rise in messages comes along with an increasing fragmentation of the media landscape[17] so that it becomes more and more complex and costly to establish and expand brands via media.[18] Third, given the inflation of media channels an increasing variety of brand touch points[19] is used to get the brand message across.[20] On the one hand, the importance of digital media in brand communications is growing.[21] On the other hand, targeted public relations activities (including event sponsorships, endorsements, and awards), activities at the point of purchase (e.g. packaging, in-store promotion, displays, and sales representatives) as well as customer relationship measures (e.g. service hotlines, product samples, and loyalty programs) have gained

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[12] See GFK (2008), pp. 41 et seqq. First choice buyers are regular customers preferring to buy a certain brand in contrast to occasional customers and competitive choice buyers. Their loss had to be compensated by costly acquisitions of former competitive choice buyers who were, however, likely to switch brands again after short time.

[13] See also in the following ESCH/WICKE/REMPEL (2005), p. 14.

[14] In Germany alone, about 765,000 national trade marks were legally in force by the end of 2007—15% more than in 2001 (see DPMA (2008), p. 114). Reasons for the growing number of brands include an enforced product development and innovation activity to meet increasingly individualised customer demands, a rising technological obsolescence of products as well as market entries of foreign competitors.

[15] See BURMANN/MEFFERT (2005b), pp. 91 et seqq; WENSKE (2008b), p. 5; WELLING (2006), p. 46.

[16] See ESCH/WICKE/REMPEL (2005), pp. 15 et seqq.

[17] From 1996 to 2006, the number of German TV channels has on average grown 8% annually; the number of radio channels increased by 4%, the number of magazine titles by 2% and the number of German internet sites even at 72% per year (see ZAW (2007)).

[18] For changes of advertising expenditures see ZENITHOPTIMEDIA (2008), pp. 1 et seqq.)

[19] Brand touch points comprise all points of contact between a consumer and a brand. For an overview of brand communication vehicles see amongst others MEFFERT/BURMANN/KIRCHGEORG (2008), pp. 649 et seqq.; KELLER (2003), pp. 230 et seqq.; DE CHERNATONY/MCDONALD (2003), pp. 91 et seqq.).

[20] See also in the following ESCH/WICKE/REMPEL (2005), p. 15.

[21] According to ZENITHOPTIMEDIA, the internet will squeeze magazines out of the Top 3 advertising media by 2010 (see ZENITHOPTIMEDIA (2008), p. 3).

relevance.[22] As a result, the consumer suffers information overload[23] since cognitive capacity allows only the processing of a fraction of the offered information.[24]

From the perceived overload and interchangeability of brands it can be concluded that brands have forfeited their 'inviolability'. This situation appears to be the breeding ground for the emergence of brand related user generated content. Some consumers seem to have recognised their power toward brands and make use of their authority, demanding a "*right to hack*".[25] Such **consumer empowerment** is driven by advanced information technology and interactive media, notably Web2.0, enabling consumers to initiate and partly influence brand-related communication processes and information flows.[26] In this context, the emergence of "*the new consumer*"[27] and new "*customer energy*"[28] was proclaimed.

Consumer empowerment has two facets: On the one hand, there is "*...the increasingly cynical, **sceptical, and marketing-savvy consumer***"[29] turning away from traditional advertising towards user generated content and word of mouth.[30] This critical consumer attitude towards traditional advertising and mass media can be explained by the information overload and advertising clutter mentioned above.[31] The phenomenon has also to be considered against the background of an increasing individualisation[32] and growing marketing literacy among consumers.[33] Checking the functioning of advertising, consumers are able to identify and avoid unwanted advertising messages. As consequence, advertising-sceptical consumers increasingly consult a third party they trust (e.g. real friends or peer comments on online plat-

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[22] For further details see ROSSITER/DANAHER (1998); DANAHER/ROSSITER (2006). A prime example for exploiting various brand touch points is the U.S. apparel maker Nike (see CNBC (2006); ADAGE (2006), p. 6).

[23] This phenomenon is also known as 'brand image confusion' within the scope of brand management and 'consumer confusion' within the scope of consumer behaviour research (see amongst others WEERS (2008)).

[24] See amongst others ESCH/WICKE/REMPEL (2005), pp. 16 et seqq. with reference to IKV report by BRÜNNE/ESCH/RUGE (1987). Already in the 1980's an IKV study stated that German recipients processed only 2 percent of the offered information.

[25] TAPSCOTT/WILLIAMS (2008), p. 32; also see ROLKE (2002), p. 18. In this context, the emergence(and

[26] See MAST/HUCK/GÜLLER (2005), pp. 10 et seqq.; see WENSKE (2008b), pp. 11 et seq.

[27] KNAPPE/KRACKLAUER (2007), p. 57.

[28] ATKEARNEY (2007).

[29] ROSEN (2006), p. ix.

[30] Word of Mouth is understood in short as commercial talk among consumers including the oral, person-to person communication about a brand.

[31] See also in the following MARSDEN (2006), pp. xx-xxi.

[32] See amongst others LORBEER (2003), pp.1 et seqq.; BRUHN (2001), pp. 2 et seqq.; WENSKE (2008b), p. 13.

[33] See also in the following MARSDEN (2006), pp. xx et seq.

forms) for brand information and engage in online word of mouth[34] rather than consuming traditional brand communication.[35]

Beside the sceptical consumer there is, on the other hand, the consumer "*...in a more **pro-active, collaborative role** in content creation, distribution and use*".[36] Indeed, the phenomenon of customer participation in brand talk and content creation has existed long time before the emergence of Web 2.0:[37] People have been naturally engaging in word of mouth for centuries; readers wrote letters to the editor; customers participated in product innovation via feedback hotlines, surveys and contests and even created parodies of advertisements.[38] However, the easy-to-use digital technology of Web 2.0 multiplied the existing option space for independent consumer generated content creation[39] by empowering ordinary people to produce brand related texts and audio-visual material. OETTING points out that consumers produce today about the same amount of marketing information than companies do.[40] By sharing their works on rich interactive platforms and in online communities[41] personal brand messages can now reach an unlimited number of users in a global audience.[42]

An indicator for the increasing importance of brand related user generated content is the **growth of social media**.[43] Overall, social media rose from 2006 to 2007 from 2% to 12% of total Web traffic corresponding to an annual growth rate of 668%.[44] Whether in the U.S., China or Germany, an increasing share of internet users visits video sharing sites such as YouTube, consults online encyclopaedias such as

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[34] Online Word of Mouth is understood in short as internet equivalent of traditional Word of Mouth, i.e. commercial talk among consumers in the internet.

[35] See WENSKE (2008b), pp. 12 et seq. Other evident consumer reactions to deal with the brand and information overload include the limitation of the brand choice to a small, familiar evoked set (see SCHWEIZER (2005), pp. 261 et seqq.) and the delay of the purchase (see RUDOLPH/KOTOUC (2006), p. 5).

[36] WUNSCH-VINCENT/VICKERY (2007), p. 5.

[37] See BURMANN (2007), p. 13.

[38] See FRANK (2008).

[39] See BURMANN (2007), p. 14.

[40] See OETTING (2006), p. 259.

[41] Online communities are understood in short as a group of people with a common interest who use computer systems to support and mediate their social interaction (also see chapter C 1.4.2).

[42] See LYONS/HENDERSON (2005), p. 319.

[43] See WIRTZ (2008), pp. 60 et seqq. Social media is used as umbrella term for Web 2.0 vehicles such as blogs, podcast sites, video and photo sharing sites and social networking sites which support the communication, interaction and collaboration in the internet and serve as platform for UGC. For a definition see KNAPPE/KRACKLAUER (2007), pp. 17 et seqq.; for an overview of social media characteristics and applications see JACOBS (2008), pp. 25 et seqq. and Appendix I.

[44] See HEMPEL (2007).

Wikipedia, engages in social network sites such as Facebook or views blogs.[45] Social media is thereby regarded as key source of a consumer's brand, product and price information.[46] Overall, the management consultancy The Boston Consulting Group estimates that half of US internet users (49%) would seek out shopping information on social networking sites and that almost a third (29%) would even buy from a social network site.[47] Studies provided evidence that online consumer reviews had significant influence on sales of products such as books[48] and experience goods such as hotel rooms[49] since their quality is mostly unknown before consumption.

While the passive consumption of consumer created content in social media is overall rising, the number of users who actually create content is still low. According to the ARD/ZDF online study 2008 only every eighth online German (13%) is very interested and every fourth (23%) somewhat interested in creating own content.[50] For instance, only 3% of online Germans contribute content to Wikipedia although 60% view it; 3% upload videos on platforms such as YouTube although 51% watch them; and 7% share photos on platforms such as Flickr although 23% view them.[51] In other words, at only 0.2% of visits at YouTube and Flickr a video and photo respectively is uploaded and only 5% of visits In Wikipedia result in content creation.[52] Real mass participation in Web 2.0 takes only place in communities in which almost all members maintain own profiles and contact other members (see Figure 1).

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[45] For Web2.0 usage in the U.S see amongst others RAINEE (2008); MADDEN (2007), pp. iii et seq.; RAINEE/TANCER (2007); for China see amongst others NETTESHEIM (2008), p. 12; for Germany see amongst others WIRTZ (2008), pp. 68 et seqq.; KNAPPE/KRACKLAUER (2007), pp. 29 et seqq.

[46] See HORRIGAN (2008), pp. I et seqq.

[47] See BOKKERING/SAYRE/BERNHARDT (2008), p. 4. For the role of peer evaluations also see SCHÖGEL/HERHAUSEN/WALTER (2008), p. 340.

[48] See CHEVALIER/MAYZLIN (2006). The scholars found that an improvement in a book's reviews led to an increase in relative sales at the online book seller site.

[49] See YE/LAW/GU (2008). The results suggested that a 10% improvement in reviewers' rating could increase sales by more than 4% while a 10% increase in review variance could decrease sales by almost 3%.

[50] See FISCH/GSCHEIDLE (2008), pp. 356 et seq. The interest, however, increased by 40% compared to 2006. Among teenagers the majority (57%) is very or somewhat interested in content creation.

[51] See ibid., p. 361.

[52] See HEMPEL (2007).

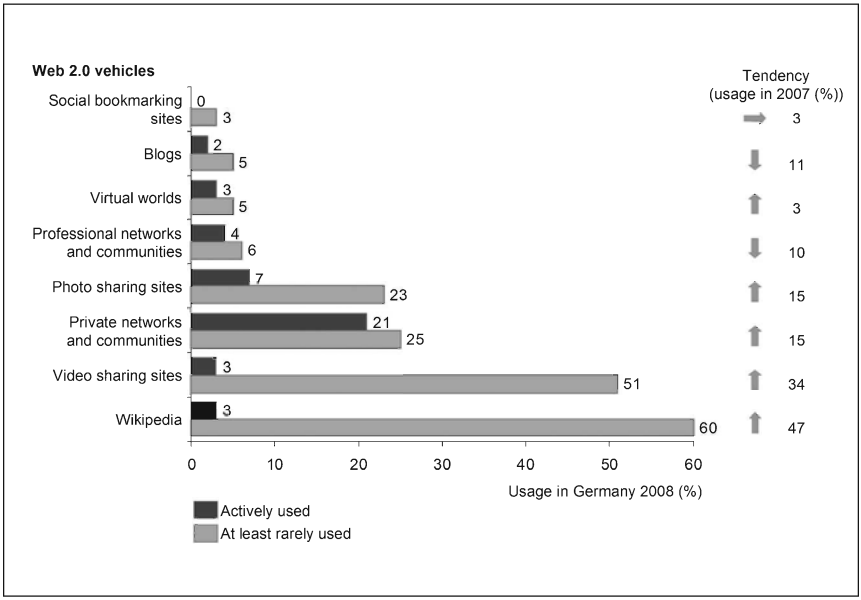

Figure 1 **Active and passive Web 2.0 usages in Germany**
Source: Own illustration based on FISCH/GSCHEIDLE (2008), pp. 358 et seqq.

The conclusion of a mostly passive Web 2.0 usage is backed by Forrester's Social Technographics study according to which active UGC contributors (so-called creators) who publish blogs, maintain web sites, or upload videos account for the smallest segment of the adult online population with a representation of only 13%.[53] 19% of users are classified as critics who add to existing conversations by posting ratings and reviews on web site content and by commenting on blogs.[54] The majority of the adult online population, however, is allocated to rather passive user groups aggregating, distributing and consuming the content generated by others: Collectors (15% of total) organize information and share content within the community by tagging[55]

[53] See also in the following LI (2007a); LI (2007b); based on survey (N=4,475) among US adults in December 2006 and youth (N=4,556) in October 2006.

[54] Critics show similar psychographical features than creators. Overall, participation at one level may overlap with participation at another level. So the FORRESTER study considers four out of 10 critics creators as well (see ibid.).

[55] Tagging refers to an online key word index allowing a user driven search (see social content aggregator and bookmarking site on Appendix I).

pages and using RSS[56] feeds on blog lines. Joiners (19%) comprise mostly young users of social networking sites which are basically online to socialize with their friends. Spectators (33%) make up the audience by just reading blogs and sometimes watching user generated videos. The biggest segment on average is, however, the level of inactives (52%) not participating at all in social computing activities in status quo. As shown in Figure 2, a generation bias in content creation is observed: While the creator segment makes up about a third of the young users (12-26 years), it accounts only for 10% among users ages 41-61 and 5% among senior users ages 62 and more. FISCH/GSCHEIDLE conclude that the Web2.0 activity level of the young generation is mostly twice as high as on average.[57]

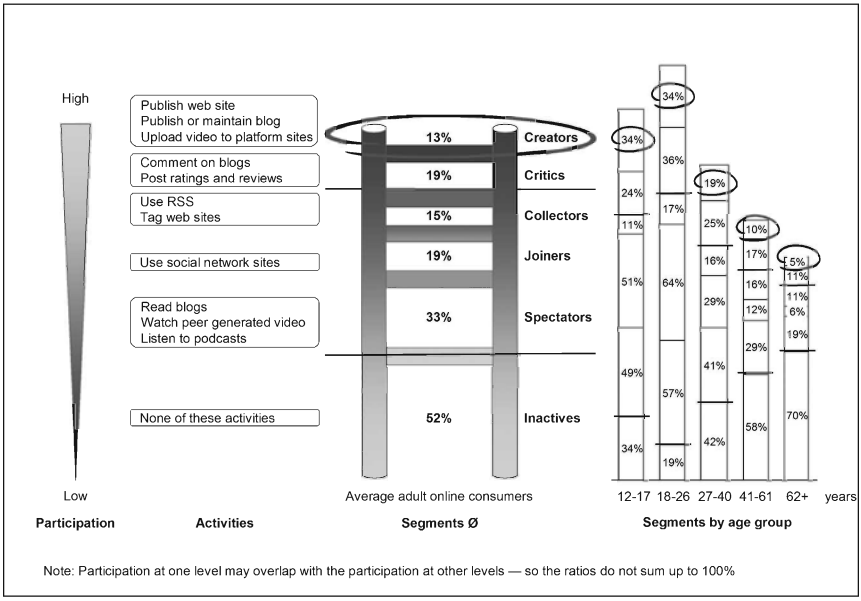

Figure 2 **Social Technographics segments**
Source: Own illustration adapted from LI (2007a); HEMPEL (2007).

[56] RSS feeds (abbreviation of Real Simple Syndication) are vehicles to deliver content on user request allowing recording of user preferences (see NIELSENBUZZMETRICS (2006), p. 3; also see Appendix III).

[57] See FISCH/GSCHEIDLE (2008), p. 359.

Summing up, shifts in the branding environment led to two kinds of consumer reaction: On the one hand, there is a crowd of sceptical and marketing-savvy consumers embracing social media and appreciating peer created content as alternative to corporate brand information. On the other hand, there is a still small group of active creators and critics publishing content. In other words: the entertainment and information needs of the crowd are satisfied by content creation by just a few users.[58] These talkative users, however, have various opportunities to speak and to be heard by posting their work in free social networks and on hyperlinked platforms and tagging it so that it can easily be found by the public. Hence, this grassroots movement is regarded a serious new challenge for brand management.

1.2. UGB as a new challenge for brand management

With regard to the growing usage and power of social media, there seems to be an agreement in marketing practice about the fact that user generated content is not a flash in the pan and will continue gaining in influence.[59] Some executives even granted consumers the power to alter the perception and even direction of brands. For instance, the CEO of Procter & Gamble, one of the worldwide strongest marketers, stated that consumers started in a very real sense to own brands and participate in their creation as could be observed in online communities built around favourite products and commercials created by consumers.[60] In this sense, the power was now with the consumers.[61] Furthermore, practitioners questioned the definition of advertising considering the increasing consumer empowerment as "*...death knell of broad based national advertising campaigns.*"[62]

Certainly, user generated branding means **loss of control** for the brand manager. However, it is to be considered that brands by definition can never be fully controlled since the brand image[63] evolves inter- and intrasubjectively in the minds of the con-

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[58] See also in the following Ibid., p. 363.

[59] See amongst others JAFFE (2006); HEUER (2008); RANGE (2008). The importance of user generated content and social media was recognised by surveys among practicioners (see DITTRICH/MANGOLD (2007); MANGOLD/VEIGEL (2008); THOMPSON (2008)) and brand rankings (see ZUMPANO (2007)).

[60] See ELLIOTT (2006); statement made by A. G. Lafley at 96th annual conference of the Association of National Advertising in October 2006 in Orlando, USA.

[61] See MELILLO/VOIGHT (2007).

[62] GARFIELD (2005b).

[63] Within the scope of the underlying identity-based brand management approach brand image is defined as "...condense and judgemental idea of a brand fixed in the psyche of relevant external target groups" (see MEFFERT/BURMANN/KIRCHGEORG (2008), p. 364 with reference to BURMANN/BLINDA/NITSCHKE (2003), p. 6 (translated from German)).

sumers.[64] Consumer driven efforts beyond the control of the brand manager have also existed before the emergence of Web 2.0. Already in the first phase of the web in the 1990's users spread complaints about brands by email or posted brand related messages on personal web sites or internet discussion forums. Brands such as the US processor producer Intel (see Appendix VII) and the German web host Strato (see Appendix VIII) faced such user initiated online complaint campaigns in response to insufficient handling of product failure and crisis management. Although brand related user generated content in that era was widely limited to text format and a niche technology environment it caused significant brand damage.

The new quality of UGC in the Web 2.0 era is the **increasing speed, reach, inventiveness and utility** of individual brand-related messages due to the new personal communications technology[65] featuring blogs, photo, audio and video sharing sites as well as social networking sites as venues of UGC. Both not meeting the brand promise and unethical behaviour of the branded company are punished quicker, more consequently and with farther reach.[66] Thus, the consequences of incidents are more serious in the Web 2.0 era. Prime examples for such loss of control include brand related UGC about the US bike lock producer Kryptonite (see Appendix IX), the US cable operator Comcast (see Appendix X) and the US internet provider AOL (see Appendix XI). In all cases, the brand was harmed by inventive brand related UGC posted by customers after insufficient corporate complaint handling.

On the other hand, brand related UGC does not have to be harmful for the brand – it might also be **beneficial in case the content supports the brand promise.**[67] Prime examples for such 'positive' loss of control are brand fan contributions to the US consumer electronics brand Apple iPod (see Appendix XII) and the German ice cream brand Nogger (see Appendix XIII). In those cases customers identified with the brand so strongly that they voluntarily engaged in product promotion or even initiated a brand re-launch campaign.

Brands may also benefit from the supportive power of brand related UGC even though the user generated message is not in line with corporate brand communication guidelines. These UGC works are characterized by a high degree of inventiveness, an arty appearance and humour. Prime examples include the so-called 'geyser experiment' in which consumers dropped Mentos candies into a bottle of Diet Coke and thus produced a geyser-like effect (see Appendix XIV) as well as the so-called

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[64] See BECKER/SCHNETZER/GRIGORYANTS (2008), pp. 8; 17.
[65] See MARSDEN (2006), p. xx.
[66] See also in the following BURMANN (2007), p. 16; SCHÖGEL/HERHAUSEN/WALTER (2008), p. 340.
[67] See BURMANN (2007), pp. 19; 33 et seqq.

'suicide bomber commercial' featuring a fake Palestinian suicide car bomber in a VW Polo (see Appendix XV).

Recently, it can be observed that branded companies **encourage consumers** to create brand-related UGC.[68] Such corporate campaigns aim at strengthen brand loyalty and benefit from grassroots ideas through positive word of mouth and idea generation for creative advertising.[69] One of the most popular methods is holding a challenge such as the Doritos 'Crash the Superbowl' contest (see chapter D 1.5.2) and BMW Mini web clip contest.[70] Further applications include selective fan contributions[71] and intermediary platforms hosting sponsored UGC assignments such as Current (see Appendix XVI). The outcome of these corporate UGC initiatives, however, might also be harmful to the brand if the customer sentiment is not favourable.[72]

As the examples show brand related UGC displays mercilessly bad brand performance but may also honour good brand performance through brand fan contributions. From this it follows that the **requirements for internal branding** are increasing.[73] In order to counteract negative brand related UGC prophylactically and evoke positive grassroots brand messages internal branding efforts in order to meet the brand promise have significantly gained in importance. The objective thereby is that employees[74] but also interfaces at brand touch points such as marketing intermediaries[75] and call centre agents[76] 'live the brand' internally and externally. Given the examples of UGC as customer complaint behaviour corporate complaint handling is of special relevance. WENSKE provided empiric evidence that customers who were sat-

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[68] See BISHOP (2007).
[69] See WEIß (2007), p. 26.
[70] See TOMCZAK/SCHÖGEL/SULSER (2006). BMW Mini called brand fans to submit video clips to accompany the market entry of Mini Seven, Mini Park Lane and Mini Checkmate. The company selected three winner clips out of 300 submissions.
[71] For instance, Burger King sponsored a set of comedic Halloween shorts and invited especially active consumers to shoot clips with it (see GUPTA (2005); BISHOP (2007).
[72] For instance, every sixth submission of the Chevy Tahoe ad contest 'The Apprentice' was a negative parody of the brand mostly created by environmentalists which shared the anti-brand UGC in the Internet (see WEIß (2007), pp. 25 et seq.; FRANK (2008), p. 48).
[73] See also in the following BURMANN (2007), pp. 22 et seqq.
[74] For details on brand commitment of employees see BURMANN/ZEPLIN/RILEY (2008); ZEPLIN (2006).
[75] For details on brand commitment of marketing intermediaries see MALONEY (2007).
[76] For details on brand commitment in call centers see BURMANN/PANNENBÄCKER (2008).

isfied with their complaint handling had a stronger customer-brand relationship[77] afterwards than customers without a complaint case.[78]

'Passive resistance' to brand related UGC understood as focusing on meeting the brand promise is one strategy in dealing with grassroots brand messages. As mentioned above, brand managers may also address the phenomenon of brand related UGC in an active manner. Especially new media practitioners are convinced that UGC rather strengthened their brands instead of threatening them.[79] However, only few marketers have made extensive progress in applying it so far.[80] This issue of actively approaching brand related UGC and employing it within the scope of brand management constitutes the focus of this study.

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[77] Within the scope of the underlying identity-based brand management approach customer-brand relationship is defined as coherent interactions in the sense of an exchange between brands and their existing buyers who evaluate this relationship subjectively. The relationship is thereby based on the existing buyers' cognitive and affective motives resulting from functional and symbolic brand benefit associations (see WENSKE (2008a), p. 97); BURMANN/WENSKE (2007), p. 40).

[78] See WENSKE (2008a), pp. 274 et seq.; the analysis was based on three surveys (N=2,334; N=177; N=147) of customers of a hot beverage system brand in the coffee segment.

[79] Within an online survey in January 2008 by Hubert Burda Research among invitees of the DLD (Digital Life & Design) conference (N=263, thereof 46% from Germany) almost one third of the participants (31%) indicated that User Generated Content strengthened their brand very much; another third (34%) believed that UGC strengthened their brand to some extent (see MANGOLD/VEIGEL (2008), p. 27.

[80] See MUNIZ/SCHAU (2007b), p. 644.

2 Need for research

Given the increasing awareness of user generated content (UGC) in branding practice, the topic has found its way into **academic discussion** – even though on the fringes and not labelled user generated branding (UGB). MUNIZ/SCHAU valued the ascendance of consumer created brand messages as *"revolutionary changes"*[81]. At the 2007 Thought Leaders International Conference on Brand Management in Birmingham branding researchers argued that "*the industrial age paradigm of branding*"[82] had ended and a new age of openness and co-creation was imminent. CHRISTODOULIDES stated that this new age branding was shifting from a predominant emphasis on top-down marketing communications to an emphasis on relationships:[83] Instead of passive recipients of marketing messages consumers had to be appreciated as equal partners in mutual value-building relationships with brands and joint creators of brand meaning.

Although the relevance of UGB has been recognized, the phenomenon has not been explored in depth in academic research so far.[84] It can be stated that **no comprehensive theoretical adaptation** of this entire subject has been developed. What is published is rather anecdotal; only sub aspects of the phenomenon are covered. Neither an agreed definition nor overall frameworks currently exist. Marketing, advertising and branding terms in this context seem to be blurred. Evidence for inherent research deficits is provided by the fact that no common term has been coined so far. Academic scholars call it 'vigilante marketing'[85], 'eTribalized branding'[86] and 'open source brand'[87]. Practitioners talk about 'listenomics'[88], 'open source marketing'[89], 'brandhackers'[90] and 'citizen marketers'[91]; advertising professionals and media refer

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[81] MUNIZ/SCHAU (2007), p. 187.
[82] CHRISTODOULIDES (2008).
[83] See also in the following ibid.
[84] See MUNIZ/SCHAU (2007), p. 199; STÖCKL/ROHRMEIER/HESS (2008), p. 272; PITT/WATSON/BERTHON et al. (2006), p. 116.
[85] See MUNIZ/SCHAU (2007).
[86] See KOZINETS (2008b).
[87] See PITT/WATSON/BERTHON et al. (2006).
[88] See GARFIELD (2005b).
[89] See CHERKOFF (2005).
[90] See HECHT (2008); HECHT (2007).
[91] See MCCONNELL/HUBA (2006).

to it as 'home-brew ads'[92], 'do-it-yourself advertisers'[93] or more general as participation, social or community advertising.[94]

Within this dissertation project, it is proposed to coin the **term user generated branding (UGB).** On the one hand, this nomenclature emphasizes the brand management stance on the topic which is taken up. On the other hand, the notion bears direct reference to the established term user generated content (UGC)[95] which is regarded the subject of UGB. Besides, the neighbouring field of advertising also referred to UGC using the term user generated advertising (UGA). Although no academic publications entitled user generated branding exist so far[96] the Munich trade conference Best Brands College 2008 was registered in this name.[97] The term was used by its academic keynote speaker KOZINETS[98] as well as within the context of the social network site 'Brandhackers' by the practitioner HECHT[99].

From a linguistic point of view, user generated branding is preferred to alternative options such as consumer generated branding following the established term consumer generated media[100] and user created branding following the known term user created content[101]. When differentiating between 'user' and 'consumer' the term 'user' is favoured since the meaning of the word 'use' comprises the practice and manner of *"...employing or applying something"*[102] in the sense of customization. In contrast, a 'consumer' is the *"...one that consumes"*[103] economic goods in a more passive way compared to the 'producer' who grows or manufactures products. Both words 'production' and 'consumption' derive from manufacturing-oriented vocabulary which is now subject to discussion given the emerging shift towards prosumption[104] and the

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92 See KAHNEY (2004).
93 See IVES (2004).
94 See FRANK (2008).
95 The term has about 2.5 million web references according to Google (URL: www.google.com; accessed on 2 April 2008).
96 Neither the academic publication database EBSCO host (including Academic Search Premier, Business Source Premier, Regional Business News) (see URL: http://web.ebscohost.com; accessed on 14 August 2008) nor the academic search engine Google Scholar show a single entry titled User Generated Branding (see URL: http://scholar.google.de; accessed on 3 April 2008).
97 See MEYER (2008).
98 See KOZINETS (2008c).
99 See HECHT (2007); UNKNOWN (2008a).
100 This term is used among others by the market research institute NIELSEN BUZZMETRICS (see NIELSENBUZZMETRICS (2008).
101 This term is used among others by the OECD (see WUNSCH-VINCENT/VICKERY (2007)).
102 MERRIAM-WEBSTER (2008b).
103 MERRIAM-WEBSTER (2008a).
104 Prosumption refers in short to people who produce some of the goods and services entering their own consumption (see TOFFLER (1980), pp. 282 et seqq.). The prosumption thesis has been extended to marketing (see KOTLER (1986); TROYE/CHUNYUAN (2007)).

service-dominant logic of marketing[105]. When distinguishing between 'generated' and 'created', the term 'generated' seems to be more to the point. It is true that both words can be used as synonyms in the sense of "*bringing something into existence*".[106] However, 'generate' stresses more the process of production while 'create' emphasises the imaginative skill behind it which is not always the case for UGC.

In order to approach the new concept of UGB, neighbouring research fields may offer insights. On the one hand, there is existing literature about brand management in the internet (also known as **eBranding**[107]); however, this cannot be regarded the very same as UGB: eBranding focuses on the question of how to present and profile a brand in the channel internet from a corporate perspective describing internet related brand management behaviour, moderating factors and effects.[108] UGB, however, refers to a grassroots movement in internet usage beyond conventional brand management behaviour. Therefore, existing eBranding studies[109] and the extensive literature in the domain of internet marketing[110] do not go into the subject of UGB directly.

On the other hand, there are **user centred research fields** such as user innovation, collective intelligence, word of mouth and community research – these grassroots concepts are regarded the foundation of this study in the broader sense. User innovation research including the concepts of prosumers, lead users and open source movement provides findings about users who create and innovate. Collective intelligence studies which comprise the buzz words wisdom of crowds and wikinomics, deal with users who collaborate and share. Word of mouth research contributes insights regarding spreading the word on brands. Brand and online community studies focus on networks of users around brands and shared interests. So all of these research fields tap aspects of UGB but none of them deals with it in detail.

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[105] The service-dominant logic of marketing considers service provision rather than goods as the fundamental purpose of economic exchange (see VARGO/LUSCH (2004); VARGO/LUSCH/WESSELS (2008)).

[106] MERRIAM-WEBSTER (2008c); MERRIAM-WEBSTER (2008d).

[107] See MEFFERT/BONGARTZ (2001); RIEKHOF (2001); PFEFFERMANN (2008).

[108] See MEFFERT (2002), pp. VII et seq. For an overview of early eBranding literature see BONGARTZ (2002), p. 25.

[109] See BONGARTZ (2002); MANSCHWETUS/RUMLER (2002), pp. 228 et seqq.; ALTOBELLI/SANDER (2001); ALTOBELLI (2003); THEOBALD/SCHULMEYER (2005).

[110] The academic publication database EBSCO host (including Academic Search Premier, Business Source Premier, Regional Business News) finds almost 16,000 references for the subject term 'internet marketing' from 1984 until today (see URL: http://web.ebscohost.com; accessed on 13 August 2008). The German domain of the book seller Amazon shows as search results about 50 books including academic publicationsand guide books written by practicioners (see URL: http://www.amazon.de; accessed on 13 August 2008). The terms 'internet marketing' and 'online marketing' áre used synonymously; the term "web 2.0 marketing' is included.

Academic literature on **UGC** in general is still considered in its initial phase.[111] Indeed, there are few studies about user generated advertising and few surveys dealing with motivational factors for UGC creation and consumption. As mentioned above, the concepts of 'vigilante marketing'[112], 'eTribalized branding'[113] and 'open source brand'[114] might be considered as UGC related approaches within the context of branding in the broader sense. However, determinants and effects of brand related UGC as well as management strategies – both active and passive – for branded companies have not been analysed so far. Thus, both the field of unprompted consumer created brand messages and the field of stimulated messages are open for further investigation.

[111] See also in the following STÖCKL/ROHRMEIER/HESS (2008), p. 272; CHEONG/MORRISON (2008), pp. 1 et seq.
[112] See MUNIZ/SCHAU (2007).
[113] See KOZINETS (2008b).
[114] See PITT/WATSON/BERTHON et al. (2006).

3 Objectives of the study

With regard to the extensive research deficits shown above the book at hand deals with the following key problem: **What is the potential of user generated branding (UGB) as an emerging brand communication tool?**

Hence, this thesis has three overall research problems: first, defining and differentiating UGB in order to fully understand the nature and application forms of the phenomenon, second, identifying factors which drive the attitude toward a UGB programme, and third, detecting the impact of UGB programmes as new brand communication tool. While the last problem takes the centre stage of this study, responding to the first two research problems is a prerequisite to enable the scientific discussion.

The first research problem of **UGB definition and characterisation** thereby comprises three major research questions:

1. How is UGB defined?
2. How does UGB differ from neighbouring fields?
3. How is UGB applied within brand management practice?

To respond to these questions, the analysis shall be predicated on a comprehensive literature review of related research fields. Based on the documentation of the state of the art in research, a definition of UGB and its subject brand related UGC shall be concluded. In a second step, UGB applications for brand management practice shall be pointed out.

The second research problem of **determinants of UGB attitude** aims at identifying factors which drive the attitude toward the UGB programme. The following research questions shall be addressed:

1. To what extent do programme related factors drive UGB attitude?
2. What influence does the user personality exert on UGB attitude?
3. Are 'hard facts' such as usage patterns and demographics of matter?

Those questions shall be answered by empirical analysis, correlating the assumed antecedents with UGB attitude and examining the ranking among those factors. The objective is to get to know UGB attitude as new construct in brand management. Complex modelling in order to determine UGB programme quality, however, is not intended.

Based on the definition and characterisation of UGB, the third research problem of **effectiveness of UGB programmes**[115] shall be examined. Effect analysis is preferred to cause analysis as the study focus due to the even bigger research gaps and practical relevance. As mentioned in the chapter above, a few studies already exist which deal with the motivations of creators of user generated content,[116] even though they were not focused on brand related UGC. Motivations of creators were also examined in open source[117] and word of mouth[118] studies. On the other hand, the perception of UGB programmes appears to be an essential issue for brand management practice. It is of interest to investigate whether a branded company may only react to emerging consumer created messages or whether they may also actively exploit the consumer potential in favour of the brand. Detecting the impact of such participatory formats initiated by branded companies is regarded of high relevance for brand management practice with respect to the lack of experience and fear of loss of control.

Thus, UGB programmes applied as corporate brand communication tools shall take the centre stage of this study. Reference point is the external target group – internal UGB effectiveness is only briefly analysed as an extra. Narrowing the research problem of UGB effectiveness down, the following three research questions are of matter:

1. May UGB programmes strengthen a consumer's relationship to the brand?
2. How strong is the UGB effect compared to classic brand communication tools?
3. Is the impact of UGB programmes moderated by third factors?

To respond to these questions, a comprehensive explanatory effect model shall be developed and validated by empirical analysis. Thereby, comprehensiveness is not understood in the sense of a total model comprising all possible hypothetic constructs related to the impact of UGB. It rather refers to a causal analysis based on a selected set of hypotheses which are to be derived from prior considerations.[119]

To sum up, the main **theoretical objective** of this study is to define and differentiate UGB and develop a comprehensive model to explain the effectiveness of sponsored UGB programmes. To meet this theoretical objective, the **methodological objective**

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[115] A programme is understood as group of related activities intended to achieve certain objectives. That is, programmes are means-ends relationships purposively designed and implemented (see McDAVID/HAWTHORN (2006), p. 15).

[116] See STÖCKL/ROHRMEIER/HESS (2008); DAUGHERTY/EASTIN/BRIGHT (2008); BERTHON/PITT/CAMPBELL (2008) and explanations in chapter C 1.5.1.

[117] See LAKHANI/WOLF (2005); HETMANK (2005); VON KROGH/VON HIPPEL (2006) and explanations in chapter C 1.1.3.

[118] See EAST/HAMMOND/WRIGHT (2007); MANGOLD/MILLER (1999); NYILASY (2006) and explanations in chapter C 1.3.

[119] For details on causal analysis see BACKHAUS/ERICHSON/PLINKE et al. (2003), pp. 334 et seq.

of this study is to design a valid and reliable measurement instrument reflecting the research problem. Resulting from the theoretical and empirical findings, the **practical objective** of this study is to identify UGB strategies for brand management. Building bridges between methodological advances and management practice is regarded a special concern of this study and marketing research in general.[120]

[120] For the need of linking marketing research with practice see WIND/GREEN (2005), pp. 301 et seqq.

4 Outline of the study

According to the research objectives described above the study is outlined as follows: Having introduced UGB as a new field of study in the current section, the next section covers the **theoretical basis** for the development of a UGB reference framework. Therein, brand related user generated content as the subject of UGB is defined. UGB is then integrated into the identity-based brand management approach which serves as the theoretical foundation of this study as well as into relationship marketing approaches which serve as a practical reference. Furthermore, an overview of technical, social and legal context factors is provided, facilitating the emergence of the UGB phenomenon.

Based on the established reference framework in section B, section C focuses on the **specification of UGB** in response to the first research problem. First, UGB is differentiated from related terms. Given the extensive research deficits, a literature review is conducted within a broad scope, ranging from concepts dedicated to collaboration in innovation and marketing to specific user-centred approaches in the branding context. Second, a comprehensive UGB definition is elaborated incorporating the learning from the literature review. Third, UGB applications are classified along the value chain and related to different objectives of brand management practice.

Section D is dedicated to the **development of an explanatory UGB model.** To address the second research problem, hypotheses regarding determinants of UGB attitude are derived from theoretical considerations and transferred to a conceptual model. Then a comprehensive reference framework for UGB effectiveness is set up in order to solve the third – and main – research problem. Based on the learning from existing communication and relationship models, relevant constructs for UGB effect analysis are selected, described and related to each other. Although the focus of this study is on the external target group, internal UGB effectiveness shall be briefly considered. As a result, a comprehensive UGB effectiveness model is designed to be tested empirically.

The **empiric validation** of the model and hypothesis testing is covered in section E. First, research design and statistical methods are introduced which are used for hypothesis testing. After validating the measurement model, the outcome of the UGB determinants analysis is presented. Then, parameters for the UGB effectiveness model are estimated, resulting in a concluding verification of the constructed hypotheses.

The thesis closes by providing a summary of the results under critical consideration of research methodology and contributions to the academic discussion. Furthermore,

section F points out implications for brand management practice as well as directions for future research. Figure 3 provides an overview of the overall outline of this study.

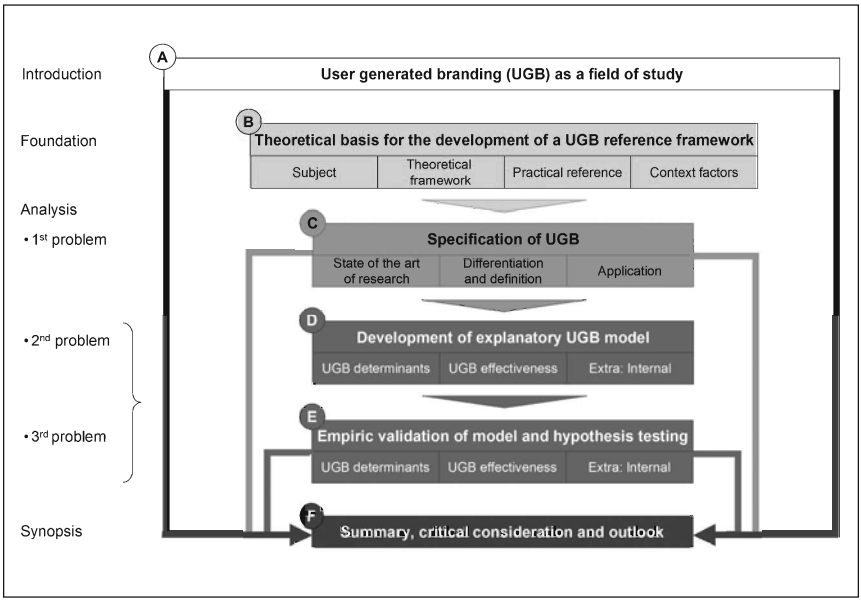

Figure 3 **Structure of the thesis**
Source: Own illustration.

5 Placement of the study in research theory

Research can be classified from three perspectives: application of the study, objectives and inquiry mode.[121] With regard to the application this study – as most research in social sciences – can be classified as **applied research**. In contrast to pure research, the gathered information aims at enhancing the understanding of a phenomenon and may be used for business administration. With respect to the objective, this research endeavour combines elements of **exploratory and correlational research**. Notably the first part of this study can be classified as exploratory since it aims at defining and differentiating UGB as an area where only little is known so far. The emphasis of the empirical part of this study is on discovering determinants and effects of UGB attitude, aiming at explaining relationships. In this sense, it can be classified as correlational. With regard to the inquiry mode, this study follows a structured approach predetermining all aspects of the research process. Since this study aims at quantifying the magnitude of a relationship, this research endeavour may also be categorised as **quantitative research**. The underpinning philosophy is rationalism[122] inducing a structured, rigid and predetermined methodology, the emphasis on measurement of variables as well as reliability and objectivity as dominant research values.

In social science, basically two main research paradigms can be observed: the positivist[123] and the naturalistic[124] paradigm. With regard to the metatheoretical placement of this study in marketing science, the **positivist paradigm** establishes the basis.[125] That is, observation and experience are regarded as essential sources of knowledge and thus the research problem shall be examined empirically.[126]

User generated branding as field of study deals with the behaviour of consumers and thus can be allocated to the scientific discipline of **consumer research**. According to TROMMSDORFF consumer research covers social and economic consumer behaviour respectively which is of interest for marketers in order to enable targeted marketing

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[121] See also in the following KUMAR (2005), pp. 8 et seqq.
[122] Rationalism refers to the ability of human beings to achieve knowledge because of their capacity to reason (see BERNARD (1994), p. 2).
[123] The positivist paradigm is rooted in the physical sciences and is also called systematic or scientific approach (see KUMAR (2005), pp. 13 et seq.).
[124] The naturalistic paradigm which is also known as qualitative, ethnographic or ecological approach denies the application of the physical sciences to the study of social phenomena (see ibid., pp. 13 et seq.).
[125] Metatheoretical placement means the allocation of a study to a basic paradigm in scientific theory (see BAUMGARTH (2003), p. 7).
[126] See CHALMERS (2007), pp. 7 et seqq.

planning.[127] The basement of consumer research is made up from various disciplines and can thus be regarded interdisciplinary.[128] Underlying disciplines derive mostly from social science such as economy, socio-psychology and sociology but also natural science (e.g. biology). To describe the relationships between brands and consumers, socio-psychology is regarded of special interest since its scientific object is not the stand-alone individual but the socially interacting individual.[129]

The school of thought of this study is **behavioural science** – the super ordinate concept of consumer research.[130] Behavioural scientific approaches analyse psychological and social variables with only indirect reference to economic values such as cost and revenue and thus belong to **non-economic approaches**.[131] The focus of this study is thereby the interactive relationship between brands and consumers.

With respect to the main research problem of exploring UGB effectiveness, this study refers to the discipline of evaluation research. According to RUTMAN evaluation research applies scientific procedures to measure effects or outcomes produced by specific activities.[132] Since the specific research problem revolves around a programme, the study refers to **programme evaluation** understood as the use of social research procedures to investigate the effectiveness of social interventions programmes.[133] According to KUMAR evaluation studies can be classified from the perspective of the focus of evaluation and its philosophical base.[134] From the focus-of-evaluation viewpoint, this study represents a so-called impact/outcome evaluation. That is, its focus is on the measurement of outcomes evaluating the effectiveness of a programme or intervention. From the philosophical viewpoint this study is classified as a consumer-oriented/client-centred evaluation since the study aims at exploring the perception of the programme effects regarding the external target group.

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[127] See also in the following TROMMSDORFF (2004), pp. 19 et seqq.
[128] See KROEBER-RIEL/WEINBERG (2003), pp. 3 et seqq.
[129] See TROMMSDORFF (2004), p. 21.
[130] See ibid., pp.19 et seqq.
[131] See BAUMGARTH (2003), p. 8.
[132] See RUTMAN (1977), p. 16. For an evaluation research definition also see OWEN (2006), p. 1; KUMAR (2005), pp. 274 et seq.; MCDAVID/HAWTHORN (2006), p. 3.
[133] See ROSSI/FREEMAN/LIPSEY (1999), p. 4, also see ALKIN/SOLOMON (1983), p. 14.
[134] See KUMAR (2005), pp. 278 et seqq. From the focus perspective programme/intervention planning, process/monitoring, impact/outcome and cost-benefit/cost-effectiveness evaluation are classified; evaluation types from the philosophical perspective include goal-centred, consumer-oriented/client-centred, improvement-oriented and holistic evaluation.

B Theoretical basis for the development of a UGB reference framework

In this chapter the theoretical concepts which provide a basis for the definition and application of user generated branding (UGB) are introduced. Since UGB is understood as the management of brand related user generated content (UGC), the notion of UGC as the subject of UGB is discussed first. Second, the identity-based brand management approach is introduced.[1] This approach is widely regarded as the state of the art of brand management research and serves as the theoretical framework of this thesis. Furthermore, UGB is integrated into relationship marketing as practical reference and related to the context factors of Web2.0 and the digital world. Based on these underlying concepts, a preliminary definition of UGB is formulated which serves as a reference point for the critical literature review in the following section.

[1] See NITSCHKE (2006), p. 44; WELLING (2006), p. 44; DE CHERNATONY (2006), pp. 45 et seq.

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1 User generated content (UGC) as the subject of this study

UGB deals with the subject of brand related UGC which constitutes a special form of content. Based on the notion of content the basic principles of UGC are introduced and transferred into the branding context.

1.1 Notion of content

In academia there is no common agreement on the meaning of the term.[2] Starting point for a definition builds the notion of **information** which can be understood as coherence of signs, data and knowledge from a technical and communication science perspective[3] and in the context of knowledge from an epistemological perspective.[4] In the field of business administration SCHWARZE defines information as "*...purposeful and goal oriented knowledge.*"[5]

From a semiotic perspective, content can be regarded as a special value of information which is displayed by means of representation such as text, audio and video, editorial styles and formats.[6] That implies that the same piece of information could be condensed to content in a different way based on the individual compilation of data and signs. The semantic is considered independent from representation and thus understood as implicit information. Since purpose orientation is achieved by using implicit information, generated content is regarded ex ante purposeful. According to ANDING/HESS content is thus defined as *"...the purposeful and individually protectable representation of implicit information condensed by editorial means based on human intelligence".*[7] As examples for content books, databases, web pages, magazines, movies, and music are quoted.[8]

According to ANDING/HESS content can be clustered into three interdependent dimensions: the economic dimension as the primary level and the technical and legal dimensions as additional conditions[9] (see Figure 4). Since content as product was

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2 For an overview of existing definitions of content see ANDING/HESS (2003), pp. 2 et seqq.
3 In the semiotic point of view information is represented by signs and data; based on that information is concluded as purposeful knowledge (see BIETHAHN/MUCKSCH/RUF (2004), p. 3).
4 For an overview of existing definitions of information see ANDING/HESS (2003), pp. 5 et seqq.
5 SCHWARZE (2000), p. 39 (translated from German).
6 See also in the following ANDING/HESS (2003), pp. 9 et seqq.
7 See ibid., p. 14 (translated from German).
8 See SHAPIRO/VARIAN (1998), p. 3; BRANDTWEINER (2000), p. 33. To describe content SHAPIRO/VARIAN refer to information which take form; BRANDTWEINER uses the term information goods.
9 See also in the following ANDING/HESS (2003), pp. 16 et seqq.

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generally generated for third-party usage the dimensions were considered from the perspective of creation and usage purposes. From a creation point of view, the economic dimension comprised the attributes creation purpose and cost; from a usage point of view it was characterized by the purpose of use, the combinability of contents (flexibility as regards content), the revenue potential as well as the revenue potential's time distribution (speed of validation). The technical dimension was determined by the sensory and technical form of representation and the data volume on the creation side as well as the technical combinability of contents (flexibility as regards technique)[10] and interactive opportunities for recipients on the usage side. The legal dimension distinguished content according to legal protectability of the creator's work (e.g. intellectual property right) and possible infringements of the right of disposal by users.

Other content categorization approaches include a distribution-oriented differentiation of buyer, seller and delivery-process related dimensions[11]. With regard to online delivered content LOEBBECKE differs between product (physical versus digital), process (online versus offline) and value (bundled versus unbundled).[12]

[10] In particular, flexibility as regards technique stated to what extent a specific content might be technically combined with other content elements into a product bundle. This technical flexibility depended strongly on the applied medium (e.g. image file type) (see ibid., p. 17).
[11] See KOPPIUS (1999).
[12] See LOEBBECKE ibid..

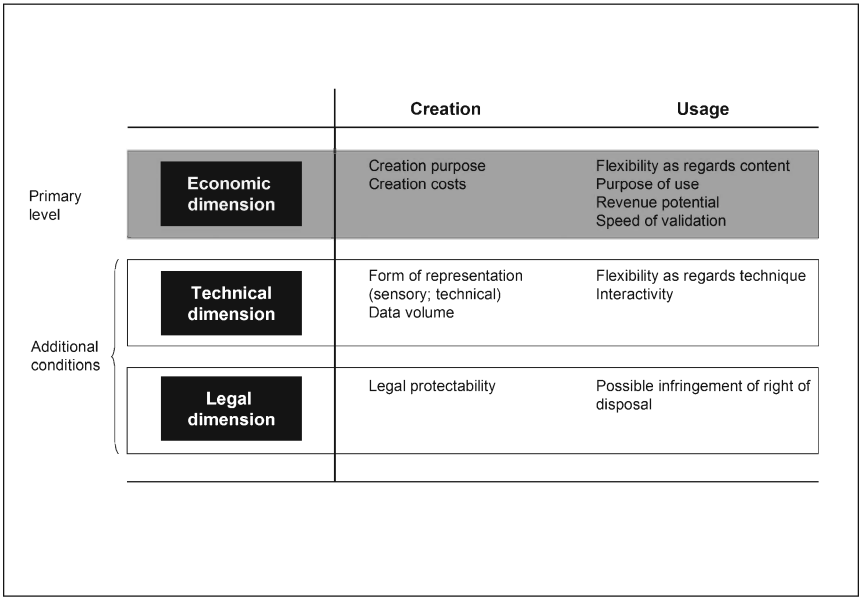

Figure 4 **Categorisation of content**
Source: Adapted from ANDING/HESS (2003), p. 19.

1.2 Definition of UGC

Given the early stage of research[13] there is currently no widely accepted definition for UGC.[14] Terms such as user created content (UCC)[15] and consumer generated media (CGM)[16] are used to a large extent interchangeably. With regard to the introduced content classifications UGC is focused on the buyer dimension.[17] STÖCKL/ROHRMEIER/HESS and colleagues define UGC as special form of content which is produced independently by a user with the help of the internet for an unde-

[13] See STÖCKL/ROHRMEIER/HESS (2008), pp. 272 et seq.
[14] See WUNSCH-VINCENT/VICKERY (2007), p. 17.
[15] See ibid., p. 17; the UCC definition by OECD is provided in the paragraph below.
[16] CGM is used by Nielsen BuzzMetrics and understood as "…consumer-generated comments, opinions and personal experiences posted in publicly available online sources on a wide range of issues, topics, products and brands" (see NIELSENBUZZMETRICS (2008)) In a narrower sense it is also referred to as Online Consumer word of mouth or online consumer buzz (see ibid.).
[17] DAUGHERTY/EASTIN/BRIGHT refer in this context to the shift of the online information market to a user-centric model, away fro the conventional publisher-centric model (see DAUGHERTY/EASTIN/BRIGHT (2008), p. 2).

termined audience without a direct profit orientation.[18] DAUGHERTY/EASTIN/BRIGHT refer to UGC as media content created by the general public rather than by paid professionals and primarily distributed on the internet.[19] A similar, but more comprehensive definition is proposed by the OECD defining UGC as "*...i) content made publicly available over the Internet, ii) which reflects a certain amount of creative effort, and iii) which is created outside of professional routines and practices.*"[20]

Although it cannot be fully accepted (see criticism below), this definition serves as cornerstone of this thesis. As indicated the OECD definition contains three constitutive features[21]: First, UGC should be publicly accessible (**publication requirement**). The OECD thereby explicitly refers to the internet as publication medium understanding UGC as one of the main features of the participative web[22] and mode of expression in the new media era.[23] Platforms of UGC distribution included internet forums, feedback and review sites as forms of the first UGC wave as well as blogs, wikis, social networking sites, online video sites, social content aggregator, bookmarking sites, podcast sites, and virtual worlds as venues of the second UGC wave[24] (for definitions see Appendix I). According to the OECD the publication requirement excludes non-publicly accessible forms of two-way communication such as email and instant messages.[25]

The linkage between UGC and the internet seems to be widely shared.[26] In the understanding of this thesis, however, linking UGC with the internet as only publication medium limits its range without cause. Indeed, UGC could be understood in a broader sense as multimedia-driven including emerging mobile devices and converging media (for a definition of new media platforms see Appendix IV). It has been stated that mobile services, video platforms (IPTV) and game consoles will give additional impetuses to UGC in future.[27] Nevertheless UGC can be basically allocated to

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[18] See STÖCKL/ROHRMEIER/HESS (2008), p. 273; STÖCKL/GRAU/HESS (2006), p. 4.
[19] See DAUGHERTY/EASTIN/BRIGHT (2008), p. 2.
[20] See WUNSCH-VINCENT/VICKERY (2007), p. 9; the authors use the term user created content (UCC) synonymous to UGC.
[21] See also in the following ibid., p. 18.
[22] Participative web is understood as an internet of "...intelligent web services that empower users to contribute to developing, rating, collaborating and distributing internet content and customize internet applications" (see ibid., pp. 9; 17). The term is used synonymously to Web 2.0.
[23] See ibid., pp. 9; 15.
[24] See ibid. and NIELSENBUZZMETRICS (2008).
[25] See WUNSCH-VINCENT/VICKERY (2007), p. 18.
[26] Nielsen BuzzMetrics stated that the internet, far more than any other medium, had given consumers 'a voice' serving as publishing platform and forum (see NIELSENBUZZMETRICS (2008)). Some UGC definitions directly refer to the internet (see DAUGHERTY/EASTIN/BRIGHT (2008), p. 2); STÖCKL/ROHRMEIER/HESS (2008), p. 273).
[27] See WUNSCH-VINCENT/VICKERY (2007), pp. 27 et seqq.; SMITH (2008).

the online delivered content classification by LOEBBECKE which is characterized by the attributes digital, online and unbundled.[28]

Second, UGC needs to add own value by applying a certain amount of creative effort to either adapt existing works or construct new ones (**creative efforts requirement**).[29] Such creative efforts included the sharing of comments and other forms of opinion expression such as advice, review, peer-to-peer discussions or personal experience and referred to a wide range of topics and issues not limited to products and brands[30]. UGC might appear as visual (text, photograph, image), acoustic (music, audio) and olfactory (video and film) representation form (for definitions see Appendix II).[31] The required amount of creative work could thereby range from purely home-made content (e.g. home videos, home recordings, own poems) to remixes of pre-existing work (e.g. re-cut film trailers, remixed songs) as well as hybrid forms combining self-made work with pre-existing content (e.g. lip synching). According to the OECD merely copying and posting of third party-produced content is excluded.[32] However, creative effort might be also collaborative.

The creative effort requirement is considered debatable. On the one hand the criterion of creative effort is not considered selective and has been shown only exemplarily so far. Therefore, the minimum amount of creative effort needed to qualify for UGC remains indistinct. On the other hand, defined UGC platforms do not always include UGC content only. For instance, the video sharing site YouTube displays also sponsored professional material (e.g. movie previews, TV series cuts). Overall, the creative effort requirement can be described by the content attributes flexibility as regards content, flexibility as regards technique and interactivity.

Third, UGC is conceptually separated from content created by traditional media producers (**creation outside professional routines requirement**)[33]. While professional writers, publishers, journalists, licensed broadcasters, etc. created and distributed content for commercial purposes, UGC was originally understood as non-

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[28] See LOEBBECKE (1999); SMITH (2008).
[29] See also in the following WUNSCH-VINCENT/VICKERY (2007), p. 18.
[30] See NIELSENBUZZMETRICS (2008).
[31] For details on UGC content types see WUNSCH-VINCENT/VICKERY (2007), pp. 34 et seqq. Content types could be also differentiated by purpose (e.g. educational content, citizen journalism) or medium (e.g. mobile content).
[32] See ibid., p. 18.
[33] See also in the following ibid., p. 18.

professional grassroots movement outside institutional context and without expectation of remuneration or profit.[34]

In today's practice, however, the boundaries have become blurred[35]. On the one hand, content might be created by users who are more than just hobbyists, for example, professionals outside their primary employment[36] or new entrepreneurs who become professionals after a non-commercial start-up phase[37]. On the other hand, users might be also remunerated for their content creation if they participated in contests. Overall, a commercialization of UGC can be observed: Established media and (internet) businesses increasingly invest and acquire UGC platforms for commercial purposes what is evidenced by the growing amount of financing and venture capital available for UGC-related sites and services.[38] Therefore, the creation purpose of UGC is shifting from non-profit to profit. Figure 5 summarizes the discussed UGC definition by applying the introduced content classification scheme of ANDING/HESS.[39]

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[34] STÖCKL/ROHRMEIER/HESS also argued that most UGC creators were amateurs without profit orientation (see STÖCKL/ROHRMEIER/HESS (2008), pp. 272 et seq.).

[35] WUNSCH-VINCENT/VICKERY admitted that especially the third requirement of creation outside professional routines was hard to maintain (see also in the following WUNSCH-VINCENT/VICKERY (2007), p. 18).

[36] For example, a user could be a journalist who writes something about his hobby in his spare time (see STÖCKL/ROHRMEIER/HESS (2008), p. 273).

[37] For example, freelancers may publish content in order to draw attention to themselves and their work (see ibid., p. 273).

[38] For example, in the US total investment in information services companies - including IT-based services and Web 2.0 internet companies running social networks, blogs and wikis – reached nearly $1bn in the 2nd quarter of 2007 which was 52% more than in the same period in 2006 and the highest amount since the dotcom bust (see WATERS (2007).

[39] See ANDING/HESS (2003), p. 19.

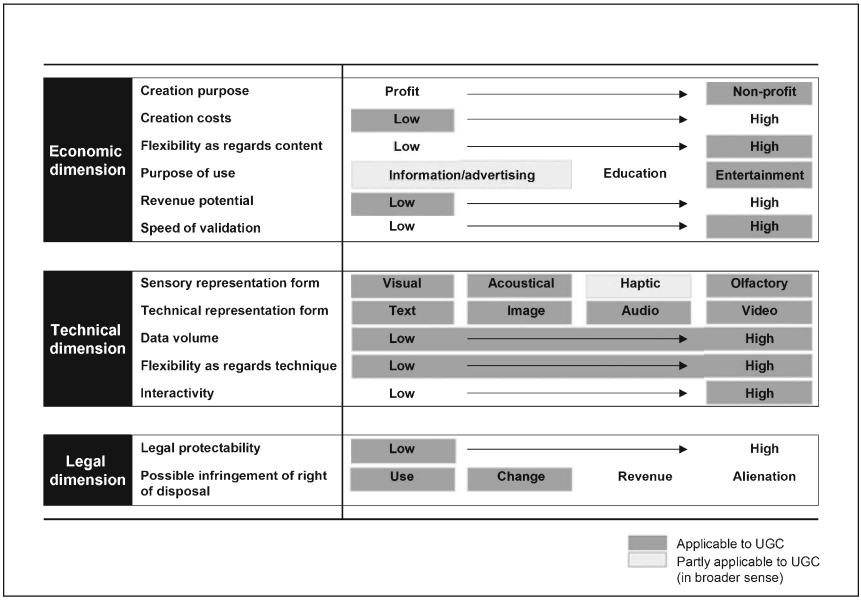

Figure 5 **Categorisation of user generated content**
Source: Own illustration based on ANDING/HESS (2003), p. 19.

1.3 Definition of brand related UGC

While UGC in general relates to a wide range of issues and topics beyond brand meaning, only brand related UGC is of relevance within the context of UGB. For instance, posting holiday pictures or poems online or maintaining a personal homepage with non-brand related content can be considered UGC but not UGB. So the subject of UGB is limited to user generated brand messages as subset of UGC which are referred to in the following as brand related UGC.

In order to elaborate a definition of brand related UGC, the general UGC principles of publication requirement, creative effort, and creation outside routines are adopted. Applying the UGC principle of creation outside professional routines, authors of brand related UGC are defined as **users in contrast to the marketer**. That implies as least common denominator that the brand-related UGC author is not the professional marketer or assigned agency of the respective brand but an individual or group outside this branding routine. The notion of user cannot be limited to non-professional grassroots contributors since quasi-professional authors engaging outside their primary employment have been observed. Furthermore, the user definition

is not restricted to a customer of the respective brand since a customer experience is not considered a necessary prerequisite for brand related UGC.

Moreover, brand related UGC is understood as a user's **personal interpretation of brand meaning** which is visualized in a certain way.[40] Brand related UGC may thereby appear in all UGC content types from text via images and photographs to audio and music and video and film. Brand related UGC may refer to the brand activities and the brand personality of corporate, product or service brands addressing both their functional and symbolic benefit components. It includes parodies on brand communications (e.g. alienated claims, logos, and commercials) whereby the brand is not explicitly named but implicitly recognisable. Brand related UGC comprises brand-related expressions of all qualities from single dilettante efforts[41] to comprehensive brand building approaches in a community mimicking professional styles.

With regard to the UGC principle of creative efforts, brand related UGC thereby requires a certain degree of **creativity** by either adapting brand-related content or constructing a new one. Thus, it might appear as original writing or shot, as montage, recut or remix, as review, feedback or rating. The definition excludes, however, merely copying and distributing original brand content, e.g. posting a recorded clip from a public TV show on YouTube or publishing a print magazine article on a personal web site. Furthermore, brand related UGC does neither include unbundling understood as disaggregating content, e.g. ad skipping in broadcast TV or cherry picking one article from a magazine, nor mass customization referring to a co-design process which allows consumers to adapt certain product or service features in a fixed solution space. So corporate web sites such as the Nike ID web site where customers can personalize every aspect of their product[42] out of range of pre-defined options do not meet the creative efforts requirement although the process is flexible and responsive and the customer compiles an individual product in the end. In fact, brand related UGC is understood as a free customization in the sense of creating an own version of original third-party brand-related content or re-aggregating it into personal bundles.

As UGC in general brand related UGC requires **public distribution**. Main channels are considered common Web 2.0 platforms such as blogs, feedback and review sites as well as social networking and video-sharing sites which provide a hub function. Public distribution is not limited to the internet as sole channel. Platforms for brand

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[40] This understanding is based on the brand image construct of the identity-based brand management approach (see chapter B 2.1.2).

[41] Examples are brand-related home-made videos on the video-sharing platform YouTube (see URL: www.youtube.com).

[42] See NIKE (2008).

related UGC may also include mobile and other electronic devices. While new media are considered as first distribution channel further distribution by traditional media is not excluded. Given the variety of channels and content forms brand related UGC is considered against the background of a **multimedia environment.** Taking these principles into account, brand related UGC is defined as follows:

> ***"Brand related user generated content (UGC)** is the representation of the voluntary creation and public distribution of personal brand meaning undertaken by non-marketers outside the branding routines and enabled by multimedia technology."*

Figure 6 illustrates the definition of brand related UGC as the UGB relevant subset of user generated content as a whole.

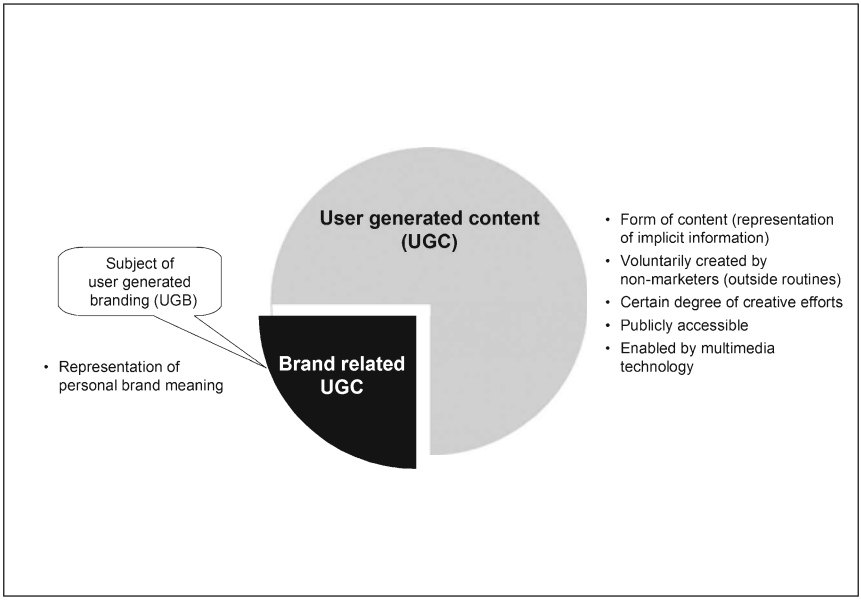

Figure 6 **Differentiation of brand related UGC**
Source: Own illustration.

2 Identity-based brand management approach as the theoretical framework of this study

After having discussed brand related UGC as subject of UGB, the theoretical framework for UGB is introduced. This thesis is based on the theoretical concept of the identity-based brand management approach according to which a brand – just like a person – needs to have a consistent and continuous identity in order to be trusted.[43] This approach was developed in the 1990s in parallel in France by KAPFERER[44], in the USA by AAKER[45] and in the German-speaking region by MEFFERT/ BURMANN[46] and has been elaborated until now[47] by adapting insights from human psychology research to brand management.[48] It represents an advanced stage in the evolution of brand management approach and is widely regarded as state of the art of research.[49] At this point, only selected parts of the approach are discussed. For an in-depth consideration of the evolution, benefits and objectives and model components of the identity-based brand management approach it is referred to BURMANN/ARNHOLD[50] and the relevant literature.[51]

With regard to UGB the brand benefit consideration from a provider's perspective forms the basis for the discussion of potential applications of UGB through brand management. On the contrary, the brand benefit associations from a consumer per-

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[43] See also in the following MEFFERT/BURMANN/KIRCHGEORG (2008) and the conceptual works in BURMANN/ZEPLIN/RILEY (2008); BURMANN/MEFFERT (2005a); BURMANN/ZEPLIN (2005a); BURMANN/BLINDA/NITSCHKE (2003).

[44] See KAPFERER (1992).

[45] See AAKER (1996).

[46] See MEFFERT/BURMANN (1996a).

[47] In the course of conceptual finetuning the theory was renamed from originally identity-oriented to identity-based brand management approach. For the latest developments see BURMANN/STOLLE (2007); BURMANN/WENSKE (2007); BURMANN/MEFFERT/FEDDERSEN (2007); BURMANN/ZEPLIN/RILEY (2008).

[48] For details on the underlying socio-psychological identity concept see MEFFERT/BURMANN (2005), pp. 27 et seqq.; BURMANN/SCHALLEHN (2008), pp. 5 et seqq.

[49] See NITSCHKE (2006), p. 44; WELLING (2006), p. 44; DE CHERNATONY (2006), pp. 45 et seq.

[50] See BURMANN/ARNHOLD (2009), pp. 41 et seqq. This book is regarded as preparatory work of this thesis.

[51] For further reference regarding brand management evolution see MEFFERT/BURMANN/KIRCHGEORG (2008), pp. 355 et seqq., pp. 814 et seqq.; MEFFERT/BURMANN (2005), pp. 20 et seqq.; KELLER (2003), pp. 52 et seqq.; DOMIZLAFF (1982); ALEWELL (1974), pp. 1218 et seq.; BEREKOVEN (1978), p. 43; for further reference regarding benefits and objectives see MEFFERT/BURMANN/KIRCHGEORG (2008), pp. 358 et seqq.; BURMANN/MEFFERT/KOERS (2005), pp. 3 et seqq.; WELLING (2006), pp. 21 et seqq.; KOTLER/KELLER/BLIEMEL (2007), pp. 509 et seqq.; DE CHERNATONY/MCDONALD (2003), pp. 12 et seqq.; BURMANN/STOLLE (2007), pp. 71 et seqq.; TROMMSDORFF (2004), pp. 126 et seqq.; MCENALLY/DE CHERNATONY (1999), pp. 9 et seqq.; KILIAN (2007), pp. 350 et seqq.; KOTLER/KELLER (2006), p. 321; BURMANN/ZEPLIN/RILEY (2008), p. 3.

spective are essential to understand the motivations of consumers who engage in UGB.

2.1 Basic model of the identity-based brand management approach

The identity-based brand management approach postulates a comprehensive brand management understanding which takes into account both the brand perception by external stakeholders (e.g. customers, users, community) and the self-reflection of a brand by internal stakeholders (e.g. employees, executives, intermediaries).[52] The view of considering the inside-out perspective as equally relevant to the outside-in perspective differed fundamentally from the preceding one-sided image-oriented approach and led to an enhanced integrated brand management understanding which combined the sales market perspective with internal resources and competences.[53] According to the idea of 'identity preceding image'[54] the purchase behaviour relevancy of a brand is thereby traced back to the brand identity[55] which gives the brand the necessary authenticity and trust and thereby the foundation for competitive differentiation.[56] The components of the basic model are briefly described in the following. Special attention is paid to consumer-brand relationship as reference point of this study.

2.1.1 Brand identity

Within the basic model of the identity-based brand management approach the self-image and actual substance of a brand is called **brand identity**.[57] It is defined as "*...those sustainable cross-spatiotemporal attributes of a brand which determine the brand's essence from the perspective of the internal target group*"[58].

Brand identity dimensions refer to organizational values, capabilities and behaviour.[59] Considering that the proponents of the identity-based brand management ap-

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[52] See also the following MEFFERT/BURMANN/KIRCHGEORG (2008), pp. 358 et seqq.; BURMANN/MEFFERT (2005a), pp. 51 et seqq.

[53] See MEFFERT/BURMANN (2005), p. 31; for competence-based view see FREILING (2004), pp. 5 et seqq.

[54] See KAPFERER (2004), p. 99.

[55] See MEFFERT/BURMANN (1996b), pp. 1 et seqq.; KAPFERER (1992). 39 et seqq.

[56] For an in-depth elaboration of the notion of brand authenticity see BURMANN/SCHALLEHN (2008).

[57] See MEFFERT/BURMANN/KIRCHGEORG (2008), pp. 359 et seqq. and BURMANN/BLINDA/NITSCHKE (2003), p. 5.

[58] MEFFERT/BURMANN/KIRCHGEORG (2008), p. 361 with reference to MEFFERT/BURMANN (1996b), p. 31 (translated from German); also see BURMANN/ZEPLIN (2005a), pp. 43 et seqq.; p. 280; MEFFERT/BURMANN (1996c); BURMANN/BLINDA/NITSCHKE (2003), pp. 15; 23;

[59] See BURMANN/ZEPLIN (2005a), p. 280.

proach categorized and labelled those dimensions differently[60] this thesis follows the classification by MEFFERT and BURMANN naming six interdependent brand identity components[61] (see Figure 7): Brand heritage represents the brand basement related to geographic, cultural and organisational influences and brand history.[62] Brand management competences[63] stand for an organization's capabilities to generate efficient brand performance.[64] Brand values reflect the principal conviction of management and employees and are regarded an emotional identity component.[65] Brand personality is considered an applicable set of human personality traits used for brand communication.[66] Brand performance refers to the total of activities displaying functional and symbolic consumer benefits in order to position the brand.[67] The brand vision finally comprises the long term direction of brand development (5 to 10 years) for internal motivation.[68] The more consistent the six components the smaller the gap between the desired and actual brand identity and the brand image and thus the higher the strength of the brand.[69]

With regard to UGB the notion of **brand personality** is of special relevance. According to the proponents of the identity-based brand management approach brand personality is understood as major tool to emotionally tighten the consumer-brand relationship.[70] Its verbal and non-verbal communication style could be determined by the brand heritage as well as typical brand representatives.[71] Latter included not only internal target groups, but also explicitly external stakeholders. From this it follows that also customers and consumers in general might shape a brand's personality after

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60 See BURMANN/ZEPLIN/RILEY (2008), p. 2. For example, AAKER suggested the four aspects of a brand as product, organisation, person and symbol (see AAKER (1996)) while KAPFERER's brand identity prism comprised the dimensions physique, personality, culture, self-image, reflection and relationship (see KAPFERER (2004), p. 107).

61 See MEFFERT/BURMANN/KIRCHGEORG (2008), pp. 362 et seqq.; BURMANN/MEFFERT (2005a), pp. 56 et seqq. The brand identity concept also constitutes a foundation for the purposes of examining the role of internal branding (see BURMANN/ZEPLIN/RILEY (2008), p. 2).

62 For details on brand heritage see BLINDA (2003), p. 39.

63 This component was also called organisational capabilities (see BURMANN/ZEPLIN (2005a), p. 280).

64 For a definition of brand management competences see BLINDA (2007), p. 174.

65 For details on brand values see BURMANN/MEFFERT (2005a), pp. 62 et seq.; BURMANN/BLINDA/NITSCHKE (2003), pp. 22 et seq.

66 For details on brand personality see BURMANN/MEFFERT (2005a), pp. 63 et seqq.; BURMANN/BLINDA/NITSCHKE (2003), pp. 23 et seq.; AZOULAY/KAPFERER (2003), p. 151; MCENALLY/DE CHERNATONY (1999), pp. 10 et seqq.; FOURNIER (1998), pp. 343 et seqq.

67 For details on brand performance see BURMANN/MEFFERT (2005a), pp. 61 et seq.; BURMANN/BLINDA/NITSCHKE (2003), pp. 22 et seq.

68 For details on brand vision see BURMANN/MEFFERT (2005a), p. 61; BURMANN/BLINDA/NITSCHKE (2003), p. 22; KAPFERER (1992), pp. 110 et seq

69 See BURMANN/ZEPLIN (2005c), p. 280; the strength of the brand was measured by how often consumers buy and recommend the brand.

70 See also for the following BURMANN/BLINDA/NITSCHKE (2003), p. 23.

71 See AAKER (1997), p. 348.

market entry.[72] Example are the motorcycle brand Harley-Davidson and the car brand Opel Manta whose perception was strongly shaped by a distinctive allegedly typical buyer group of 'rockers' and 'easy riders' and 'retarded drivers' respectively.[73]

The brand thereby represented brand identity features first inwards and later outwards.[74] In this sense, brand identity is understood as a **management concept** which is constituted by both the interactions among internal stakeholders and with external target groups. Brand identity as management tool pursues two objectives: first the consistent outwards communication of the brand promise in the sense of a target positioning at all brand touch points[75] and second the inwards implementation and honouring of the value proposition through adequate employee behaviour. Since consumer brand experience is driven by all consumer touch points which were often determined by the words and actions of employees, an institutionalised internal brand management is regarded essential in order to achieve a strong brand identity.[76]

2.1.2 Brand image

According to the identity-based brand management approach, brand image is a multidimensional attitude construct[77] which represents the brand information processing and association network in the consumer's mind.[78] In contrast to the brand identity concept **brand image** is understood as the exterior view on a brand.[79] It is defined as *"...condense and judgemental perceptions about a brand fixed in the psyche of relevant external target groups."*[80] It is the result of a consumer's individual subjective perception and decryption of all brand signals sent via various brand touch points.[81] In this sense, the brand image represents a **market response model** with two distinctive components: customer expectations regarding the brand's aptitude to meet

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[72] See MOSER (2003), pp. 67 et seqq.

[73] For an in-depth analysis of the Harley Davidson community see SCHOUTEN/MCALEXANDER (1995); FOURNIER/SENSIPER/MCALEXANDER et al. (2000).

[74] See also in the following MEFFERT/BURMANN/KIRCHGEORG (2008), pp. 359 et seqq.; BURMANN/BLINDA/NITSCHKE (2003), p. 5.

[75] Brand touch points comprise all points of contact between a consumer and a brand (see MEFFERT/BURMANN/KIRCHGEORG (2008), p. 360). Besides major media also public relations and sponsorships, point of sale and customer relationship activities are included. For an overview of brand communication vehicles see MEFFERT/BURMANN/KIRCHGEORG (2008), pp. 649 et seqq.; for examples for a strong brand's touch points see BURMANN (2007), p. 4.

[76] See BURMANN/ZEPLIN (2005a), p. 281

[77] See KROEBER-RIEL/WEINBERG (2003), pp. 168 et seqq.; TROMMSDORFF (2004), p. 159.

[78] See BURMANN/STOLLE (2007), p. 68.

[79] See BURMANN/BLINDA/NITSCHKE (2003), p. 3.

[80] MEFFERT/BURMANN/KIRCHGEORG (2008), p. 364 with reference to BURMANN/BLINDA/NITSCHKE (2003), p. 6 (translated from German).

[81] See also in the following MEFFERT/BURMANN/KIRCHGEORG (2008), pp. 364 et seqq.

individual needs on the one hand and the created brand experience on the other hand.

Prerequisite for brand image building is brand awareness understood as the consumers' ability to recall a brand spontaneously or recognize it after a visually or acoustically aided recall and allocate it to a product category.[82] Given brand awareness as base, brand image is made up from three components [83] (see Figure 7). Brand attributes represent the lowest processing stage of brand information comprising only descriptive elements associated with the brand.[84] They include all product (e.g. price), origin (e.g. country of origin, history, industry, and corporation) and user related brand characteristics perceived by the consumer and served as basis for the brand personality formation by the consumer.[85] Brand personality is called – as in the context of brand identity – the set of human traits associated with the brand by the consumer (e.g. truth, competence, and stimulation but also social class, age group, gender, etc.).[86] Brand attributes and personality resulted in condensed form in functional and symbolic brand benefit associations as highest brand information processing stage with relevancy for purchase behaviour. Brand benefit associations are regarded a review a brand's inherent bundle of benefits in order to meet individually appreciated benefits and achieve a target stage.[87]

With regard to UGB the **symbolic benefit associations** and the granted user influence on brand image are of relevance. The proponents of the identity-based brand management approach argue that the brand image might be strongly shaped by a brand's allegedly typical customers and users. Those peers did not only generate associations on the brand attribute level[88], but also influenced the perceived brand personality as well as the symbolic brand benefit associations of other consumers.[89] Especially the effects concept of the identity-based brand management concept has been criticised.[90] WELLING points out an ambiguity problem regarding the understand-

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[82] See BURMANN/BLINDA/NITSCHKE (2003), p 6; AAKER (1991), p. 61.

[83] The components are understood as perceived partial images of a brand from a consumer perspective. These partial images resulted in the global attitude towards the brand (see BURMANN/STOLLE (2007), pp. 68; 82)

[84] See also for the following ibid., pp. 68; 82.

[85] For a derivation and description of brand attribute dimensions see ibid., pp. 80 et seqq.

[86] For details on brand personality dimensions according to the brand personality scale, effects models and relationships to brand benefit levels see ibid., pp. 78 et seqq.; for the relation between brand personality and consumer's lifestyle see BECKER/SCHNETZER (2006), pp. 121 et seq.

[87] For a description of the benefit dimensions, levels and categories see BURMANN/STOLLE (2007), pp. 71 et seqq.; BURMANN/MEFFERT (2005a), pp. 55 et seq. and explanations later in this section.

[88] For details on the brand attribute dimension see BURMANN/STOLLE (2007), pp. 80 et seqq.

[89] See MEFFERT/BURMANN/KIRCHGEORG (2008), p. 365.

[90] See also in the following WELLING (2006), pp. 44 et seqq.

ing of a brand as an image in consumers' minds since perception processes varied intersubjectively and even intrasubjectively and thus resulted in different images despite of identical perception catalysts. Thus, he proposed to refrain from defining a brand as an image construct and rather regard it as a signal evoking an image in perception.[91]

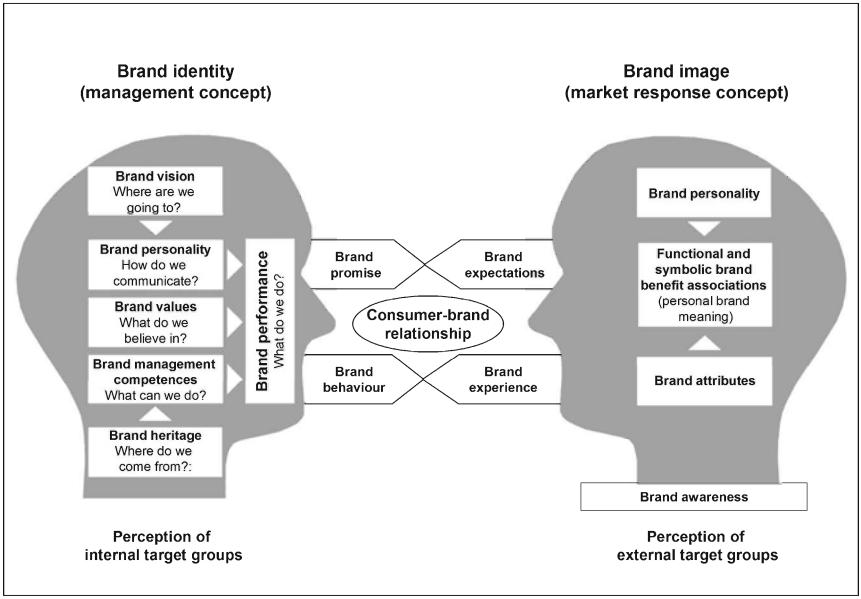

Figure 7 **Basic model of the identity-based brand management approach**
Source: Own illustration based on MEFFERT/BURMANN/KIRCHGEORG (2008), pp. 359; 361; 364.

[91] Welling differs between a brand as material signal (e.g. logo), brand effects (e.g. brand knowledge) and brand sales objects (e.g. branded product) (see ibid., pp. 52; 222).

2.1.3 *Consumer-brand relationship as the reference point of this study*

According to the model the two contrasting constructs of brand identity and brand image are linked by the **consumer-brand relationship.**[92] As preliminary stage of a customer-brand relationship[93] it is defined as *"...the degree of the subjectively perceived cognitive and affective relatedness of a consumer to a brand."*[94]

In other words: Based on the understanding of a brand as a bundle of benefits the brand identity formulates a relevant benefit and the brand image expresses the potential buyers' judgement of the degree to what the brand is able to meet their needs.[95] Since all brand management activities result in the consumer-brand relationship, it represents a highly relevant target for brand management and the foundation of a brand's overall economic value.[96]

Transferring the relationship definition from social psychology to brand management the proponents of the identity-based brand management approach consider – in metaphoric form – three constitutive features of a consumer-brand relationship: coherent interactions in respect of content, subjectivity and affective and cognitive motives of relatedness.[97] While affective motives resulted from a consumer's psychological brand benefit associations, cognitive motives corresponded to functional brand benefit associations. From this two contrasting relationship qualities followed[98]: On the one hand, relationships from cognitive motives were established and maintained because the consumer was not able to change it due to functional reasons (e.g. contracts, economic loss, techno-functional rational).[99] On the other hand, relationships from affective motives were established and maintained because the con-

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92 See also in the following MEFFERT/BURMANN/KIRCHGEORG (2008), p. 367. The term refers to the notion of consumers understood as the total of potential buyers. Thus, it exceeds the notion of customers understood as actual buyers of the brand.

93 For an in-depth elaboration of the notion of customer-brand relationship (referring to customers as actual buyers of the brand) see BURMANN/WENSKE (2007).

94 MEFFERT/BURMANN/KIRCHGEORG (2008), p. 367 with reference to BURMANN/MEFFERT (2005b), p. 101 (translated from German). Cognitive relatedness refers to rational aspects of the relationship; affective relatedness corresponds to an emotional attitude towards the brand. For further explanation see BURMANN/WENSKE (2007), p. 37.

95 See MEFFERT/BURMANN/KIRCHGEORG (2008), p. 360.

96 See BURMANN/MEFFERT (2005b), p. 75; WENSKE (2008b), p. 89.

97 For details on the socio-psychological relationship construct and the derivation of the consumer-brand relationship see WENSKE (2008b), pp. 73 et seqq.; BURMANN/WENSKE (2007), pp. 36 et seqq. Taking the criticm into account that brands could not be treated like human beings the reference to interpersonal relationships should be understood as metaphor in the sense of a comparison.

98 See also in the following WENSKE (2008b), pp. 75 et seq.; BURMANN/WENSKE (2007), p. 37.

99 For examples for cognitive relatedness from customer loyalty research see WEINBERG/DIEHL (2001), p. 29.

sumer did not want to change it because of emotional attitudes towards the brand (e.g. brand community).[100]

Based on the cognitive or affective relatedness various subtypes of consumer-brand relationships can be distinguished. FOURNIER – the pioneer of brand relationship research – identified 15 types of consumer-brand relationships along seven dimensions,[101] ranging from friendship (e.g. childhood buddies) via marriage (e.g. marriages of convenience) to the dark side (e.g. 'enslavements', 'secret affairs').[102]

With regard to UGB the subjectively perceived **affective relatedness** of a consumer to a brand is of relevance. Brand related UGC corresponds to 'volunteer' relationships from affective motives since users who engage in the creation of personal brand meaning tend to be mostly driven by emotional attitudes and symbolic brand benefit associations such as peer recognition and self-actualisation rather than functional brand benefit associations. In the understanding of this thesis, brand related UGC is based on the consumer's desire to voluntarily establish and maintain the brand relationship; they are basically able to discontinue it, but may not want to.

Given its reference to the external target group the consumer-brand relationship is regarded an important driver of the external brand strength which is represented by the brand's actual purchase behaviour relevancy.[103] Provided that a consumer-brand relationship resulted in a customer-brand relationship[104] its strength might be expressed by the degree of customer loyalty[105] and reflected by the purchase behaviour and recommendation intention.[106] These effects of customer-brand relationships can be classified as consumer-related pre-economic effects referring to behaviour and attitudes in contrast to branded company-related economic effects (e.g. sales increase).[107] Within the scope of consumer-related pre-economic effects WENSKE allocates the perception of brand image to the attitude-related effects and **communica-**

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[100] For examples for affective relatedness see ibid., p. 29.

[101] Dimensions of consumer-brand relationships include voluntary versus imposed, positive versus negative, intense versus superficial, enduring versus short-term, public versus private, formal versus informal and symmetric versus assymetric (see FOURNIER (1998), p. 361).

[102] See ibid., p. 362.

[103] See WENSKE (2008a), pp. 87 et seq.; also see WENSKE (2008b) (book version of original PhD thesis).

[104] The customer-brand relationship is defined as coherent interactions in the sense of an exchange between brands and their existing buyers who evaluate this relationship subjectively. The relationship is thereby based on the existing buyers' cognitive and affective motives resulting from functional and symbolic brand benefit associations (see WENSKE (2008a), p. 97); BURMANN/WENSKE (2007), p. 40).

[105] See MEFFERT/BURMANN/KIRCHGEORG (2008), p. 368

[106] For empiric evidence see ZEPLIN (2006), pp. 187 et seqq.

[107] See HADWICH (2003), pp. 44 et seqq.; WENSKE (2008a), p. 124.

tion behaviour and purchase behaviour to behaviour-related effects.[108] Communication behaviour thereby included supportive consumer reactions such as the willingness to recommend the brand and serve as testimonial[109] as well as spread positive word of mouth[110]. In an empiric analysis STICHNOTH validated this communication behaviour effect of customer-brand relationships in the context of customer participation in internet based communication platforms.[111] In this sense, brand related UGC may be interpreted as communication behaviour as effect of the consumer-brand relationship.

Customer-brand relationships correspond to the customer life cycle which consists of three phases[112]: In the first phase of customer acquisition the relationship to the consumer was initiated and socialized by means of high investments (e.g. advertising, promotions). In the second phase of customer penetration the customer potential was exploited in the sense of maximizing the share of wallet[113] and expanded to other fields in terms of the so-called cross selling. In this phase the customer-brand relationship achieved its maximum value and had the highest profitability.[114] In the final phase of customer retention the achieved customer potential level was attempted to stabilize by retention measures or to recover in case of customer migration.[115]

As shown in chapter 1.2, the creation of personal brand meaning may be driven by customer experiences and direct contact to the brand (e.g. complaints handling), but this is not considered a prerequisite for brand related UGC. Provided that there is a sufficient brand awareness consumers – understood as the total of potential buyers – could also engage in brand related UGC without being an actual buyer of the brand.

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[108] See also in the following WENSKE (2008a), pp. 129 et seq. For an overview of academic studies about the effects of customer-brand relationships see WENSKE (2008a), pp. 124 et seqq.

[109] See FOURNIER (1994), pp. 160 et seq.

[110] See BRUHN/EICHEN (2007), pp. 3; 247.

[111] STICHNOTH analysed attitude and behaviour related effects of the customer-brand relationship of members of official and grassroots virtual brand communities and virtual customer clubs for the brands Nokia, SonyEricsson, Nintendo and PlayStation by means of an online survey (N=2,121) in summer 2008 (see STICHNOTH (2008), pp. 52 et seqq.; 94 et seqq.). The study results are discussed in detail in the chapter D 3.1.2.2.

[112] See also in the following MEFFERT/BURMANN/KIRCHGEORG (2008), pp. 368 et seq.; BURMANN/BLINDA/NITSCHKE (2003), p. 45.

[113] For the impact of brand-customer-relationship on the share of wallet see BURMANN/WENSKE (2007), p. 17.

[114] Reasons for higher profitability compared to the customer acquisition and retention phase include higher purchase frequency, reduced administrative costs, higher customer recommendation rates and lower price sensitivity (see ibid., pp. 18 et seq.).

[115] See BLINDA (2007), pp. 90 et seq.; BRUHN/EICHEN (2007), pp. 223 et seqq.

Overall, a strong consumer-brand relationship has advantages for both the branded company and the consumer.[116] From a company perspective the profitability of the customer-brand relationship increased the longer the relationship lasted[117] and the more satisfied customers recommended the brand[118]. From a consumer perspective a strong customer-brand relationship provided confidence benefits in terms of perceived reduced risk of purchase decisions, social benefits with regard to affiliations to brand representatives and co-customers[119] as well as special treatment benefits such as discounts, upgrades and time savings or within the scope of loyalty programmes. Generally speaking: The deeper the customer-brand relationship, the higher is a customer's brand habit and emotional barrier to switch to competitive offers.[120]

Evidence was provided that the consumer-brand relationship building was pushed by the perception of brands as interactive partners.[121] Customer interaction could be especially enhanced by pro-active complaints handling, brand experience opportunities (e.g. brand shops, brand contests) and the humanisation of brands (e.g. celebrity testimonials, artificial characters, regular users). Furthermore, STICHNOTH provided evidence that a customer's participation in interactive internet based communication platforms such as virtual brand communities and virtual customer clubs had a positive influence on the strength of the customer-brand relationship.[122]

Thus, it can be concluded that also UGB might be considered as special value of **brand-consumer interaction**. As stated by the proponents of the identity-based brand management approach interactivity is regarded as a constitutive feature of a relationship and the perception of brands as interactive partners are seen as advantageous for consumer-brand relationship building. Brand related UGC can thereby be an expression of customer complaint, but also of the desire to experience the brand (e.g. participation in a brand contest) or to exchange with co-consumers (e.g. participation in a brand community).

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[116] See also in the following BURMANN/WENSKE (2007), pp. 17 et seqq.
[117] For industry examples of profit gains over time see ibid., pp. 19 et seq.
[118] For an in-depth elaboration of the customer recommendation problem see REICHHELD (2003).
[119] Studies showed that co-customers provided not only additional support and brand information but also the feeling of social integration and acceptance (see KLINGENBERG (2000), pp. 67 et seqq.).
[120] For details on benefit categories and industry-specific differences in relationship quality see BURMANN/WENSKE (2007), pp. 21 et seqq.
[121] See also in the following ibid., pp. 28 et seqq.
[122] See STICHNOTH (2008), pp. 87 et seqq.

2.2 Identity-based brand management process

As mentioned in the chapter above the brand identity construct is understood as a management concept. The objective is the integration of all brand management related measures – towards internal and external target groups – to establish a stable and sustainable brand-consumer-relationship.[123] The management process thereby comprises three separated sub processes as regards content and timing: strategic and operative brand management as well as brand controlling[124] (see Figure 8).

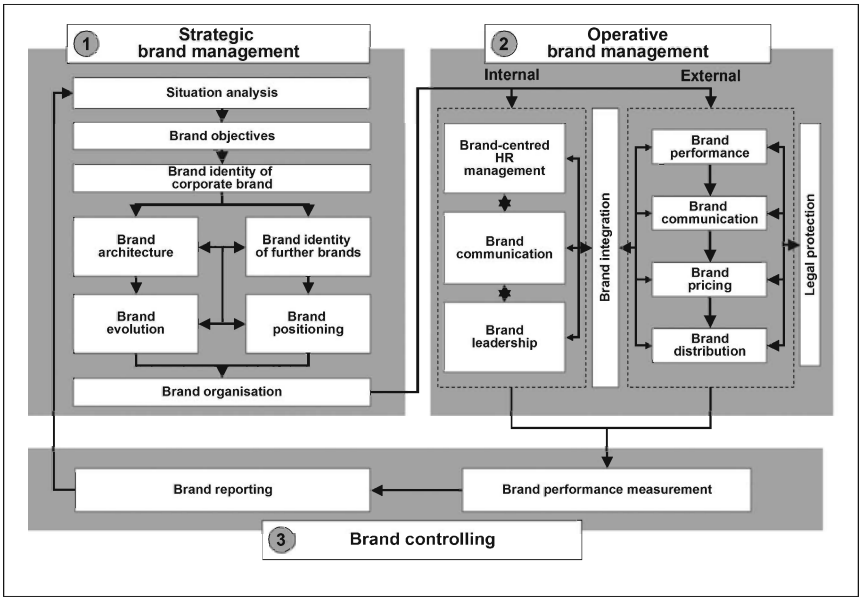

Figure 8 **Identity-based brand management process**
Source: Adapted from BURMANN/MEFFERT/FEDDERSEN (2007), p. 12.

Strategic brand management covers general decisions on objectives and identity of a company's brands.[125] Starting point is a situation analysis including internal and ex-

[123] See BURMANN/MEFFERT (2005b), p. 75; BURMANN/BLINDA/NITSCHKE (2003), pp. 10 et seqq.; BURMANN/MEFFERT/KOERS (2005), p. 9.
[124] See BURMANN/BLINDA/NITSCHKE (2003), p. 10. All three process steps are considered iterative; they occur rather in parallel than in chronology.
[125] See also in the following ibid., pp. 10 et seqq. and BURMANN/MEFFERT (2005b), pp. 77 et seqq.

ternal context factors.[126] Second, **brand objectives** are determined which can be separated into psychographic and economic goals according to the psychographic and economic brand value distinction.[127] Psychographic values include brand awareness, brand loyalty, satisfaction, recommendation rate and brand commitment of employees). Economic values comprise customer equity[128], price premium, customer acquisition and retention costs and operating margin. Third, based on the brand objectives the brand identity of the corporate brand is designed according to the six introduced identity components. The portfolio of divisional, product and service brands may be then adjusted accordingly by coordinating the comprehensive portfolio within the scope of brand architecture decisions and by defining the individual brand identities.[129]

Within the following **brand positioning** process the brand identities are condensed and translated into purchase behaviour relevant brand promises and communicated to consumers in order to achieve a dominant position in consumer's minds and an adequate differentiation compared to competitive offers.[130] This brand identity translation into a brand promise and corresponding brand behaviour of all brand-related employees is regarded one of the major tasks of identity-based brand management.[131] The static perspective is complemented by a dynamic view: By means of the so-called brand evolution plan the development of a brand within the upcoming 2 to 5 years is fixed.[132] Finally the brand organisation is determined by defining leadership structures, processes and incentive systems. In order to achieve these strategic goals the management decisions are converted into behaviour plans.

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[126] Components of a situation analysis include information about consumer demands, brand touch points, competitive environment, legal and distribution system, and social trends. In particular the potential gap between target identity and status quo perception of brand identity and image are of interest. For details see BURMANN/BLINDA/NITSCHKE (2003), p. 11.

[127] See also in the MEFFERT/BURMANN/KIRCHGEORG (2008), pp. 354 et seq. In contrast to brand vision as brand identity component brand objectives refer to a shorter time horizont of 1 to 5 years and have a more operational nature.

[128] Customer equity is a market-based asset deriving from a company's total customer-brand relationships (see ibid., pp. 802 et seqq.). For details on customer equity models see BURMANN/BREUSCH (2007).

[129] For details and examples on brand architecture see AAKER/JOACHIMSTHALER (2000), pp. 95 et seqq.; AAKER (1996), pp. 239 et seqq.; BURMANN/MEFFERT (2005c), pp. 163 et seqq.

[130] For an in-depth consideration of positioning strategies see KOTLER/KELLER/BLIEMEL (2007), pp. 422 et seqq.; KELLER (2005), pp. 87 et seqq.; KELLER (2003), pp. 131 et seqq.

[131] See MEFFERT/BURMANN/KIRCHGEORG (2008), p. 372.

[132] For details on brand evolution including the alternative strategies of brand expansion and brand consolidation see BURMANN/MEFFERT/BLINDA (2005), pp. 183 et seqq.

Operative brand management aims at implementing the strategic goals by translating the target brand identity into operative measures.[133] With regard to **internal target groups** the goal is to achieve an employee behaviour which is consistent with the brand identity.[134] This so-called brand citizenship behaviour[135] is driven by high brand commitment[136] which can be generated by three levers: brand focused HR, internal brand communication and brand focused leadership.[137]

With regard to **external target groups** brand identity is translated into the four known instruments of the marketing mix: product, communication, price, and distribution politics.[138] Brand performance corresponds to product politics and comprises the technical-qualitative product and service design including a brand's innovation capacity, packaging design and corporate identity.[139] Brand communication aims at transmitting consistent brand messages throughout all marketing communication politics channels such as classical advertising, sponsoring, events, promotion, direct mail, Public relations, fairs and exhibitions and online communication. The brand identity is also reflected in brand pricing implying exclusiveness versus mass market orientation. Brand distribution deals with the transmission of tangible and intangible offers to the consumer aiming at a systematic penetration of the target market and a consistent appearance through selection and control of sales channels. In order to ensure exclusivity in applying brand icons such as brand name, logo, claims, jingles, etc. the legal protection of the trademark is of high relevance. Whatever target group is addressed or marketing instrument applied – essential is the integration of all tools as regards content, form and timing.

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[133] See also in the following BURMANN/MEFFERT (2005b), pp. 86 et seqq.; BURMANN/BLINDA/NITSCHKE (2003), pp. 34 et seqq.

[134] For details on institutionalised internal brand management see BURMANN/ZEPLIN/RILEY (2008); ZEPLIN (2006).

[135] Brand citizenship behaviour is defined within the scope of internal branding as "...the intention of each employee to voluntarily exhibit certain generic (brand- and sector-independent) behavioural characteristics outside of the formally defined role expectation system, which strengthen the identity of the brand" (BURMANN/ZEPLIN/RILEY (2008), p. 3).

[136] Brand commitment is defined as "...extent of psychological attachment of employees to the brand, which influences their willingness to exert extra effort towards reaching the brand goals..." (BURMANN/ZEPLIN (2005a), p. 284, also see BURMANN/MEFFERT/KOERS (2005), p. 10; BURMANN/ZEPLIN/RILEY (2008), p. 3).

[137] The levers were identified through expert interviews (see BURMANN/ZEPLIN (2005a), p. 286; BURMANN/ZEPLIN (2005), p. 124) and empirically validated (see BURMANN/ZEPLIN/RILEY (2008), pp. 13 et seq.; 18; ZEPLIN (2005), pp. 235 et seq.).

[138] For details on product politics see MEFFERT/BURMANN/KIRCHGEORG (2008), pp. 397 et seqq.; on communication politics see MEFFERT/BURMANN/KIRCHGEORG (2008), pp. 632 et seqq.; on price politics see MEFFERT/BURMANN/KIRCHGEORG (2008), pp. 478 et seqq.; on distribution politics see MEFFERT/BURMANN/KIRCHGEORG (2008), pp. 560 et seqq.

[139] See also in the following MEFFERT/BURMANN/KIRCHGEORG (2008), pp. 379 et seqq.

Brand controlling represents the third sub process of the identity-based brand management process. It deals with the information provision, consultancy and coordination of all brand management related departments in order to ensure rationality, effectiveness, efficiency and profit orientation of brand management.[140] Brand controlling can be divided into brand performance measurement[141] evaluating the results of brand management and brand reporting structuring and condensing data and communicating the results to leaders to enable strategic decisions. Given the controlling task of target-performance comparison brand controlling can be considered at the same time as completion of the identity-based brand management process and starting point of a situation analysis within the scope of a new process cycle.

2.3 Integration of UGB and brand related UGC into the identity-based brand management approach

When integrating UGB into the identity-based brand management framework it is essential to distinguish between the subject brand related UGC and the management approach UGB. With regard to the subject brand related UGC both causes and effects can be considered. The cause perspective focuses on the question of how brand related UGC is emerging. In this sense, brand related UGC may be regarded as effect of the consumer-brand relationship. Brand related UGC is thereby understood as a creative form of recommending or advising against a brand; both positive and negative word of mouth is included. The idea of **brand related UGC as a kind of communication behaviour** evoked by the consumer-brand relationship is backed by comprehensive empiric analyses conducted by WENSKE and STICHNOTH. Both provided evidence that brand recommendation intentions were an effect of a strong customer-brand relationship.[142]

In contrast to the cause perspective, the effects perspective describes the impact of brand related UGC. It is considered the visualised result of a consumer's individual subjective perception and decryption of all brand signals sent by various – mostly

[140] See also in the following ibid., pp. 387 et seq.; BURMANN/BLINDA/NITSCHKE (2003), pp. 34 et seqq.; BURMANN/MEFFERT (2005b), p. 101; for marketing controlling in general see KOTLER/KELLER/BLIEMEL (2007), pp. 1181 et seqq.

[141] For an in-depth consideration of brand performance measuring see KELLER (2005), pp. 92 et seqq.

[142] For details see WENSKE (2008a), pp. 268 et seq.; STICHNOTH (2008), pp. 63 et seqq. In particular, STICHNOTH validated within the context of internet based communication that the customer-brand relationship had a positive influence on a customer's re-purchase and cross-buying intention, willingness to pay a higher price and recommend the brand. Besides, he showed that the customer-brand relationship had a positive influence on the brand image and a negative influence on the attractiveness of competing brands.

brand management influenced – brand touch points. Since brand related UGC is available content it represents at the same time a **brand touch point** for other consumers.[143] Thus, it can be regarded as a non-company initiated brand touch point next to corporate communication efforts such as Public Relations and sponsorships, point of sale and customer relationship activities.[144] To give the example of the restaurant chain McDonald's, user generated anti-brand content (e.g. incriminating video game) represents a brand touch point to consumers just as well as the company driven touch points from Happy Meal via testimonial Ronald McDonald to employee of the month and the McCafé next door.[145] So it can be concluded that brand related UGC has a significant impact on the consumers' brand experience and brand expectations (see Figure 9).

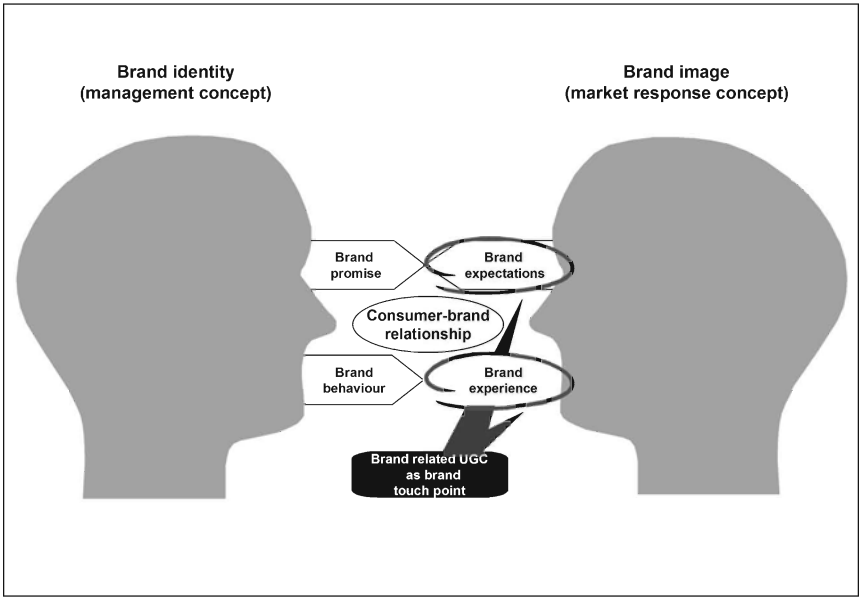

Figure 9 **Brand related UGC as brand touch point**
Source: Own illustration based on MEFFERT/BURMANN/KIRCHGEORG (2008), p. 359.

[143] This assumption is backed by GfK's Brand Health Management Model in which UGC is allocated to 'consumer experiences' within the 'brand signals' dimension (see JARCHOW (2008), p. 5).
[144] For an overview of brand communication vehicles see MEFFERT/BURMANN/KIRCHGEORG (2008), pp. 649 et seqq.
[145] For details on brand touch points regarding the McDonald's example see BURMANN (2007), p. 4.

This consumer-to-consumer interaction is explicitly considered in the identity-based brand management approach. The proponents argue that the brand image might be strongly shaped by a brand's allegedly typical customers and users. Those peers did not only generate associations on the brand attribute level, but also influenced the perceived brand personality as well as the symbolic brand benefit associations of other consumers. The consideration of co-customers as social benefit factor (e.g. in terms of social integration and acceptance) provides a potential explanation why users engage in UGB both on the creator's and receiver's side.

Given the relevance of brand related UGC as brand touch point, **UGB as management approach** needs to cope with it within the three-level identity-based brand management process (see Figure 8). A situation analysis is considered the starting point of the identity-based strategic management process. Since the objective of the situation analysis is to gather information about consumers and in particular to identify their brand touch points and explore the fit between brand identity and brand image[148] brand related UGC as representation of grassroots brand perception is to be integrated into the analysis. Therefore, monitoring of brand-related UGC is considered an integral part of UGB within the scope of the strategic brand management process. Implementing the learning from monitoring brand related UGC may result in an adaptation of brand positioning and thus affect operative brand management instruments such as product and communication politics but also pricing and distribution and legal issues.

Beside the rather passive monitoring brand related UGC may be also actively incorporated into the marketing mix of the operative brand management. Notably, it could be part of the brand communication strategy. It is thereby regarded as a tool for both external and internal target groups. Given the insights from monitoring and the trackability options of brand related UGC campaigns in the computer mediated environment UGB could also contribute to brand performance measuring.

As mentioned above UGB is understood as a specific brand management type. It is characterized by its management subject – brand related UGC. It comprises brand related artefacts from comments, reviews and ratings to artistic work created and distributed by users. It can be both an expression of customer complaint and brand fan dedication. It may appear in all qualities from single dilettante efforts to comprehensive sophisticated brand building approaches in a community. It may be visualized in the form of text, image, audio or video. It may appear as original writing or shot but

[146] See also in the following BURMANN/MEFFERT (2005b), pp. 77 et seqq.

also as montage, re-cut or remix given a certain creative effort behind. It may be distributed on UGC platforms in the internet such as forums, blogs, feedback and review sites, video and photo sharing sites, podcast sites, social networking sites, Wikis, virtual worlds (see Appendix I) but also via mobile and other electronic devices.

As the integration in the identity-based brand management approach implies UGB might have a strategic and operative component. Management is thereby understood in the sense of dealing with the subject to achieve brand goals, not in the sense of steering it. It is not assumed that brand related UGC may be controlled by the branded company. In fact, management is understood as goal-oriented influence.

Given the definition of brand related UGC and the foundation of the identity-based brand management process the following preliminary definition for UGB is proposed:

> ***"User generated branding (UGB)** is the strategic and operative management of brand related user generated content (UGC) to achieve brand goals."*

With regard to the expected learning from the literature review of related research fields this preliminary definition will be revisited and further specified in chapter C 2.2.

3 Relationship marketing as the practical reference of this study

Apart from the identity-based brand management approach as theoretical framework, UGB shall be also considered against the background of marketing approaches which deal with the broad field of customer participation. First, the thoughts of relationship marketing are briefly introduced which recognized marketing as exchange system long ago before the emergence of participatory media. Then the idea of interactive marketing is discussed which reflects the new media potential within the customer dialogue. Finally, UGB and brand-related UGC are positioned within these marketing approaches.

3.1 Relationship marketing

Relationship marketing is a field of relationship management, understood as active and systematic analysis, selection, planning, design and control of business relationships.[147] Essential is the paradigm shift from transaction oriented to relationship oriented thinking, aiming at economic success in the long run via sustainable business relationships.[148] Although relationship management comprises all sorts of horizontal, vertical, lateral and internal relationships of an enterprise, **customer relationship management** (CRM) takes centre stage within the scope of this study. CRM aims at addressing customers in an individual way with respect to both customer acquisition and retention.[149] The objective is to build and maintain profitable and sustainable customer-brand relationships exploiting customer lifetime value. The focus is not on short-term purchase decisions but long-term relationships to valuable customers.

BELZ/SCHÖGEL/ARNDT distinguish four key principles of CRM: customer orientation, economic efficiency, individualisation and IT application.[150] The importance of brand related UGC is thereby highlighted with respect to individualisation. By integrating customers via UGB applications, customer involvement could be strengthened and

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[147] For a detailed definition see amongst others DILLER (1995), p. 442. The terms 'relationship marketing' and 'relationship management' are often used synonymously. However, WENSKE points out that the latter primarily refers to the IT supported framework (see WENSKE (2008a), p. 52).

[148] See amongst others BELZ/SCHÖGEL/ARNDT (2008), p. 8. BAGOZZI recognized already in the 1970s the importance of exchange systems for marketing, concentrating the attention on relationships among social actors and variables affecting their behaviour (see BAGOZZI (1975).

[149] For CRM objectives see also in the following BELZ/SCHÖGEL/ARNDT (2008), pp. 8 et seqq.; SCHÖGEL/WALTER/ARNDT (2008), pp. 439 et seq.; TOMCZAK (1994), pp. 195 et seqq.

[150] See also in the following BELZ/SCHÖGEL/ARNDT (2008), pp. 8 et seqq. It is to be noted that the scholars understand brand related UGC in a broader sense, including mass customization. applications.

additional customer insights won. On the other hand, such programmes also facilitated data gathering, i.e. personal customer information, which, in turn, supported the IT integration necessary for efficient CRM.

The idea of relationship marketing emerged long before the existence of social media. BERRY introduced the term in 1983 as "*...attracting, maintaining and ...enhancing customer relationships*".[151] He thereby took a company-dominant position and focused on customers as sole stakeholders. Currently, relationship marketing is used as a **super ordinate term** comprising various sub research fields such as the analysis of relationship phases (customer life cycle), customer retention tools, interactions and networks as well as customer-brand relationships.[152] While some interaction approaches still keep the company-oriented view as coined by BERRY, the concept of customer-brand relationship considers customers as equal partners. Only in the latter sense, relationship marketing thus suits the idea of UGB.

3.2 Interactive marketing

Based on the ideas of relationship marketing, interactive marketing takes a step forward in response to recent shifts in branding environment.[153] According to SCHÖGEL/HERHAUSEN/WALTER this relatively new marketing discipline applies social media to engage customers in a dialogue.[154] Exploiting the potential of Web2.0 and mobile devices, both high interactive and individual customer address (richness) and high connectivity (reach) is achieved. The focus is on dialogue, considering branded companies as members of **communication networks** which they may influence but not control. As relationship marketing, interactive marketing can be also understood as **super ordinate term** comprising various sub research fields classified by Web2.0 applications (e.g. blog marketing, brand community marketing) and channels (e.g. word of mouth marketing).[155]

Interactive marketing thereby pays special attention to the active participation of consumers as evidenced by user generated content, products and services.[156] Taking in-

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[151] BERRY (1983), p. 25. For an overview of further relationship marketing definitions see WENSKE (2008a), p. 53.
[152] For an in-depth consideration of the named sub fields see WENSKE (2008a), pp. 54 et seqq.
[153] Such trends include information overload, diversification of communication channels, changing media consumption, shrinking impact of traditional media and individual customer address (see SCHÖGEL (2009). For shifts in branding environment also see chapter A 1.1.
[154] See SCHÖGEL/HERHAUSEN/WALTER (2008), pp. 342 et seq.
[155] See amongst others STANOEVSKA-SLABEVA ibid., pp. 221 et seqq. UGB relevant approaches are discussed in chapter C 1.3, 1.4 and 1.5 of this study.
[156] See SCHÖGEL/HERHAUSEN/WALTER ibid., p. 339; STANOEVSKA-SLABEVA (2008), p. 221.

teractivity between brand and customers as well as interactivity among customers into account, SCHÖGEL distinguishes four marketing interaction types (see Figure 10). With respect to UGB, the **customer-driven communication** type is of matter since the 'acting customer' takes centre stage. SCHÖGEL thereby considers both user generated content stimulated by the branded company and consumer created brand messages occurring unprompted. To some extent, also community marketing[157] as well as viral and buzz marketing[158] are of relevance with regard to UGB. Understanding UGB as management of brand-related user generated content, communities constitute a social network wherein consumer created brand messages might be created and distributed. In case a branded company establishes such an online community as platform for UGC, it might be regarded as application of UGB. With regard to viral and buzz marketing, the focus is also on content transmission. This is, however, not restricted to brand related UGC as subject of UGB.[159]

[157] For an in-depth consideration of brand and online communities see chapter C 1.4.
[158] For an in-depth consideration of viral and buzz marketing in the context of word of mouth research see chapter C 1.3.
[159] For a detailed differentiation of UGB from related terms (e.g. online communities, word of mouth) see chapter C 2.

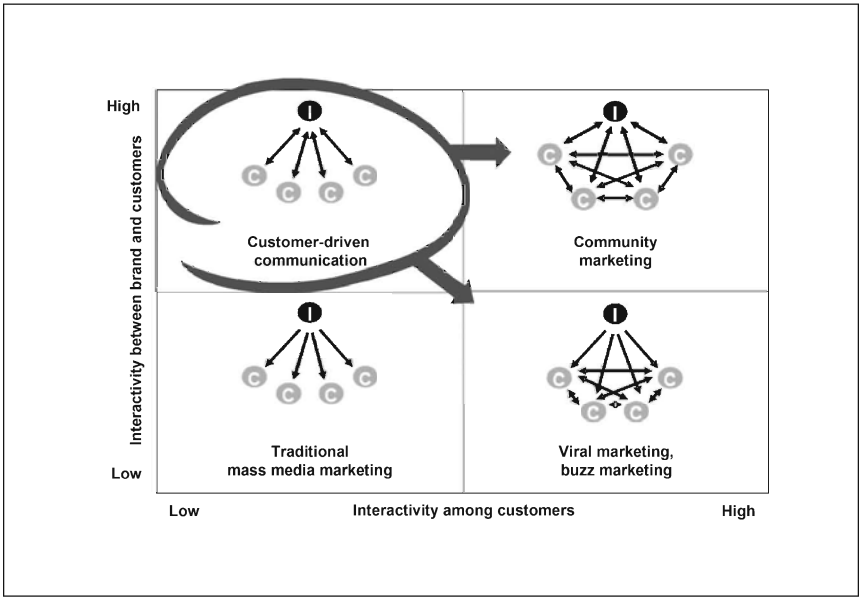

Figure 10 Interaction types in marketing
Source: Adapted from SCHÖGEL (2009).

3.3 Integration of UGB and brand related UGC into relationship marketing

As shown, the concepts of relationship and interactive marketing are useful to understand possible applications and target values of UGB in brand management practice. With respect to relationship marketing, the importance of **consumer-brand relationships** for UGB is highlighted. However, the UGB inherent management idea is only met if relationship is understood as mutual exchange between equal partners following the consumer-brand relationship definition within the identity-based brand management approach. Besides, the status of the consumer-brand relationship construct as pre-economic target value is reconfirmed. That implies that UGB effects could be measured in terms of strength and changes in consumer-brand relationship as outcome variable.

Since UGB is rooted in the social media environment, reference to interactive marketing is obvious. In particular, parallels to SCHÖGEL's customer-driven communication approach are manifest, considering both unprompted and stimulated brand related UGC. As mentioned, UGB is also related to sub fields of interactive marketing such as brand community and word of mouth marketing. However, two basic differ-

entiations are crucial for clear understanding: first, the **distinction of management, content and channel**, and second, the **distinction of stimulation and reaction**. The first differentiation is essential to separate UGB as management approach, brand related UGC as content and word of mouth and community as channel and network respectively. That is, UGB makes use of those concepts, but shall not be equated with it.

The second differentiation is crucial to define the scope of interactive marketing versus UGB. As shown in the introduction, the UGB phenomenon has two faces: On the one hand, there are branded companies which stimulate UGC by blogs, challenges, communities, etc. in order to achieve brand goals. On the other hand, however, there are countless unattached users which create and distribute brand messages unprompted, using off-brand platforms and making off-brand statements. Thus, interactive marketing only covers part of the UGB phenomenon, i.e. the stimulation part. The big off-brand part, however, is not addressed. This distinction between stimulation and reaction shall be further elaborated in the course of this study.

4 Web2.0 and the digital world as context factors of this study

As mentioned above, the emergence of brand related UGC and thus UGB is linked with Web2.0 and the digital world. Basically, four main factors can be distinguished[160]: advancements in digital technology, a changed understanding of hierarchy and architecture through Web 2.0 as platform, changes in the community due to increasing digital skills and shrinking privacy concerns as well as legal facilitations. This classification includes IT, social, demographic, economic, legal and institutional drivers encouraging brand related UGC.

4.1 Advancements in digital technology

Recent advancements in digital technology have been fostering the creation, distribution and consumption of brand related UGC. First, due to high-speed broadband the **internet has become faster**.[161] In 2007, a fourth of the total of 1 billion internet households worldwide had broadband connections.[162] This global transition from slow dialup connections to fast broadband drastically changed the environment in which users create, post and download content allowing the handling of large media files.[163] With regard to the emergence of widespread fibre, wireless broadband and ubiquitous networks this trend is likely to amplify.[164] Besides, costs of internet usage have been decreased, mainly due to the introduction of flat rates.[165]

Second, **improved hardware** with higher processing speed, hard drive and memory capacity facilitate the digital content creation.[166] While the technical quality of consumer electronic devices such as digital cameras, video recorders, and mobile phones has been increasing their cost were decreasing making them accessible to a greater public. Especially new mobile phone platforms allowing users to send and re-

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[160] See also in the following BERNHARDT/BOYLE/CLARK et al. (2007), p. 42; WUNSCH-VINCENT/VICKERY (2007), pp. 13 et seqq.
[161] See WUNSCH-VINCENT/VICKERY (2007), p. 13.
[162] See BERNHARDT/BOYLE/CLARK et al. (2007), p. 44. The broadband household penetration rate for developed countries is already high and expected to grow further by 2011. For instance, US – 73.1% (2006)/94.1% (2011), Japan – 52.3%/76.1%, UK – 47.1%/76.8%, Germany – 30.8%/63.2%. (see BERNHARDT/BOYLE/CLARK et al. (2007), p. 44 based on eMarketer).
[163] For example, the download of a 3 MB music file takes approx. 7 minutes by means of ISDN (Integrated Services Digital Network) but only less than a minute by means of DSL (Digital Subscriber Line) (see GÖTTGENS/DÖRRENBÄCHER (2008), p. 216. For further speed related comparisons of internet connection modes see JACOBS (2008), pp. 14 et seq.
[164] See WUNSCH-VINCENT/VICKERY (2007), p.13.
[165] For details on price evolution of internet usage in Germany see JACOBS (2008), pp. 15 et seq.
[166] See also in the following WUNSCH-VINCENT/VICKERY (2007), p. 13.

ceive clips and pictures at higher speed are expected to drive UGC in future. Third, **easy-to-use software tools** have been developed allowing ordinary people to create audio and video files, edit them, and distribute them in the internet. This emerging software also enables content management of interactive systems[167] without professional knowledge. And fourth, the rise of **UGC hosting sites and services** is regarded an essential factor providing users space to post their work. Mobile networks, video platforms and video game consoles geared to UGC are expected to provide additional impetus.

4.2 Web 2.0

Web 2.0 is considered a major driver for brand related UGC. This second generation of the World Wide Web does not refer to a technical update[168] but to a **fundamental mind shift** in the ways software developers and end-users think and use the Web.[169] The new understanding of the web as a platform[170] was initially expressed by example and later specified as *"...a more mature, distinctive medium characterized by **user participation, openness, and network effects.**"*[171] Although the term Web 2.0 has clearly taken hold[172] there is still no commonly agreed definition.[173] Pioneer O'REILLY, however, identified eight Web 2.0 **core patterns**[174] whereof four are regarded of special relevance for brand-related UGC: first, the pattern of harnessing collective intelligence by creating architecture of participation using network effects;

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[167] Content management includes tagging, podcasting, group rating and aggregation, recommendation, content distribution via RSS feeds (see ibid., p. 13).

[168] Many of the technology components of Web 2.0 have existed since the early days of the Web which was introduced in 1989 as system of interlinked hypertext documents to be accessed via the internet. For example, new techniques such as Ajax (Asynchronous JavaScript) are based on existing underlying protocols like HTTP (Hypertext Transfer Protocol), just adding layers of abstraction on top of them. For a critical discussion of the notion of Web 2.0 see JACOBS (2008), pp. 12 et seqq.

[169] See MUSSER/O'REILLY (2006), p. 5; KOLBITSCH/MAURER (2006), p. 187. For Web 2.0 basics see KILIAN/HASS/WALSH (2008), pp. 4 et seqq.

[170] See O'REILLY/BATTELLE (2004); O'REILLY (2005); GRAHAM (2005); MUSSER/O'REILLY (2006). The phrase Web 2.0 was first used publicly in the homonymous O'Reilly Media conference in 2004.

[171] MUSSER/O'REILLY (2006), p. 7.

[172] For the term "Web 2.0" about 80 million citations are shown by the search engine Google (URL: www.google.com; accessed on 2 April 2008).

[173] For example, HAGEL defines Web 2.0 as "*...an emerging network-centric platform to support distributed collaborative and cumulative creation by its users*" (HAGEL (2005)). HÖGG/MECKEL/STANOEVSKA-SLABEVA et al. talk about "*...the philosophy of mutually maximizing collective intelligence and added value for each participant by formalized and dynamic information sharing and creation*" (HÖGG/MECKEL/STANOEVSKA-SLABEVA et al. (2006), pp. 23 et seqq.). For a reference list of recent defintions see JACOBS (2008), pp. 10 et seq.; also see HUDETZ/DUSCHA (2008), pp. 386 et seq.

[174] See also in the following MUSSER/O'REILLY (2006), pp.12 et seqq.; O'REILLY (2005), sections 2-7.

second, the pattern of so-called 'innovation in assembly' meant in the sense of building platforms to foster innovation by remixing data services; third, the pattern of rich user experiences beyond traditional web site metaphors combining the best of desktop and online software, and fourth the pattern of cost-efficient lightweight business models which were based on syndication instead of coordination and designed for 'hackability'.[175] Examples of such lightweight business models included the online auction house eBay and the online book seller Amazon which treated the web already in the so-called Web 1.0 era as a platform leveraging brand related UGC.[176]

Thus, it can be concluded that the underlying principles of brand related UGC – notably user participation, remixability, and rich user experience – are already inherent to its platform Web 2.0. A key lesson of Web 2.0 is that users are invited as co-developers and that their content is acknowledged as value added. The modular architecture of Web 2.0 thereby fosters brand related UGC by providing networks and peer-to-peer communication platforms for individual knowledge accumulation and real-time collaboration.

4.3 Emergence of the digital community

Beside technological and architectural factors, community factors have played a significant role in boosting brand related UGC. In general, communication in the internet is perceived by users as interpersonal communication meeting the need for peer information and social contact.[177] UGC production is thereby mainly driven by the so-called net generation or **'digital natives'** – a group of young, male, digitally skilled early adopters who grew up with the internet and actively use Web 2.0 applications.[178] In recent years, however, Web 2.0 applications have begun to **move mainstream**, ascending spread to older age groups and institutional functions.[179] Accord-

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[175] Further patterns state that unique, hard-to-recreate data sources should be used. Besides, the software should be above the level of a single device integrating various services and should be updated on a regular basis as part of the normal user experience. Furthermore, customer self-service should be leveraged by reaching out to the entire web employing the so-called long tail. For further explanation of Web 2.0 themes and rules see O'REILLY/BATTELLE (2004); O'REILLY (2005); O'REILLY (2006).

[176] Amazon, for instance, has allowed users to write reviews and consumer guides since its launch in 1995 and opened its source code interface for cooperative work with external developers in 2002. Google is cited as another forerunner (see O'REILLY (2002); O'REILLY (2005): section 1).

[177] See KIECKER/COWLES (2001), p. 72; KROEBER-RIEL/WEINBERG (2003), pp. 253 et seq.

[178] See TAPSCOTT (2007), pp.40; WUNSCH-VINCENT/VICKERY (2007), pp. 13 et seq. For surveys about the generation bias in UGC production see FORRESTER's US Social Technographics study (see LI (2007a); HEMPEL (2007)) and the ARD/ZDF online study for Germany (see FISCH/GSCHEIDLE (2008), p. 359).

[179] See WUNSCH-VINCENT/VICKERY (2007), pp. 13 et seq.

ing to the ARD/ZDF online study almost half of the senior German internet population ages 50-59 consults Wikipedia at least infrequently, 18% frequent video sharing sites and 15% participate in photo communities. [180]

Besides, a growing desire for **self-expression and contact** can be observed which has not been covered by traditional media platforms.[181] P2P online platforms provide a stage for self-advertisement and new identity creation rewarding users with visibility and applause by their peers in the community at low entry barriers.[182] KREUTZER/MERKLE consider profiling, talkativeness, search for social contact and escapism as main non-commercial motives for Web 2.0 usage.[183] STÖCKL/ROHRMEIER/HESS provided empiric evidence that content generating users were primarily driven by fun, information dissemination, the desire for contact and personal documentation.[184] The demand for self-expression thereby goes hand in hand with a **changed attitude towards privacy**: While engaging online people are willing to reveal and share a lot of personal information. Telling others about themselves, providing personal information and keeping record of personal experiences were identified as key drivers of the UGC engagement of weblogers and video producers.[185]

4.4 Facilitation of legal schemes

The rise of new legal means has also contributed to a greater availability of UGC. As the success of **open source software projects** (see chapter C 1.1.3) provided evidence contributing one's innovations to a commons does not inevitably lead to the destruction of incentives to innovate due to free-riding of others on the innovator's product.[186] Community managed open source software projects keep private intellectual property claims aside from both innovators and adopters. O'MAHONY showed that such OS projects protect their work by using several legal and normative tactics which do not disregard intellectual property rights.[187] According to VON KROGH/VON

[180] See FISCH/GSCHEIDLE (2008), p. 357. According to AGOF 60% of German citizens ages 50-59 and 25% of seniors ages 60 and more use the internet; these older users account for a fourth (24%) of the German online population (see AGOF (2008b), pp. 5 et seqq.).
[181] See also in the following WUNSCH-VINCENT/VICKERY (2007), pp. 13 et seq.
[182] See JACOBS (2008), pp. 21 et seq.
[183] See KREUTZER/MERKLE (2007), pp. 151 et seqq.
[184] See also in the following STÖCKL/ROHRMEIER/HESS (2008), pp. 283 et seq.; based on survey (N=489) among weblogers and video producers about their motivations to produce content. The study results are introduced in detail in chapter 1.5.1C 1.5.1.
[185] See ibid., p. 279.
[186] See also in the following VON KROGH/VON HIPPEL (2006), p. 975.
[187] See O'MAHONY (2003).

HIPPEL this example of user collaboration questions the "*...entire fabric of assumptions buttressing the necessity of intellectual property protection regimes*"[188].

Against this background legal facilitations emerged: On the one hand, there are **end-user licensing agreements** granting copyright to users for UGC (e.g. virtual world Second Life). On the other hand there are **flexible licensing schemes** such as Creative Commons. Creative Commons (CC) is a corporation[189] which newly defines the spectrum of possibilities between full copyright (all rights reserved) and the public domain (no rights reserved) by providing free licenses for a 'some rights reserved' copyright labelled by the CC logo.[190] So licensees could keep their copyright while inviting certain uses of their work.

Beside intellectual property risks service providers face potential liability risks arising from UGC including claims of defamation through posting defamatory statements about other people on their sites and violations of right to privacy and publicity, i.e., by collecting and publishing information from children such as name, age, etc.[191] **Updates to copyright laws**, however, have enabled UGC infrastructure providers to protect themselves based on the separation of creation and distribution of UGC.[192] Figure 11 provides a summary of the described UGB context factors which drive the creation and consumption of brand related UGC.

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[188] VON KROGH/VON HIPPEL (2006), p. 975.

[189] Creative Commons is a Massachusetts US charitable corporation sustained by the support of organizations including the Center for the Public Domain, The Rockefeller Foundation, and The William and Flora Hewlett Foundation, as well as members of the public (see CREATIVECOMMONS (2008)).

[190] See also in the following ibid.

[191] See LATHAM/BUTZER/BROWN (2008), pp. 1 et seqq.; BOORTZ (2008), p. 18.

[192] In the US relevant legal updates include the Digital Millennium Copyright Act of 1998 granting 'safe harbors' to content providers and the Communications Decency Act of 1996 providing broad immunity for publishing statements of third parties to providers of computer services (see LATHAM/BUTZER/BROWN (2008), pp. 2 et seqq; BOORTZ (2008), p. 18).

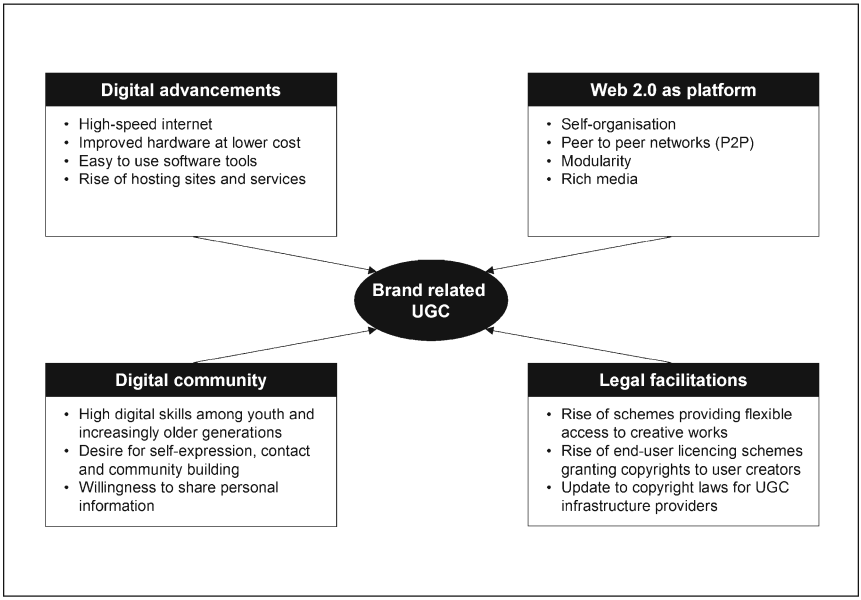

Figure 11 Context factors of user generated branding
Source: Own illustration based on BERNHARDT et al. (2007), p. 42; WUNSCH-VINCENT/VICKERY (2007), p. 14.

5 Discussion and summary of the theoretical basis

In this section, a reference framework for user generated branding (UGB) was developed by relating the concept to the identity-based brand management approach, relationship marketing and Web2.0 and the digital world as context factors. It was shown how advancements in digital technology, the Web 2.0 platform, increasing digital skills of consumers, shrinking privacy concerns as well as legal facilitations have been driving user generated content and thus evoked new challenges for brand management.

Main take-away is the **differentiation of UGB as a management approach and brand related user generated content (UGC) as its subject**. Deriving from the notion of information and content, brand related UGC was defined as "*...the representation of the voluntary creation and public distribution of personal brand meaning undertaken by non-marketers outside the branding routines and enabled by multimedia technology*". Based on the identity-based brand management approach, UGB is understood as "*...the strategic and operative management of brand related user generated content (UGC) to achieve brand goals*". That is, UGB is considered as goal-oriented handling of all kinds of user generated brand related artefacts – from original artistic work, comments, reviews and ratings to remixes with corporate content; from text and image to audio and video; from customer complaint to brand fan dedication. These consumer created messages are thereby distributed by means of Web2.0 and mobile platforms such as blogs, media sharing sites and social networking sites.

With respect to the **identity-based brand management approach**, the emergence of brand related UGC refers to communication behaviour as a result of the consumer-brand relationship. It is understood as a creative form of recommending or advising against a brand. The published user generated brand messages are thus regarded as brand touch points for other consumers. From a consumer perception perspective, brand related UGC stands next to corporate communication efforts such as advertising and Public Relations. UGB as management approach copes with these grassroots messages within the identity-based brand management process. Monitoring brand related UGC is regarded as an integral part of the strategic management process. Incorporating the won insights may result in adaptations of the operative brand management instruments, notably communication politics. It may also contribute to brand performance measuring.

Considering UGB against the background of **relationship marketing**, the relevance of consumer-brand relationship is highlighted. Given its role as pre-economic target value of brand management, consumer-brand relationship appears to be an appro-

priate reference value for measuring the effects of UGB initiatives. This point shall be deepened in section D when developing a UGB effectiveness model.

In terms of practical reference, parallels between UGB and **interactive marketing** are manifest. However, interactive marketing only covers one side of the whole UGB phenomenon, assuming the chance of stimulation and manipulation of brand related UGC from a corporate point of view. In this context, the role of UGB as active and passive management approach respectively is to be clarified. Furthermore, the aspects of management, content, and channel need to be clearly distinguished in order to differentiate UGB from other approaches within interactive marketing. Thus, the definition of UGB shall be further specified in the following section.

C Specification of UGB

In response to the first research problem, this section is dedicated to the elaboration of a definition and differentiation of user generated branding (UGB). Based on the theoretical framework introduced in the previous section, UGB related concepts in the broader sense shall be reviewed in the following. At this point, only selected aspects are described. A comprehensive overview of state of the art of UGB research was provided by BURMANN/ARNHOLD preceding this thesis.[1] Based on the insights from the existing literature, the UGB concept shall be further specified. Apart from detailing the proposed UGB definition and differentiating the concept from neighbouring fields, UGB application areas along the value chain shall be pointed out.

[1] See BURMANN/ARNHOLD (2009), pp. 73 et seqq.

U. Arnhold, *User Generated Branding*, DOI 10.1007/978-3-8349-8857-7_3,

1 State of the art of research of UGB related concepts

This chapter reflects the state of the art of research regarding the UGB phenomenon.[2] Since the study object has been widely untapped so far, the literature review is conducted with a broader scope, gradually narrowing it down to the brand related research problem (Figure 12). At the beginning, the phenomenon of users who innovate and collaborate is accounted for by briefly introducing innovation and collective intelligence research. Then the focus is on users who spread the word (word of mouth research) and join networks (community research). Special attention is paid to users who generate content in general and in the branding context in particular.

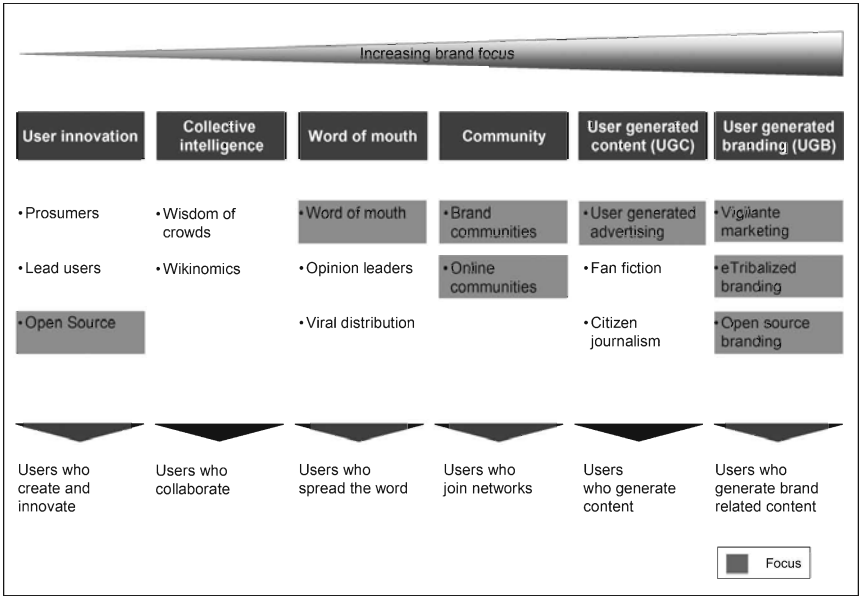

Figure 12 Analysis approach for state of the art of research exploration
Source: Own illustration.

[2] For a detailed literature review see ibid., pp. 73 et seqq.

1.1 User innovation research

The phenomenon of users who create and innovate has a long history.[3] To understand this phenomenon, the theory of prosumption including the service-dominant logic of marketing and the concept of so-called lead users are essential. These approaches establish the basis for analysing the recent open source movement which is regarded essential for UGB.[4]

1.1.1 Prosumers

In 1980, TOFFLER defined prosumers as people who produce some of the goods and services entering their own consumption, for example, cooking their own food, repairing their cars themselves or designing customized clothes.[5] TOFFLER argued that driven by more leisure time, empowering computers and telecommunications technology, rising service costs, higher education as well as sensitivity for quality and conscious lifestyle, the norm of society shifted from mass consumption to individuation, spotlighting self-actualisation. Hence, consumers as phenomenon of the industrial age were shifting to prosumers in the post-industrial age.

TOFFLER's prosumer thesis was extended by KOTLER in 1986 to the context of marketing, stressing individuation, skill-building, and productiveness as relevant marketing themes.[6] He put into perspective that only few people would opt for 100% prosumption and proposed beside the 'archprosumer' the profile of the **'avid hobbyist'** who prosumed in some domains in leisure time.[7] Motivational factors were the desire of participation and task elaboration in the interest of personal satisfaction and better quality. KOTLER concluded already in the pre-new media age that marketers should look for opportunities to facilitate prosumption activities by creating tools for prosumers 'to use' (e.g. 'how to' information and communities for people of shared interest).[8]

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[3] For example, automobiles have been adapted by customers since their invention (see BERTHON/HOLBROOK/HULBERT et al. (2007a).

[4] For an in-depth consideration of user innovation research in the context of UGB see BURMANN/ARNHOLD (2009), pp. 74 et seqq

[5] See also in the following TOFFLER (1980), pp. 282 et seqq.

[6] See KOTLER (1986), p. 511.

[7] See also in the following ibid., p. 512.

[8] In recent years, TROYE/CHUNYUAN enhanced the prosumption concept identifying drivers and motivations behind prosumers' make or buy decisions in the new millennium (see TROYE/CHUNYUAN (2007); CHUNYUAN/BAGOZZI/TROYE (2008)).

The prosumption idea is also one of the tenets of the emerging **service-dominant logic of marketing** which contrasted to the traditional goods-dominant logic.[9] VARGO/LUSCH coined the term in 2004 considering service provision rather than goods as the fundamental purpose of economic exchange.[10] Primary tenets of the service-dominant logic were the conceptualization of service as a process, the focus on dynamic resources such as knowledge and skills and an understanding of value as a collaborative process between providers and customers.[11] Within this context VARGO/LUSCH considered the customer a "*coproducer of service*"[12] rather than a *"recipient of goods"* and primarily an operant resource rather than an operand resource[13]. Marketing is regarded as "*...a process of doing things in interaction with the customer*" rather than doing things to customers.[14]

BRODIE/GLYNN/LITTLE argue that the **service brand**[15] as 'relational asset' was a central concept within the service-dominant logic, considering it as corollary to VARGO/LUSCH's proposition about resource integration and co-creation of value.[16] As basis, they propose to develop a 'theory of marketplace equity' integrating the concepts of brand equity, customer equity and network equity[17] in order to provide a balance between the traditional customer-centric branding view and the recent service and relational branding thoughts. TAPSCOTT/WILLIAMS elaborated on the prosumption concept in their 2007 **wikinomics** approach discussing it like VARGO/LUSCH in the context of co-creation of products and services (see chapter below).

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[9] While the traditional goods-dominant logic focused on tangible resources and embedded value, the service-dominant logic centred on intangible resources and relationships. This approach is backed by the work of NORMANN suggesting to shift the focus to a process of value creation and an understanding of customers as co-producers (see MICHEL/VARGO/LUSCH (2008)).

[10] See VARGO/LUSCH (2004).

[11] See VARGO/LUSCH/WESSELS (2008); the authors consider service as "*a process of using ones resources for the benefit of and in conjunction with another party*".

[12] VARGO/LUSCH (2004); the following quotations also refer to this source.

[13] The term operant resource within the scope of the service-dominant logic referred to the exchange for knowledge and skills, considering customers as participants. On the contrary, the term operand resource related to the xxchange for goods in the traditional goods-dominant logic regarding customers as to be acted upon (see ibid.).

[14] The overall service-dominant logic of marketing stands in opposition to 200 years of mainstream economic logic. The thesis, however, has provoked much academic attention and had a profound effect on the discussion about the future of marketing in theory and practice (see BALLATYNE/VAREY (2008); CHRISTODOULIDES (2008); TROYE/CHUNYUAN (2007), p. 73).

[15] For an introduction to service brands and service marketing see MEFFERT/BURMANN/KIRCHGEORG (2008), pp. 28 et seqq.

[16] See BRODIE/GLYNN/LITTLE (2006), pp. 375 et seq.

[17] These three concepts are considered the main 'off-balance sheet' assets that increasingly determined the market value of an organization. For a discussion of the concepts see ibid., pp. 366 et seqq.; for an introduction into market-based assets see MEFFERT/BURMANN/KIRCHGEORG (2008), pp. 802 et seqq.

Overall it is essential to understand the prosumption concept as a dynamic transition between the consumer and prosumer role.[18] In fact, people could be a prosumer in one activity and a consumer in another even in one field due to change of routines. Transferring this idea to UGB it means that users could take on a prosumer role in generating personal brand meaning but at the same time 'remain' a consumer in another situation and towards other brands.

How to address prosumption as part of marketing activity is still disputed.[19] With regard to UGB the idea of value creation in a collaborative process and users as co-producer of service is regarded essential. Other learning includes the dynamic transition between the consumer and prosumer role described by the avid hobbyist phenomenon. Of special interest is the finding that a certain 'do-it-yourself' ambition is inherent to consumers driven by the desire of participation and task elaboration in order to gain personal satisfaction and better quality.

1.1.2 Lead users

In 1986 VON HIPPEL introduced the concept of **lead users** defined as "*...users whose present strong needs will become general in a marketplace months or years in the future*"[20] Lead users were ahead on marketplace trends using a novel or enhanced product, process or service. Since they faced needs long before the mass encountered them, they filled the gap they experienced by finding a solution to those needs in order to benefit from it.[21] They would crack the products and modify them to their liking. Such user-led innovations happened especially in fast-moving high-technology fields such as the software and information industry[22], but also with physical goods (e.g. kite surfing equipment).[23] User-innovators thereby tended to rely on local solution information already in their possession or use.[24]

VON HIPPEL argued that product development actually concentrated only among few lead users. Their innovations served not only as "*...a need-forecasting laboratory for*

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[18] See KOTLER (1986), p. 512; TROYE/CHUNYUAN (2007), p. 73; one reason was the fact that prosumption often requires market purchases (consumption) in advance.
[19] See TROYE/CHUNYUAN (2007), p. 73
[20] VON HIPPEL (1986), p. 791.
[21] See also in the following ibid., p. 796.
[22] For example, a study of library users of OPAC information search systems showed that 26% of users in a local market modified their OPACs in a way OPAC manufacturers judged to be of commercial interest (see MORRISON/ROBERTS/VON HIPPEL (2000)); for a first empirical study in computer-aided systems see URBAN/VON HIPPEL (1988).
[23] For a study of user modifications to kite-surfing equipment see FRANKE/VON HIPPEL/SCHREIER (2006).
[24] See LÜTHJE/HERSTATT/VON HIPPEL (2005).

market research"[25] but also as new product concepts and design data companies could exploit by transforming he user-led ideas into a commercial product. The manufacturer's task was to identify lead users[26], evaluate commercially attractive innovations[27] and then draw them into a process of joint development of new product concepts.[28] According to VON HIPPEL the traditional 'find a need and fill it' innovation mode should therefore be replaced by a tool-kit approach where companies provided rather 'building blocks' of their products to lead users than end solutions to stimulate innovation.[29]

Beside corporate efforts to exploit user-led innovation there were also consumer created horizontal innovation networks which existed entirely independently of manufacturers[30].VON HIPPEL refers to this phenomenon as ongoing shift towards the **democratization of user-centred innovation**. Enabled by advancements in computing and communications technology, users developed new own products and services for themselves and often freely shared their innovations (see open source movement in chapter C 1.1.3).

VON HIPPEL's lead user concept has been recently extended and modified. BERTHON/PITT/MCCARTHY et al. introduced the notion of **creative consumers** defined as "*...an individual or group who adapt, modify, or transform a proprietary offering*"[31]. Unlike lead users they did not only focus on novel or enhanced products but all types of offerings, including outdated products like the Newton PDA (see Newton community example in chapter B 1.6.1).[32] Their needs would not necessarily become general; they often innovated from a thrill of experimentation and personal interest, not to solve a specific problem and benefit from the solution. They were rather driven by 'symbolic capital', with no other reward than the recognition of friends and peer-users.

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[25] VON HIPPEL (1986), p. 791.

[26] Von Hippel suggested a four step process how to identify lead users: (1) identify an important trend, (2) identify lead users who lead this trend in terms of experience and intensity of need, (3) analyze lead user need data, (4) project lead user data onto the general market of interest (see Ibid., pp. 797 et seqq.).

[27] Two independent dimensions were essential to identify commercially attractive innovations: First, the high expected-benefits dimension, predicting innovation likelihood, and second, the ahead of the trend dimension, predicting both the commercial attractiveness and innovation likelihood (see FRANKE/VON HIPPEL/SCHREIER (2006)).

[28] The pathway from user innovation to commercial product design was described as following: First, users innovate. Second, they join into communities, driven by the increased efficiency of collective innovation. Third, user-manufacturers implement the idea using high-variable/low-capital cost production methods. Finally, high-capital, low-variable cost manufacturers enter (see BALDWIN/HIENERTH/HIPPEL (2006)).

[29] See VON HIPPEL/BAKER (2005), p. 18.

[30] See also in the following VON HIPPEL (2007).

[31] BERTHON/PITT/MCCARTHY et al. (2007b), p. 40.

[32] See also in the following Ibid., pp. 40 et seqq.

While lead user efforts could be controlled by a company creative users worked usually independently of an organization. According to BERTHON/PITT/MCCARTHY et al. companies had to judge depending on their business environment and strategic considerations whether supporting or discouraging actions toward customer innovation were suitable.[33]

Researchers have also identified user-creators with rather antagonistic relationships with the companies whose products they modify. MOLLICK referred to these groups of hackers and crackers as **underground innovators**[34]; FLOWERS called them more radically **outlaw users**[35]. These individuals were driven by utility, curiosity and occasionally anger, bypassing manufacturers and legal safeguards in their drive to explore. Especially the activities of outlaw users were often illegal. MOLLICK identified two distinct classes of underground communities:[36] 'Elites' were the true innovators understanding the workings of proprietary systems and modifying them to their liking. 'Kiddies', on the contrary, merely used tools created by the elites to exploit the system in some way. In order to benefit from underground innovators' efforts marketers had to nurture the constructive elites rewarding them and supplying tools while thwarting the destructive kiddies.

The buzz word **crowd sourcing** can also be traced back to VON HIPPEL's concept of corporate usage of user-led innovation. Crowd sourcing refers to the act of taking a job traditionally performed by a designated agent (e.g. programming, product development or R&D) and outsourcing it to a large group in the form of an open call.[37] So complex processes such us knowledge generation and the development of new tool and applications can be handed over to external users. This principle is also applied in TAPSCOTT's wikinomics concept referring to company sponsored peer-to-peer innovation platforms in the internet.[38]

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[33] BERTHON/PITT/MCCARTHY et al. developed a four-fold typology of firms' stances toward creative consumers: If a firm had a negative attitude towards creative consumers it could either actively restrain it (resist) or ignore it (discourage). In case of a positive attitude customer innovations could be passively supported (encourage) or actively facilitated (enable) (see ibid., pp. 44 et seqq.).

[34] See MOLLICK (2005), pp. 8 et seqq. Underground innovators are defined as user-innovators who intended for their discoveries and innovations to be kept secret within a small community for non-commercial purpose. Besides, parasitic innovators are distinguished who were limited to the exploitation of existing technological systems. Pirate innovators, on the contrary, provided user innovation that was forbidden by the company whose products served as basis for the innovation.

[35] See also in the following FLOWERS (2008).

[36] See also in the following MOLLICK (2005), pp. 64 et seqq. He refers to hackers defined as individuals who modify computer hardware and software.

[37] See also in the following KNAPPE/KRACKLAUER (2007), pp. 23 et seq.; BRANDEL (2008).

[38] As example Tapscott quotes the online chemistry research platform InnoCentive which is sponsored by the consumer goods manufacturer Procter & Gambler (see TAPSCOTT (2007)).

Given the definition of lead users and UGB it can be concluded that both ideas have several things in common: Both concepts represent a voluntary innovation process outside routines based on creative effort.[39] Both lead users and brand related UGC creators might crack third-party products and modify them to their liking. However, lead users innovate since they face upcoming needs and benefit from solving these needs. They do not necessarily create in order to share among peers or get public recognition just like UGC creators do. So the described modified version of creative consumers proposed by BERTHON/PITT/MCCARTHY et al. is considered more appropriate to explain brand related UGC. Besides, the distinction of underground innovators provides insights to understand UGC creators who generate anti-brand content.

Furthermore, the managing aspect of the lead user concept is of relevance for UGB. The phenomenon of user-creators is widely considered a paradox for business.[40] On the one hand, marketers could benefit from it as cost-efficient alternative to 'in-house' product development programmes. On the other hand, there were copyright and intellectual property issues threatening marketers. However, user innovation research demonstrated that end users of products and services are able to innovate and follow a pathway to generate offerings serving as basis for new commercial products. Especially the studies by VON HIPPEL showed companies may make use of user creativity by setting up an identification process and toolkit approach.

1.1.3 Open source

Unlike received opinion, the open source (OS) approach has a long history.[41] The emergence of OS computer software gave fresh impetus to the movement: In this field OS refers to projects such as the Microsoft Windows alternative Linux where the source code is freely distributed.[42] Such mostly organized OS software projects are considered non-rival, keeping private intellectual property claims out of the way and preserving a commons of software code which everybody could access.[43]

According to VON KROGH and VON HIPPEL the existing OS software research can be categorized in three areas: motivation of contributions, governance, organization and

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[39] For example, KOZINETS directly refers to the lead user concept in the context of content creation in an online brand community (see KOZINETS (2002) and explanations in chapter C 1.6.2).

[40] See also in the following BERTHON/PITT/MCCARTHY et al. (2007b), pp. 39 et seqq.

[41] For example, the Oxford English Dictionary was created in a cooperative endeavour already from 1857. The project required hundreds of volunteer readers and assistants and took more than 70 years (see WINCHESTER (2003): prologue).

[42] Further examples for OS computer software were the server hosting software Apache, the email programme Sendmail and the database programme MySQL (see PITT/BERTHON/WATSON et al. (2007), pp. 318 et seqq.)

[43] See VON KROGH/VON HIPPEL (2006), p. 975

innovation process as well as competitive dynamics.[44] Current findings about programmer's motivations suggest that **intrinsic motivations**[45] such as learning, meeting personal requirements and having fun are particularly responsible for OS software production.[46] Extrinsic motivations[47] such as monetary rewards and reputation appeared to be less relevant although they interplayed with intrinsic motivations. According to an empiric study by LAKHANI and WOLF intellectual stimulation and improving programming skills are top motivators for project participation.[48] Paid programmers ranked work need and professional status higher than unpaid software developers which were mainly driven the desire to improve their skills. Assuming that OS software contributors may also benefit from their own expected use of innovation they can be considered lead users.[49]

In the second research field of governance, organization and innovation process the functioning and types of organizations in OS software project and the coordination of innovation is examined.[50] FRANCK/JUNGWIRTH argue that new governance structures reconciled the interests of both contributors who expect to receive individual rewards by participating (so-called investors) and contributors who do not (so-called donators).[51] NONNECKE/PREECE showed that large parts of a community are so-called **lurkers** who passively observe the project activity without publicly posting which is considered in no way a negative behaviour.[52] Moreover, two challenges have been observed in OS software projects governance: first keeping self-interested contributors (so-called **forkers**) on track who tend to develop their own versions and second keeping the software a public good.[53] Overall, innovation processes in OS software

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[44] See ibid., p. 977.

[45] Intrinsic motivation within the scope of content creation is understood as performing an creative activity wihout receiving any other reward except the activity itself (see LAKHANI/WOLF (2005), pp. 4 et seqq.; STÖCKL/ROHRMEIER/HESS (2008), p. 274).

[46] HETMANK provided an overview of various empiric research results regarding motivations to produce OS software (see HETMANK (2005), pp. 177 et seqq.). VON KROGH and VON HIPPEL listed relevant studies (see VON KROGH/VON HIPPEL (2006), pp. 978 et seq.).

[47] Extrinsic motivation within the scope of content creation is understood as performing an activity exclusively because of its consequences (see LAKHANI/WOLF (2005), pp. 6 et seqq.; STÖCKL/ROHRMEIER/HESS (2008), p. 274).

[48] See also in the following LAKHANI/WOLF (2005); based on web-based survey (N=684) among software developers in 287 OS software projects in 2002 (including paid (share of 40%) and volunteer contributors).

[49] See VON KROGH/VON HIPPEL (2006), p. 976.

[50] For a list of existing studies in this field see ibid., pp. 976; 979 et seq.

[51] See FRANCK/JUNGWIRTH (2002), pp. 2 et seqq.

[52] In their empiric study in email-based discussion lists lurking varied between 46% and 82% (see NONNECKE/PREECE (2000); NONNECKE/ANDREWS/PREECE (2006)).

[53] O'Mahony identified in an empiric study of six OS software projects various legal and normative tactics which ensured that the software remained in the commons (see O'MAHONY (2003)).

deviate from traditional innovation concepts.[54] According to VON KROGH and VON HIPPEL OS innovation is fostered by a mix of user-oriented incentives, a creative commons-oriented community, low-cost project organization mechanisms, and few expenses in diffusing the innovation.[55]

In the third research field of competitive dynamics the **coexistence of OS and commercial** software is explored.[56] BONACCORSI/ROSSI amongst others showed that OS software could compete in a commercially dominated environment.[57] WEST provided evidence that traditional vendors of proprietary platforms employed hybrid strategies attempting to combine the advantages of OS software while retaining control and differentiation.[58]

In recent years, the OS term was extended from software to other fields referring to projects with the same underlying principle of improving and extending the original product with joined forces.[59] In a broader sense, PITT/WATSON/BERTHON et al. defined OS as "*...products, services, and ideas for which the intellectual input of the inventors and producers is non-proprietary in nature.*"[60] Examples for OS projects include the online encyclopaedia (e. g. Wikipedia), product development in skateboarding, windsurfing, and snowboarding and biomedical, life science and pharmaceutical research (e.g. orphan drugs).[61] In all spheres, intellectual contributions are made freely and voluntarily, without expectation of remuneration. PITT and colleagues transferred OS learning to the domain of brand management (see chapter 1.6.3).[62]

With regard to UGB, the extensive body of OS software findings can be tested for transferability. Especially the learning from OS motivation research might form a basis for understanding the motivational drivers of UGB creators[63] although differences in a mostly professional OS project set-up with partly paid contributors need to be considered. Furthermore, the studies on OS governance including the various roles of contributors within a project might provide insights for marketers in case of stimu-

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[54] See VON KROGH/SPAETH/LAKHANI Ibid..
[55] VON KROGH/VON HIPPEL (2006), p. 976.
[56] For a list of existing studies in this field see ibid., pp. 976; 980 et seq.
[57] See BONACCORSI/ROSSI (2003).
[58] See WEST (2003). Basically, four different OS models from software industry are known: open distribution, corporate distribution, externally supported OS and professional OS model (see PITT/BERTHON/WATSON et al. (2007), pp. 320 et seqq.).
[59] See VON KROGH/VON HIPPEL (2006), pp. 975; 982.
[60] PITT/WATSON/BERTHON et al. (2006), p. 116; also see PITT/BERTHON/WATSON et al. (2007), p. 319.
[61] See PITT/BERTHON/WATSON et al. (2007), pp. 318 et seqq.; VON KROGH/VON HIPPEL (2006), p. 976.
[62] See PITT/WATSON/BERTHON et al. (2006); CHAKRABARTI/BERTHON/WATSON et al. (2007); PITT/BERTHON/WATSON et al. (2007).
[63] STÖCKL/ROHRMEIER/HESS transferred the findings from OS software motivation studies to UGC in general (see STÖCKL/ROHRMEIER/HESS (2008)).

lating UGB. In a broader sense, the OS model is considered effective at finding and fixing faults and thus appropriate for concept testing since users could contribute modifications.[64] Given the emergence of hybrid models of OS and commercial platforms it can be concluded that branded companies might be able to make use of consumer grassroots movement including UGB.

1.2 Collective intelligence research

Collective intelligence is an ancient phenomenon of humankind.[65] The Massachusetts Institute of Technology (MIT) defines it as "*...groups of individuals doing things collectively that seem intelligent*"[66]. The key question was how people and computers could be connected so that – collectively – they acted more intelligently than any individuals, groups, or computers had done before.[67] Although collective intelligence has evoked a lot of hype in academic research and its principles were adopted by buzz words such as wisdom of crowds and wikinomics, there is still a lack of theory.[68] According to MIT the effects of collectiveness and decentralizations are still disputed: Some believed that doing things collectively would always result in great predictions; others doubted any kind of open system.

1.2.1 Wisdom of crowds

SUROWIECKI coined the term wisdom of crowds restating the idea that large groups of people are more intelligent than an elite few.[69] With reference to findings from psychology and economics he argued that the aggregation of information in groups resulted in decisions that were superior to decisions made by individual group members. Their judgements were faster, more reliable and more independent than expert views. However, the crowd had to possess the following qualities: diversity of opinion, independence of thought, decentralization of knowledge as well as a method to aggregate opinions to arrive at a collective decision. If a crowd did not meet these cri-

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[64] See PITT/BERTHON/WATSON et al. (2007).

[65] See also in the following MALONE (2006). While it has been discussed for decades in natural and social sciences its importance dramatically increased within the last years due to new communication technologies—especially the internet.

[66] Ibid.

[67] The hypothesis of MIT Professor MALONE is that cheaper and more useful communications technology would effect a revolution in the way business, science, and politics operate, influencing business parameters such as organizational effectiveness, firm productivity, teamwork, and leadership (see MALONE (2006)).

[68] The principles of collective intelligence and the human, organizational, social, and motivational systems behind are regarded subject to further research (see ibid.).

[69] See also in the following SUROWIECKI (2004).

teria and conformed rather than reflected independently – so-called groupthink – the group could also be poor.[70]

According to SUROWIECKI the wisdom of crowds phenomenon could be applied to three categories: prediction markets[71], Delphi methods[72], and opinion polls. Prediction markets generated the most accurate predictions since they asked group members to estimate an outcome rather than to report their choices or tastes as opinion polls do.[73] Unlike focus groups, prediction markets also minimize people's influence on one another, encouraging diversity of opinion.

With regard to UGB the idea of wisdom of crowds is less useful to explore the grassroots branding approaches of consumers but might be relevant for marketers in case of stimulating brand related UGC. The predictions of the crowd could be used for concept testing.

1.2.2 Wikinomics

TAPSCOTT/WILLIAMS coined the term wikinomics as a new science of collaboration beyond the single ideas of prosumption, wisdom of crowds, open source and social networking. The term described a new economic mode of how innovation, production and the creation of goods and services were organized in a society.[74] According to TAPSCOTT/WILLIAMS wikinomics was based on four principles defining how the so-called enterprise 2.0 competed: **openness, peering, sharing, and acting globally**.[75] Those principles were contrary to the previous model of hierarchical, closed, secretive, and insularly acting companies of the 'command-and-control economy'[76]. The authors argued that we nowadays witnessed the rise of the 'collaboration economy' "*...where firms coexist with millions of autonomous producers who connect and*

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[70] See FLEENOR (2006); FITZGERALD (2005).

[71] Prediction markets are public or internal corporate markets created to produce an accurate aggregate prediction. Group members can bet on things like election outcomes, current events, and product sales in a competitive environment (see SUROWIECKI (2007)).

[72] Through Delphi methods the collective value of ideas can be elicited, judged and aggregated (see FLEENOR (2006)).

[73] See also in the following SUROWIECKI (2007).

[74] The authors considered wikinomics in the context of four drivers of change in the 21st century: Web 2.0 forming a robust platform for creative disruptions, the Net Generation of youngsters growing up digital, the Social Revolution generating collaborative communities, and the Economic Revolution characterized by the rise of mass collaboration (see TAPSCOTT (2007), pp. 8 et seqq.; TAPSCOTT/WILLIAMS (2008), p. 3).

[75] See TAPSCOTT/WILLIAMS (2008), pp. 20 et seqq.; TAPSCOTT (2007), pp. 54 et seqq.

[76] See TAPSCOTT/WILLIAMS (2008), p. 30.

cocreate value in loosely coupled networks"[77]. This collaboration economy incorporated seven new models based on the previously discussed ideas:[78]

- The first model is the so-called **Peer Pioneers** comprising open source projects such as the OS software Linux and the online encyclopaedia Wikipedia which are created by dispersed volunteers.
- The second model, the so-called **Ideagoras**, refers to emerging market places in the internet such as InnoCentive[79] where ideas and innovations can be commissioned. This model corresponds to the buzz word of crowd sourcing.
- The third model includes innovations by **prosumers** understood as consumer-producers who co-create goods and services rather than just consuming the end product.[80] Examples are venues of user generated content such as YouTube as well as virtual worlds such as Second Life.
- The fourth model is called **The New Alexandrians** and refers to science sharing platforms such as Science Commons[81] aiming at collaboratively developing breakthrough ideas. It can be understood as the scientific research pendant to the business centred Ideagoras model.
- The fifth model, **Open Platforms**, means corporate software platforms which are opened up by firms such as Amazon. Like the mentioned Peer Pioneers model it incorporates the OS idea but refers to computer software source codes only.
- The sixth model is related to the worldwide peer-design and -production of industrial goods. An example for the so-called **Global Plant Floor** is the collaborative making of Boeing airplanes.
- The last model, the **Wiki Workplace**, includes the internal perspective referring to peer collaboration across organisational boundaries.

According to TAPSCOTT/WILLIAMS these models were all based on community and self-organization rather than hierarchy and control. They were applicable to virtually any sector of global economy far beyond the forerunners software, music, publishing and pharmaceutical industry. The researchers argue that the mentioned principles of

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[77] TAPSCOTT/WILLIAMS (2008), p. 32.

[78] See also in the following TAPSCOTT/WILLIAMS (2008), pp. 32 et seq., TAPSCOTT (2007b), pp. 64 et seqq.

[79] InnoCentive is an online chemistry research platform which is sponsored by the consumer goods manufacturer Procter & Gambler (see INNOCENTIVE (2008)).

[80] See TAPSCOTT/WILLIAMS (2008), p. 1.

[81] Science Commons provides strategies and tools for more efficient web-enabled scientific research. It includes policy guidelines, legal agreement and knowledge management projects in the field of biology and health research (see SCIENCECOMMONS (2008)).

openness, peering, sharing and acting globally also applied to branding. Harnessing collective capability in marketing and branding to promote innovation and making customers co-creators were stated best practice.[82]

Overall, the described patterns of wisdom of crowds and wikinomics provide valuable insights for employing UGB as management approach. Findings on the benefits of mass collaboration, e.g. the reliability of predictions of crowds and the creativeness of open innovation platforms, should be transferred to UGB strategies. In particular, the creation of web-based virtual talent pools outside company walls (the Ideagoras) – also in form of temporary contests – seems to be a promising approach to stimulate brand related UGC. Furthermore, the Wiki Workplace model extends the UGB understanding by highlighting the potential of the internal target group for leveraging brand related ideas.

1.3 Word of mouth research

After exploring users who create, innovate and collaborate in the chapters above this chapter reviews literature on users who spread the word on products and brands. In the following word of mouth as a natural and exploited phenomenon is briefly introduced. Given the computer mediated environment of UGB the focus is thereby on online word of mouth. Besides, the way of information transmission among people and the characteristics of consumers who spread the word are highlighted.

1.3.1 Offline word of mouth

Word of mouth (WOM) is a pre-existing, naturally occurring phenomenon of consumer behaviour.[83] In marketing, it is understood as **commercial talk among consumers**[84] based on the following three essential elements:

- Interpersonal communication: WOM is informal, mostly oral person-to-person communication – in contrast to mass communication and impersonal channels.[85]
- Commercial content: WOM messages refer to talk about commercial entities,

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[82] See TAPSCOTT/WILLIAMS (2007).

[83] See NYILASY (2006), pp. 164 et seq. The Oxford English Dictionary refers to WOM as "*...spoken communication as a means of transmitting information*". In everyday language, WOM might be used in the meaning of 'hearsay' or 'rumour".

[84] See also in the following NYILASY (2006), pp. 164 et seq.

[85] See MARTILLA (1971); WESTBROOK (1987); REINGEN/KERNAN (1986); BONE (1995); HALSTEAD (2002); WOMMA (2006).

products, product categories, brands and marketers or even their advertising.[86]

– Seemingly unbiased communicators: WOM communicators are perceived not to be commercially motivated (they do not necessarily have to be so).[87]

Taking these elements into account WOM can be defined as oral, person-to-person communication concerning a brand, a product or a service whereby the communicator is perceived as non-commercial by the receiver. According to NYILASY the WOM phenomenon can be analyzed from four perspectives[88] (see Figure 13): On the one hand, there were the communicator providing information (output WOM) and the receiver acquiring and processing this information (input WOM). Both were dependent and could be either active or passive in interaction. On the other hand, antecedents and consequences of WOM could be analyzed.

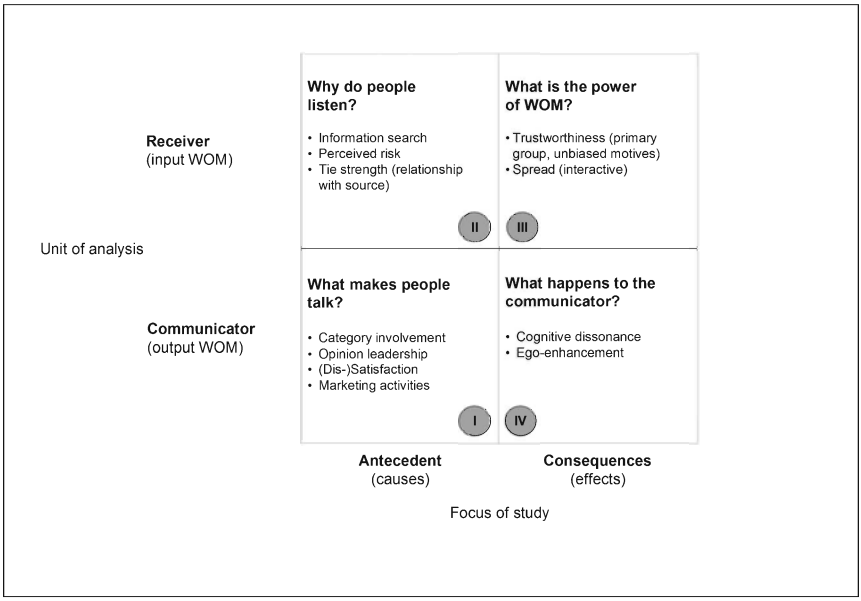

Figure 13 Word of mouth research directions
Source: Adapted from NYILASY (2006), p. 168.

[86] See STILL/BARNES/KOOYMAN (1984); WESTBROOK (1987); HALSTEAD (2002); WOMMA (2006). .
[87] See WEBSTER (1970); REINGEN/KERNAN (1986); BONE (1995).
[88] See also in the following NYILASY (2006), p. 168.

The **communicator-antecedents perspective** (quadrant I) refers to what people made talk.[89] Evidence was provided that WOM output on an aggregate level depended on the relative importance of the category to consumers and its prominence in everyday life.[90] On an individual level, various studies showed that information was processed by opinion leaders[91] which showed natural social leadership behaviour[92] and were enduringly interested and involved with the product category.[93] Thus, output WOM on an individual level depends on the knowledge, value and experience with the category and the individual's social contacts.[94]

WOM is thereby driven by satisfaction or dissatisfaction with the product or service which results in either positive (PWOM) or negative WOM (NWOM). Against prevailing opinion a recent study by EAST/HAMMOND/WRIGHT provided evidence that PWOM is more common than NWOM with an incidence ration of 3 to 1.[95] PWOM was found to refer to the current main brand while NWOM usually corresponded to past brands or never owned brands. The impact of PWOM on brand choice is assumed much the same as the impact of NWOM in familiar categories. MANGOLD/MILLER pointed out that beside their own brand satisfaction WOM communicators took also into account the needs and brand attitudes of WOM receivers when making recommendation and thus, in some cases, might give both positive and negative advice about the same brand in order to suit the other person.[96] Studies also showed that WOM could be stimulated by marketers.[97] Such promotional antecedents of WOM include incentives and deal proneness[98], consumer participation in the service[99] and eliciting surprise[100].

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[89] For an overview of existing studies on the communicator-antecedents perspective see ibid., pp. 171 et seqq.
[90] See also in the following EAST/HAMMOND/WRIGHT (2007), p. 182.
[91] Opinion leadership refers to an individual's ability to informally influence the attitudes and (purchasing) behaviour of others through WOM communication. For an in-depth consideration of opinion leadership in general see KATZ/LAZARSFELD/ROPER (2005); KELLER/BERRY (2003); ROSEN (2000), pp. 42 et seqq.; for trendsetters versus trend spreaders see SALZMAN/MATATHIA/O'REILLY (2003); BERMAN (2003); for brand advocates see REICHHELD (2003); EBENKAMP (2004); WRAGG (2004); SCHULTZ (2000).
[92] See early study of ROBERTSON/MYERS (1969).
[93] See RICHINS/ROOT-SHAFFER (1988).
[94] See EAST/HAMMOND/WRIGHT (2007), p. 182.
[95] See also in the following ibid., pp. 181 et seq.
[96] See MANGOLD/MILLER (1999).
[97] See NYILASY (2006), p. 173
[98] See WIRTZ/CHEW (2002).
[99] See FILE/JUDD/PRINCE (1992).
[100] See DERBAIX/VANHAMME (2003).

The **receiver-antecedents perspective** (quadrant II) investigates why people listened.[101] The following predictors for the so-called input WOM were identified: First, consumers engaged in WOM for general external information search, in particular if they considered buying a new product, service or brand which they have no prior personal experience.[102] Empirical analyses also found that consumers were more likely to expose to WOM the riskier they perceive the purchase decision.[103] Since the perceived risk is higher with inimitable services than with replicable products consumers of services use WOM sources more often than purchasers of products. The likelihood of WOM is also influenced by the relationship between receiver and potential communicator. BROWN/REINGEN and WIRTZ/CHEW showed among others that the stronger the relationship between members of a social network (e.g. friends, relatives) the more likely these strong ties were activated for WOM referral.[104] However, weak ties displayed an important bridging function, allowing information to travel from one subgroup to another subgroup in a social system.

The **receiver-consequences perspective** (quadrant III) examines the power of WOM compared to other communication channels.[105] With regard to the declining power of mass media marketing researchers have frequently refer to WOM as most powerful communication channel.[106] KELLER notes that the average US consumer participated in 121 WOM conversations mentioning specific brand names 92 times over a typical week.[107] According to NYILASY the power of WOM could be explained first by the trustworthiness of primary groups like family and friends, second the desire for group conformity, third the receiver's causal attribution about the unbiased motives behind the communicator's behaviour and fourth the perceived vividness of oral and interactive information.[108]

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[101] For an overview of existing studies on the receiver-antecedents perspective see NYILASY (2006), pp. 168 et seq.
[102] See KATZ/LAZARSFELD/ROPER (2005); ENGEL/BLACKWELL/KEGERREIS (1969); FONG/BURTON (2006)
[103] See also in the following HUGSTAD/TAYLOR/BRUCE (1987).
[104] See also in the following BROWN/REINGEN (1987); WIRTZ/CHEW (2002).
[105] For an overview of existing studies on the receiver-consequences perspective see NYILASY (2006), pp. 169 et seqq.
[106] See GLADWELL (2001), p. 32; NYILASY (2006), pp. 170 et seq.; OETTING/JACOB (2007), p. 1; KELLER (2007), p. 448; GOLDSMITH/HOROWITZ (2006).
[107] See KELLER (2007), p. 450.
[108] See NYILASY (2006), pp. 170 et seq.; the scholar refers to the two-step flow of communication theory, attribution theory and accessibility-diagnosticity theory although empirical proof is widely lacking.

The **communicator-consequences perspective** (quadrant IV) explored the effects on the communicator after WOM interaction.[109] Findings from motivational research implied that communicators might feel good about their expert and helper's role resulting in ego-enhancement. WOM interaction could also reduce negative feelings associated with cognitive dissonance by reassuring through output WOM to have made the right purchase decision. Overall, this field has not been explored sufficiently in empiric analyses so far.[110]

With regard to UGB, WOM is of high relevance since both concepts are situated in the context of voluntary consumer-to-consumer communications about commercial and in particular brand related content and its management. However, while WOM represents the communication channel UGB deals with the content. Hence, **WOM** is understood **as a channel of dissemination of brand related UGC**. In this sense, WOM research provides valuable insights of why users create and share brand related UGC and why they consume it. Drivers of WOM communicators such as category involvement, opinion leadership and brand satisfaction might be also true for brand related UGC creators[111]; motives of WOM receivers such as information seeking, risk reduction and personal relationships might explain the determinants of brand related UGC consumers. Furthermore, the findings related to positive and negative WOM are of relevance implying that UGB efforts should not only focus on counteracting NWOM but also promoting PWOM. Besides, WOM research provides evidence that WOM might be stimulated by marketers even though it is a grassroots incident by nature. That implies that within the scope of UGB campaigns brand related UGC might be stimulated, too. Given the evidence of WOM power a similar strong impact of UGB compared to traditional brand management vehicles may be assumed.

1.3.2 Online word of mouth

With regard to the new media environment of UGB, online or electronic WOM (in short eWOM) is of particular relevance.[112] Studies provided evidence that the described principles of WOM can be transferred from the offline to the online context. With respect to the communicator-antecedents perspective, LYONS/HENDERSON proved that the behaviour of online opinion leaders generally resembled the behav-

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[109] For an overview of existing studies on the communicator-consequences perspective see ibid., pp. 173 et seq.

[110] See ibid., p. 174.

[111] According to the findings of WENSKE and STICHNOTH these factors resemble determinants of strong customer-brand relationships which evoked customer communication behaviour such as brand recommendations (see WENSKE (2008b), pp. 268 et seq.; STICHNOTH (2008), p. 104).

[112] See CHEONG/MORRISON (2008), p. 4; GOLDSMITH/HOROWITZ (2006).

iour of opinion leaders in offline environments.[113] Extending the social tie concept of offline WOM, FONG/BURTON demonstrated that consumers enlarged their social networks to virtual acquaintances who they might not know personally but with whom they shared common interests in order to seek out opinions about products and services.[114] The agency Burson-Marsteller identified so-called e-fluentials who had exponential influence spreading the word in the internet, sharing rather negative than positive experiences.[115]

Considering the receiver-antecedents perspective GOLDSMITH/HOROWITZ analysed consumer motivations for online opinion seeking before purchase.[116] Their study suggested that consumers sought the opinions online mainly due to the internet's ease of use, but also to secure lower prices, obtain valuable information and reduce their risk.[117] Online opinion seeking stimulated by off-line inputs such as TV, because others did it, 'by accident' or because it was cool were identified as less relevant drivers to get pre-purchase information.

Regarding the receiver-consequences perspective evidence was provided that consumer had more trust in UGC product information than in information by manufacturers and traditional advertising.[118] SUSSAN/GOULD/WEISFELD-SPOLTER found that eWOM was more effective on consumer involvement and the likelihood to adopt a new product when consumers found the information on a third party sponsored independent web site rather than on a firm sponsored web site.[119]

In literature, eWOM has been closely aligned and often confused with UGC.[120] However, as mentioned above the two concepts differ depending on whether the content is generated by users or **just conveyed by users**.[121] For instance, if a user creates

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[113] See LYONS/HENDERSON (2005), p. 325, also see BAILEY (2005), p. 100; BURSON-MARSTELLER (2001).

[114] See FONG/BURTON (2006), pp. 61 et seqq. The study was based on online surveys (N=214) and observation of postings (N=3029) on US and Chinese discussion boards on the subject of digital photography.

[115] See also in the following BURSON-MARSTELLER (2001).

[116] See also in the following GOLDSMITH/HOROWITZ (2006), pp. 8 et seqq. The study was based on a survey (N=309) among US college students and adults.

[117] As a result of an applied factor analysis the mean factor loading value for these four factors ranged from 4.1 for 'ease of use' to 3.6 for 'perceived risk' on an eigth-point scale. Following the classification of STÖCKL/ROHRMEIER/HESS a value greater than 4.0 suggested factor approval (see STÖCKL/ROHRMEIER/HESS (2008), p. 281).

[118] See GOLDSMITH/HOROWITZ (2006), p.13; CHEONG/MORRISON (2008), p. 20. The latter study was based on a limited survey (N=17) among US college students.

[119] See SUSSAN/GOULD/WEISFELD-SPOLTER (2006), p. 649. The study was based on an experiment (N=90) on movie DVDs.

[120] See the synonymous usage with regard to online user reviews in EAST/HAMMOND/LOMAX (2007); EAST/HAMMOND/LOMAX (2007); YE/LAW/GU (2008).

[121] See also in the following CHEONG/MORRISON (2008), p. 3.

and posts footage on YouTube, the video clip can be regarded as UGC. However, if a user sends a link to this YouTube entry to a friend as recommendation, he or she engages in eWOM. Likewise, if a user writes an opinion on a product brand on a review site or blog, the review is considered UGC. Emailing a link to the UGC review is, in contrast, eWOM. Thus, eWOM and UGC may be considered related and interdependent concepts: UGC requires eWOM to get awareness and influence; eWOM requires UGC as object of dissemination.

Comparing WOM and eWOM, the latter is more likely to achieve **viral spread**, i.e. an exponential growth in the message's exposure and influence.[122] WOM spreads in physical space in human networks which are locally clustered.[123] eWOM, in contrast, is by definition mediated by technology, spreading in viral space in human networks which are centred on hubs. Due to these highly influential nodes, eWOM – as vehicle of UGB – has a much faster spread and wider reach than WOM.[124]

1.3.3 Organic versus amplified word of mouth

As mentioned above, WOM occurs naturally but may also be stimulated by marketers making use of viral spread and opinion leaders. In this context, the WORD OF MOUTH MARKETING ASSOCIATION (WOMMA) distinguishes between organic WOM and amplified WOM.[125] **Organic WOM** occurred naturally when people are happy with a product and have a natural desire to share their support and enthusiasm. Given both satisfaction and dissatisfaction as drivers for output WOM this definition should also include negative commercial talk.[126] According to WOMMA organic WOM as independent phenomenon could only passively enhanced by marketers through focus on customer satisfaction (e.g. product quality, open dialog and feedback).

On the contrary, **amplified WOM** occurred when marketers launched campaigns in order to accelerate WOM in existing or new communities.[127] Amplified WOM marketing initiatives aimed at "*...getting on conversational agendas*"[128] and "*...harnessing*

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[122] For details on viral spread see KIRBY (2005), pp. 88 et seq.; GLADWELL (2001), pp. 7 et seqq. Viral spread thereby does not necessarily mean making a product recommendation.
[123] See also in the following BERNHARDT/BOYLE/CLARK et al. (2008a), pp. 29 et seq.
[124] LYONS/HENDERSON argue that opinion leaders in traditional market environments influenced the decision making of less than a dozen people, while the internet allowed contact to a global audience with unlimited users (see LYONS/HENDERSON (2005), p. 319).
[125] See also in the following WOMMA (2006), p. 5.
[126] We argue that people have also a natural desire to share their disappointment and resentment in case they are unhappy with a product or service.This aspect has not been explicitely stated in the WOMMA definition (see ibid., p. 5).
[127] See also in the following ibid., p. 5.
[128] MARSDEN (2006), p. xviii.

the voice of the customer for the good of the brand[129]". According to WOMMA it could not be directly created, but encouraged by giving people a reason to talk about the brand and facilitate this conversation.

According to the message, channel and recipient, various types and techniques of amplified WOM can be distinguished (see Figure 14).[130] From a message perspective, WOM can be evoked by product seeding placing the product into the hands of target group representatives and cause marketing supporting social causes in order to earn respect from people who feel strongly about the cause. From a channel perspective, WOM can be achieved through referral programmes creating tools that enable satisfied customers to refer their friends as well as viral marketing designed to spread a persuasive message from person to person.[131] Messages can be also transmitted through events or public activity (buzz marketing), blog participation (blog marketing) and games including online branded games (advergames) and cross-media games blurring the distinction between fiction and reality (alternate reality games). A hybrid form is the so-called advertainment understood as promotion through an online campaign combining advertising and entertainment. From a recipient perspective, WOM marketing targets opinion leaders such as evangelists who are encouraged to take a leadership role in actively spreading the word on behalf of the brand (evangelist marketing) and opinion leaders who have the ability to influence the opinions of others (influencer marketing). Besides, activities can be addressed to local volunteers who can be motivated to engage in personal or local outreach (grassroots marketing) and niche communities that are likely to share interests about the brand (community marketing) (for definitions also see Appendix V).

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[129] WOMMA (2006), p. 2.

[130] There is no commonly agreed standardisation of WOM types in marketing research. Thus, the types can be regarded as sub types of WOM marketing or stand-alone marketing forms. For details see also in the following ibid., pp. 3 et seqq.; BALTER (2004), pp. 3 et seqq.; MARSDEN (2006), pp. xvii et seqq.

[131] KIRBY argues that viral marketing campaigns were a user-driven process: Unlike traditional marketer-to-consumer techniques, it enabled consumers to choose to interact proactively with a brand message so that the consumer effectively became another media channel (see KIRBY (2005), pp. 88 et seqq.).

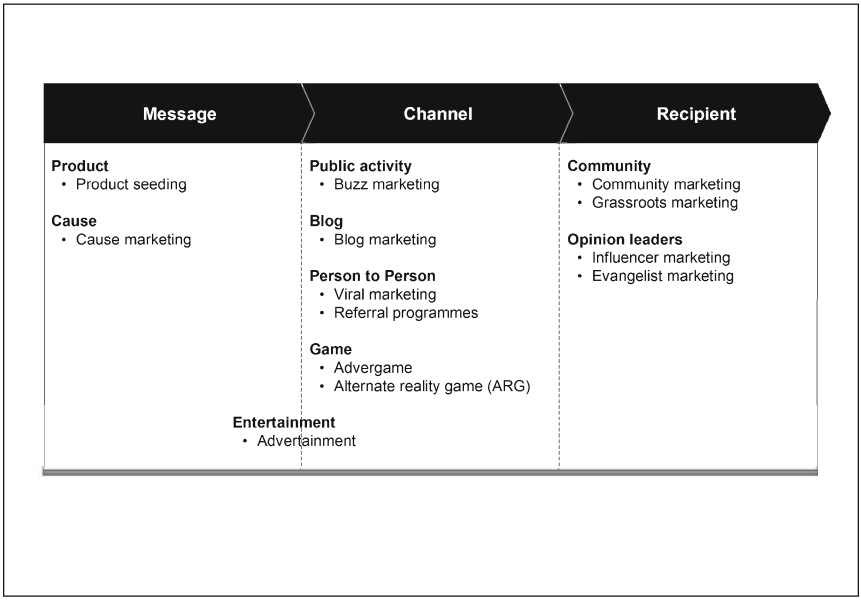

Figure 14 Techniques to stimulate word of mouth
Source: Own illustration based on WOMMA (2006), p. 6.

Overall, techniques to stimulate WOM are based on the concepts of customer satisfaction, two-way dialog, and transparent communications.[132] Basic elements comprise educating consumers about products and services, identifying opinion leaders, providing tools for information-sharing, and engaging in feedback processes including responding to supporters, detractors, and neutrals[133].

Although codes of conduct in the marketing industry reject unethical techniques attempting to fake WOM,[134] practices have been applied in the past, deceiving people about the marketer's involvement in the communication.[135] KAIKATI/KAIKATI consider the so-called **stealth marketing** as a marketer's attempt to present a product or service by creating and spreading buzz in a surreptitious manner so that the incident did

[132] See also in the following WOMMA (2006), p. 2.
[133] The key idea is to start a dialogue with opinion leaders in a network rather than to broadcast the marketing message to all nodes (see ROSEN (2006); KIRBY/MARSDEN (2005)).
[134] The disaffirmation of unethical WOM marketing techniques is fixed in the Ethics Code of the US WOM trade organisation WOMMA. The essence of this code of conduct comes down to honesty of relationship, opinion and identity (see WOMMA (2008)).
[135] See WOMMA (2006), p. 7.

not appear company-sponsored.[136] According to WOMMA such practices include paying or employing people to talk undercover in favour of the brand (shilling) and using fake identities when posting fake UGC on review, rating and social-shopping sites and wikis (infiltration).[137] Further disputable stealth marketing methods comprise sending spam messages, sharing knowingly false information or violating online or offline venues to promote a product[138] (for definitions also see Appendix VI).

Prevailing views of stealth marketing programmes suggest that disclosing corporate affiliation reduced perceived credibility and hampered WOM campaign effectiveness.[139] However, a recent study by CARL found counter-intuitive results: In case of self-disclosure, WOM marketing agents were actually rated more credible by their conversational partners who had then fewer negative feelings about the agent's corporate affiliation and told more people about the brand being discussed.[140]

With regard to UGB, the amplified WOM approach represents a showcase of how to harness the consumer's voice. The depicted WOM techniques might be also valuable approaches in stimulating brand related UGC within UGB campaigns. Learning from amplified WOM also includes the public disaffirmation of any kind of stealth marketing suggesting to refrain from imitating or falsifying brand related UGC. Essential is the understanding that marketers cannot create and influence WOM in a vacuum but only stimulate and accelerate the natural WOM potential of a brand. This might also be true for the stimulation of brand related UGC.

In summary, WOM research provides various insights transferable to UGB. As shown above, the findings give indications for understanding why people might create and consume brand related UGC. Online WOM research, in particular, shows how brand related UGC might spread virally in the web. Despite the parallels between WOM and UGB, it is essential to keep the differences in mind: WOM represents first and foremost an interpersonal communication channel while UGB refers to the management of personal content. In this sense, WOM is the channel of dissemination of brand related UGC and thus an essential pillar of UGB.

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[136] See KAIKATI/KAIKATI (2004), p. 6.
[137] See WOMMA (2006), p. 7; SCHÖNEBERG (2007).
[138] See WOMMA (2006), p. 7.
[139] See KAIKATI/KAIKATI (2004), p. 6.
[140] See CARL (2008), pp. 225 et seqq. Within the experiment disclosure was defined as when the conversational partners were aware that they were talking with a person participating in an organized WOM marketing program. CARL explained the results in part by the existing personal relationship between the agent and the conversational partner during the WOM marketing episode.

1.4 Community research

The next section of the literature review is dedicated to users who join brand communities and online networks. Brand communities have been studied in marketing research for decades as a tool to enhance customer attraction and retention. For the purpose of this study, online brand communities are of special relevance.

1.4.1 Brand communities

To describe communities which are centred upon consumption, shared interests and brands, three different key notions have been presented: brand community[141], subculture of consumption[142] and consumer tribe[143]. All terms can be traced back to sociology where a community is defined as a group of people as the least common denominator.[144] According to PRYKOP/HEITMANN a community is characterized by four constituting elements[145]:

- Member entities – similarity of group members. It can be expressed through value orientation.
- Shared interest – the reason of cohesion between the community members. It may lie in the communality of passion, occupation, or activity.
- Space for interaction – the meeting place for participants. The common space can be described by multimediality, accessibility, and geotemporality.
- Relation – connection between member entities. It can be described through recurrence, intensity, multiplicity and immediacy.

Based on this sociological definition as well as consumer behaviour research and findings from urban neighbourhood, neo-tribalism, religiosity and modernity studies,

[141] See MUNIZ/O'GUINN (2001).
[142] See SCHOUTEN/MCALEXANDER (1995).
[143] See COVA (1997); COVA/KOZINETS/SHANKAR (2007).
[144] Synonymously the terms social network, social group, and social identity are used. For a theoretical reference framework see PRYKOP/HEITMANN (2006), pp. 301 et seqq.; VON LOEWENFELD (2006), pp. 48 et seqq. For an overview of community definitions in sociology see PRYKOP/HEITMANN (2006), pp. 303 et seqq.; STICHNOTH (2008), pp. 22 et seqq.; ABRAHAMSEN/HARTMANN (2006), pp. 1 et seqq.
[145] See also in the following PRYKOP/HEITMANN (2006), pp. 303 et seqq.

MUNIZ/O'GUINN introduced the notion of **brand community**.[146] They defined it as "*...a specialized, non-geographically bound community, based on a structured set of social relations among admirers of a brand*"[147]. Markers of communities with a branded good or service at its centre were shared consciousness, shared rituals and traditions, and a sense of moral responsibility.[148] Each of these qualities was situated within a commercial and mass-mediated ethos of the community's environment, having its own particular expression. Due to the presence of inexpensive and accessible communication, brand communities were liberated from geography and rather considered a network of social relations than a place. Overall, the scholars understood brand communities as "*a form of consumer agency*"[149] giving consumers a greater voice by providing brand-related information as well as wider social benefits due to communal interaction.[150]

Another concept to describe consumption-centred communities is the notion of **subculture of consumption** coined by SCHOUTEN/MCALEXANDER. It was defined as "*...a distinctive subgroup of society that self-selects on the basis of a shared commitment to a particular product class, brand, or consumption activity.*"[151] Based on ethnographic fieldwork with Harley-Davidson motorcycle owners, the researchers identified the following characteristics: a hierarchical social structure, a unique ethos, and modes of symbolic expression (see Table 1).[152]

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[146] Urban neighbourhood studies imply that brand communities had limited liability given their narrowly defined commitment around the common interest in the brand. The neo-tribalism work suggests that brand communities like other diffuse neo-tribes in the hyperindividualist society are hold together by consumption practice (see MUNIZ/O'GUINN (2001), pp. 414 et seq.). The religiosity studies indicate the creation of mythology or folklore by community members in order to revitalize the brand (see MUNIZ/SCHAU (2005), pp. 739 et seqq.). This yearning for religious affiliations and meaningful connections to counter the rationalizing effects of late capitalism is backed by modernity studies (see MUNIZ/SCHAU (2005), p. 746).

[147] MUNIZ/O'GUINN (2001), p. 412.

[148] See also in the following ibid., pp. 412 et seq.

[149] Ibid., p. 426.

[150] For a critical consideration of the approach by MUNIZ/O'GUINN see VON LOEWENFELD (2006), p. 99.

[151] SCHOUTEN/MCALEXANDER (1995), p. 43.

[152] For a critical consideration of the approach by SCHOUTEN/MCALEXANDER see VON LOEWENFELD (2006), p. 109.

Consumers as brand worshipers
– Research question: What is the identity of consumption-oriented communities?
– Research object: **Harley-Davidson community** (U.S. motor bike brand)
– Method: Ethnographic study (participant/non-participant observation, interviews)
– Findings: Community forms through consumption activities (not sociological constructs) and is governed by ideologies of consumption ▪ Complex, hierarchical social structure: within-group status based on an individual's commitment (seniority, participation, leadership, riding expertise/knowledge, experience); self-presentation through conformity and imitation ▪ Unique ethos: set of core values with social, political and spiritual aspects (e.g. personal freedom, patriotism and American heritage, machismo, brotherhood, nature); brands as religious icons ▪ Modes of symbolic expression: visible indicators such as clothing, tattoos, pins
– Learning: By understanding the ethos of subcultures of consumption marketers may cater to their needs (providing information, accessories, services, event sponsoring) and increase brand loyalty, publicity and customer feedback (grassroots R&D)

Table 1 **Harley-Davidson subculture of consumption**
Source: Own illustration based on SCHOUTEN/MCALEXANDER (1995); FOURNIER et al. (2000).

An ethno-sociological approach to brand related communities is the concept of **consumer tribes** based on the neo tribes construct. According to COVA/COVA a neo tribe is an unstable, small-scale group of heterogeneous people who ae hold together through shared emotions, life styles, moral beliefs or consumption practices.[153] The scholars argued that consumers appreciated the consumption-inherent social links and identities more than the actual objects of consumption; therefore the sense of belonging and membership ranked higher than the product. To describe such tribal experience as evidenced by consumer gatherings (e.g. clubs, conventions, rallies), COVA/COVA used the term consumer tribes.[154] According to KOZINETS these consumer tribes shared the following specific attributes: temporariness, smaller scale, intense identification, passionate basis, looser connection (but still a strong sense of belonging), less moral obligations, rich rituals and the possibility to belong to various tribes in a lifetime.[155] KOZINETS later extended the consumer tribes notion to the virtual space calling virtual communities of consumption **'eTribes'** (see chapter D 1.6.2).[156]

[153] See COVA/COVA (2001), pp. 67 et seq. with reference to MAFFESOLI (1996).
[154] See COVA/COVA (2002).
[155] See KOZINETS (2008a); KOZINETS (2008b). Examples were the Harley-Davidson, Harry Potter and Star Trek communities as well as rock geeks, fantasy football geeks and film geeks.
[156] See KOZINETS (2008a); KOZINETS (2008b).

Despite similarities the introduced brand related community concepts can be distinguished by the reason or centre of gathering. According to ABRAHAMSEN/HARTMANN brand communities are centred on a particular brand and appear rather stable and more explicit in contrast to consumer tribes.[157] MUNIZ/O'GUINN see a clear distinction between brand communities and subcultures of consumption in the matter that brand communities typically embraced aspects of the surrounding culture's ideology instead of rejecting them as subcultures (e.g. punk rockers) do.[158]

Irrespective of the term used, brand community approaches can be understood as an advancement of the traditional customer-brand dyad[159] (see Figure 15): By acknowledging the communal interactions and the active consumer involvement in brand-related communications, MUNIZ/O'GUINN shifted thinking away from the dyad to the brand community triad emphasizing social relationships among customers.[160] MCALEXANDER/SCHOUTEN/KOENIG expanded this **brand community model** to entities beyond peer-to-peer relationships, considering brand communities as customer-centric.[161] In this model, the focal customer formed the centre, assuming that the meaningfulness of the community inhered in customer experience rather than in the brand around which that experience revolved. Beside customer-brand and peer-to-peer relationships, the scholars also examined the relationship of the focal customer toward the product in use and the marketer. These four interconnected relationships represented the basis of their integration in the brand community (IBC) concept grounded in consumers' total-life experience.[162]

[157] See ABRAHAMSEN/HARTMANN (2006), p. 7.
[158] See MUNIZ/O'GUINN (2001), p. 414.
[159] See in the following MCALEXANDER/SCHOUTEN/KOENIG (2002), p. 39; MUNIZ/O'GUINN (2001), pp. 412 et seqq.
[160] They argued that the active consumer directly affected brand equity including perceived quality, brand loyalty, brand awareness, and brand associations (see MUNIZ/O'GUINN (2001), p. 426).
[161] See also in the following MCALEXANDER/SCHOUTEN/KOENIG (2002), p. 39.
[162] See ibid.

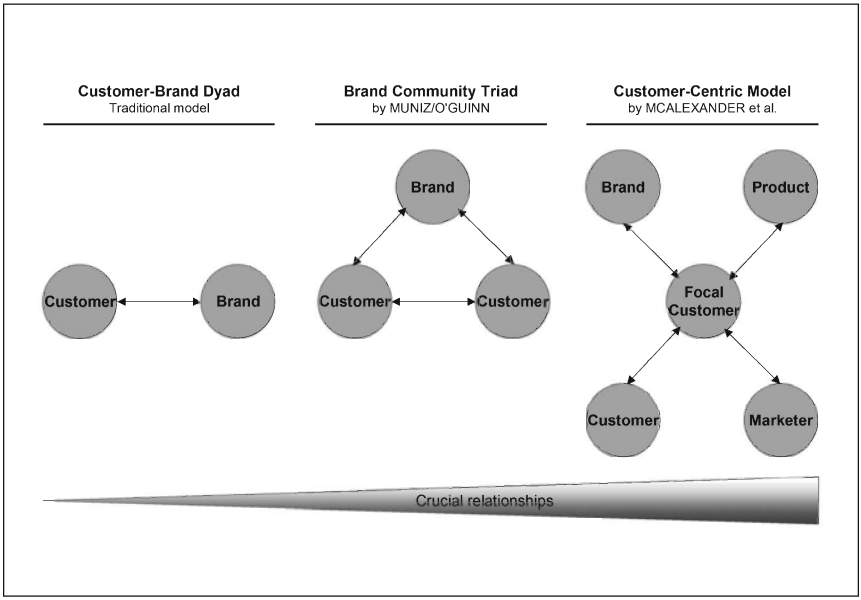

Figure 15 Brand community models
Source: Own illustration based on MCALEXANDER/SCHOUTEN/KOENIG (2002), p. 39; MUNIZ/O'GUINN (2001), pp. 412 et seq.

Although there is no consensus on any brand community categorizations,[163] the following distinctions regarding community emergence, member role and identity relevant is considered.[164] First, MUNIZ/SCHAU distinguished between **organic and inorganic brand communities**.[165] While organic communities emerged independently and reflected self-sustaining consumer generated brand building approaches,[166] inorganic communities were prompted and influenced by the marketer (also see chapter 1.6.1). According to STICHNOTH such inorganic brand communities may not be

[163] See STICHNOTH (2008), pp. 24 et seq.
[164] With regard to communities in general MÜHLENBECK/SKIBICKI identified 11 differentiation factors: the community's presence in reality, content type, the proprietor's goals, entry barriers, member type, activity level, communication frequency, web site integration, mobility, members' authenticity and emotional bond (see MÜHLENBECK/SKIBICKI (2008), p. 38).
[165] See MUNIZ/SCHAU (2007).
[166] For an analysis of the emergence of the organic Nikonians community (users of Nikon cameras) see AMINE/SITZ (2004).

confused with customer clubs since the latter lacked peer-to-peer interaction and represented a one-way communication tool.[167]

Second, KOZINETS highlighted the diversity of 'tribal activity' identifying activators, plunderers, double agents, and entrepreneurs as sub groups of consumer tribes.[168] On the one hand, these subgroups differed on how they identified with the **consumer or producer role**. Entrepreneurs, for example, desired an equal footing with commercial producers seeking a share of the economic wealth. In contrast, activists and plunderers behaved more consumer-like. On the other hand, the tribal subgroups differed in rituals of poaching and appropriating the brand identity. Plunderers, for examples, liked to play with meanings and symbols and to shape and share them. Activators, on the contrary, felt satisfied by spreading the pre-defined the marketing messages.

Brand community research also explored the relationship between **self-identity and brand community identity** (see Figure 16). In an empiric study MUNIZ/SCHAU found a great variability in the degree to which consumers embraced the brand:[169] The most devoted fan showed no other reference to any other dimensions of self than the community membership; he or she lived the brand rituals and lifestyle representing the so-called 'subsumed identity'[170]. The second group, the so-called 'super member', mastered the brand through customization procedures within the community but revealed his or her real life identity by telling tales of the self about how the brand intersects with the personal life. In the third group ('community membership as identity component') the identity of the individual overshadowed the membership in the community. In the fourth group multiple community identities merged into a real life self; brand affiliations were rather used as 'shorthand' to communicate individual selves.

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[167] See STICHNOTH (2008), pp. 28 et seq.; STICHNOTH used the terms official vs. inofficial brand community in this context. For customer club definitions see BUTSCHER/MÜLLER (2006); HOLZ (1998).

[168] See also in the following KOZINETS (2008b) based on COVA/KOZINETS/SHANKAR (2007), pp. 7 et seqq.

[169] The empiric study included brand communities around Apple computers, Harley-Davidson motorcycles, Saab automobiles, the Xena Warrior Princess TV show, and singer Tom Petty (see SCHAU/MUNIZ (2002), pp. 344 et seqq.).

[170] See also in the following ibid., pp. 346 et seqq.

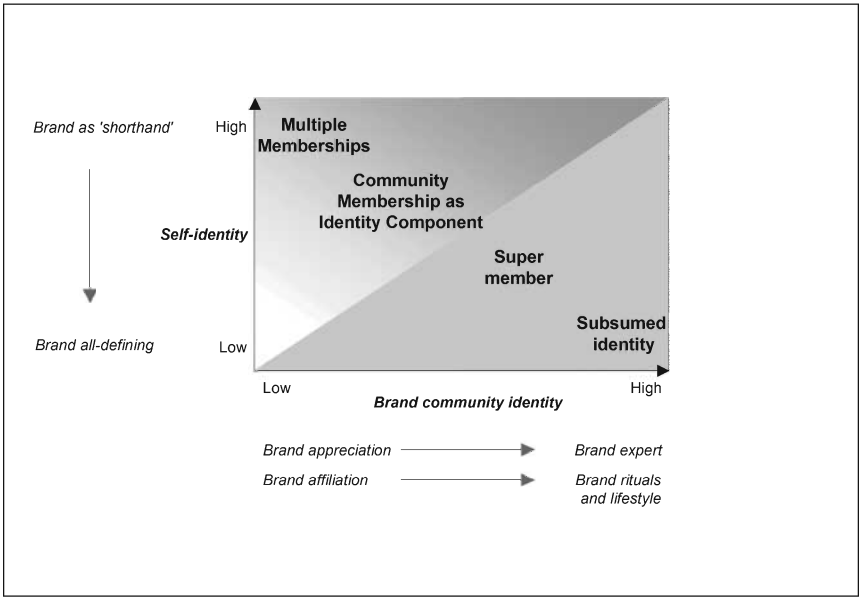

Figure 16 Variability of brand and community adaptation
Source: Own illustration based on SCHAU/MUNIZ (2002).

Based on the findings by MUNIZ/SCHAU the following factors can be considered as **drivers for brand community building**:[171]

- A brand's capacity for transformative experiences such as communal encounters. Examples are the Jeep[172] and Harley-Davidson[173] community.
- A brand's underdog status: Somewhat marginalised, stigmatised or threatened brands tend to evoke quasi-religious affiliations which consumers seem to enjoy. Brand communities serve in this sense as legitimacy or tool of justice. Examples are the Newton[174] and Macintosh[175] community.

[171] See also in the following MUNIZ/SCHAU (2005), pp. 738; 746.
[172] See MCALEXANDER/SCHOUTEN/KOENIG (2002).
[173] See SCHOUTEN/MCALEXANDER (1995).
[174] See MUNIZ/SCHAU (2007); SCHAU/MUNIZ (2006); MUNIZ/SCHAU (2005).
[175] See BELK/TUMBAT (2005).

- A brand's fiction content: Brand communities appear to emerge around brands offering magic-religious metaphors, rituals and symbols. Examples are media entertainment brands such as Harry Potter or Star Wars[176] community.
- A brand's publicity: The identification seems to be also driven by public consumption, a rich brand heritage and strong brand communications. In this case, brand communities meet the desire to join the (mass) trend. Examples are the Apple and Nutella[177] community.

Given the role of brand communities as venue of brand related UGC, it can be concluded that the creation of brand related UGC is driven by similar factors. The underdog pattern, for example, is reflected in the Nogger example[178] where brand fans created UGC to call for the relaunch of the discontinued product brand. Metaphors, rituals and symbols can be found in user created videos where brand fans re-cut TV episodes or present profiles of their beloved stars themed love, friendship, beauty, etc.[179] The importance of a brand's publicity as UGC driver was proven by BERTHON/PITT/CAMPBELL who found that the omnipresent brands Coca Cola, Microsoft and McDonald's accounted for the most UGC contributions on the video sharing sites YouTube – even though in form of parodies.[180]

A further distinctive factor of brand communities is their **channel**. According to PRYKOP/HEITMANN they could be supported **face-to-face** as well as in **online** and **mobile** media.[181] While the member entities in all channels were similar and communities emerged around a shared interest, the space of interaction and the kind of relations varied among the media. Online communities interacted in virtual forums – geographically detached, anonymous, and pseudonymous.

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[176] See KOZINETS (2001).
[177] See COVA/PACE (2006).
[178] See WIEGAND (2008) and description in Appendix XIII.
[179] For example, the successful US TV show 'Desperate Housewives' which tells the story of the suburban everyday life of five girlfriends is the subject of various organic user generated videos which present the characters in inventive remixes based on themed songs about love (see UNKNOWN (2007b)), sex appeal (see UNKNOWN (2008b)) and forbidden affairs (see UNKNOWN (2007c)).
[180] See BERTHON/PITT/CAMPBELL (2008), p. 27. Analysis based on term search 'spoof ad' on YouTube (accessed on 2 January 2008) for Top 10 brands according to Interbrand Best Global Brands Survey 2007 (see INTERBRAND (2008)).
[181] See also in the following PRYKOP/HEITMANN (2006), pp. 306 et seqq. The offline and online existence of brand communities is explicitly considered in the brand community definition by VON LOEWENFELD (see VON LOEWENFELD (2006), p. 133)

1.4.2 Online communities

Online communities can be seen as extreme and advanced versions of a community, referring to the gathering of geographically separated people with shared interests.[182] In research, there is no agreement on a definition so far: Terms such as 'online community', 'virtual community', 'cyber community' and 'social network' on the internet have been used widely interchangeably.[183] In a broader sense, MALONEY-KRICHMAR/PREECE define **online communities** as "*...a group of people with a common interest or a shared purpose ... who use computer systems to support and mediate social interaction and facilitate a sense of togetherness.*"[184] ABRAHAMSEN/HARTMANN transferred this understanding to the branding context, defining an **online brand community** as "*...a brand community, which uses computer systems as the central tool for mediating interaction between members.*"[185] In other words: An online brand community is a brand community primarily in the internet.

Given the observed temporary, solely imagined and superficial nature of online communities, it is frequently discussed in academia whether these communities in the internet represented 'true' communities.[186] Opponents argued that 'true' communities required direct social relationships while the connectivity in online communities was rather parasocial and imagined. For instance, interactions in online communities were not always synchronically (e.g. chat rooms) but also a-synchronically (e.g. discussion forums with archives).[187] Supporters stated that online communities served as instrument to re-establish conviviality which was suppressed in the anonymous society. They referred to the similar feelings provided by chat rooms compared to actual cafés.

Empiric evidence was provided that participation in an online brand community had a **positive influence on consumer commitment** to the brand: STICHNOTH found that a membership in an online brand community strengthened the customer-brand relationship and positively influenced the brand image.[188] The results by CASALO/

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[182] See ABRAHAMSEN/HARTMANN (2006), p. 9.
[183] For an overview of existing online community definition see ibid., p. 9; STICHNOTH (2008), pp. 26 et seqq.; TIETZ (2007), pp. 18 et seq.; WALTER (2008), p. 401.
[184] See MALONEY-KRICHMAR/PREECE (2005), p. 203.
[185] See also in the following ABRAHAMSEN/HARTMANN (2006), p. 9.
[186] For an overview see ibid., p. 10.
[187] See also in the following AMINE/SITZ (2004).
[188] See STICHNOTH (2008), pp. 87 et seq.; 95.

FLAVIAN/GUINALIU confirmed the positive effects of online community participation on the brand.[189] .

Given the increasing visitor numbers and importance in the consumer purchase path, communities build an attractive platform for marketers for advertising and promotion. Due to self-defined interest groups, a high degree of user engagement and the virtual environment, they are a venue for targeted advertising and low-cost viral marketing.[190] Besides, the rich, fast and visible consumer interactions are 'open intellectual property' and serve as source for real-time market research aiming at both scouting new ideas and testing product concepts. Some online communities can be even explicitly used as R&D platforms (see chapter D 3).

Summing up, brand community research is considered an essential reference point for UGB. On the one hand, online brand communities represent a major **venue of brand related UGC creation and consumption**. Analysed causes and effects of consumer participation in these virtual communities might be transferred to the subject of UGB. Learning from online brand community studies also includes approaches of how to leverage these platforms for marketing objectives. Findings on employing virtual communities for customer acquisition and retention and as market research tool provide valuable indications for potential applications of UGB. On the other hand, brand community research highlights consumer-brand relationships and peer-to-peer interactions. In particular, the identified drivers of community building (e.g. transformative experiences, underdog status, metaphors and symbols) are essential for stimulating brand related UGC. Overall, the distinction between organic brand communities emerging on consumers' initiative and inorganic brand communities prompted by the marketer is regarded critical. This implies a differentiation between organic and inorganic brand related UGC within the UGB concept, too.

1.5 UGC research

Apart from studying users who innovate, collaborate, spread the word and join networks, academia has started dealing with users who create content. Although most studies do not refer to branding, indications can be found in neighbouring fields, notably user generated advertising, fan fiction and citizen journalism. Furthermore, few studies have investigated motivations and attitudinal factors for the creation and consumption of UGC.

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[189] See also in the following CASALO/FLAVIAN/GUINALIU (2008); analysis based on online survey made to members of several virtual brand communities.

[190] See also in the following BERNHARDT/MORIEUX (2008), p. 8.

1.5.1 Motivations for creating and consuming UGC

Based on the findings about the motivations of open source software programmers, STÖCKL/ROHRMEIER/HESS developed a model considering six **motivational factors** for UGC creation and consumption: external economic incentives (monetary and signalling incentives), personal documentation (self-presentation and recording of experiences), enjoyment (fun and entertainment), passing time (diversion), information dissemination (presenting and sharing information) and contact (communication with others). [191] The scholars found that the factors **enjoyment, information dissemination, desire for contact and personal documentation** provided the most relevant motivations[192] (see Figure 17). All these constructs capture intrinsic motivations – the activity itself becomes part of the desired satisfaction. Extrinsic motivations such as external (monetary) economical incentives played an inferior role, however, the wish to enhance reputation among and recognition from other users seemed to be relevant. Overall, these findings correspond to the motivations of OS software developers and online opinion seeking mentioned above. The communication aspect, however, appears to be more important in UGC production.

STÖCKL/ROHRMEIER/HESS also explored **motivational factors** against producing videos and blogs. UGC objectors – the so-called lurkers – indicated **time consuming** UGC production as main factor. [193] Other resentments include the argument of having nothing interesting to say or show, privacy concerns and lacking pleasure in producing UGC (see Figure 17).

[191] The study (N=479) was based on online questionnaires targeting video producers, webloggers and persons who do not produce UGC (see STÖCKL/ROHRMEIER/HESS (2008), pp. 275 et seqq.). The factors are derived from the uses and gratifications approach as theoretical foundation as well as economic theory and open source research.

[192] See also in the following ibid., pp. 279 et seqq. As result of an applied factor analysis the mean factor loading values for these four factors were above 3.5 on a seven-point scale and were thus considered 'approved' by the authors of the study.

[193] See also in the following ibid., pp. 281 et seq.

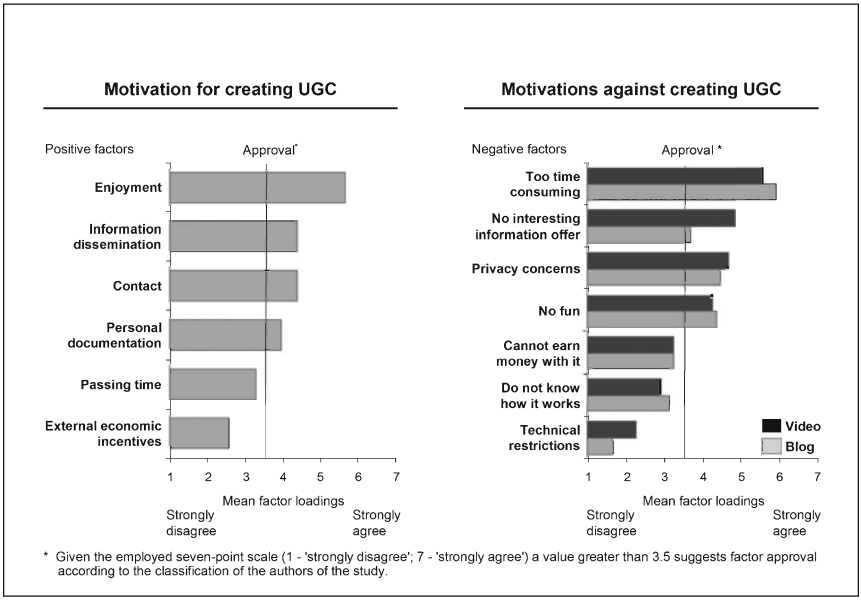

Figure 17 Motivational factors for creating UGC
Source: Own illustration based on STÖCKL/ROHRMEIER/HESS (2008), pp. 279 et seqq.

DAUGHERTY/EASTIN/BRIGHT found that creators of UGC relied predominantly on the **ego-defensive and social function** as motivational sources when forming attitudes towards UGC. [194] The ego-defensive function thereby referred to defending one's self-image from internal insecurities and external threats.[195] The social function referred to motivation for social adjustment, notably expressing attitudes or behaviour that is agreeable to others.[196] These categories correspond to STÖCKL/ROHRMEIER/HESS's personal documentation and contact factor respectively. Furthermore, DAUGHERTY/EASTIN/BRIGHT identified noticeable **differences between UGC creation and consumption** with regard to UGC platforms.[197] While UGC creators mostly engaged in UGC vehicles that provided them with a voice (e.g. blogs, fo-

[194] The study is based on an online survey (N=325) comprising respondents across various groups, educational levels, ethnicities and income clusters (see DAUGHERTY/EASTIN/BRIGHT (2008), pp. 14 et seqq).
[195] Ego-defensive function as motivational source derives from KATZ' s typology of four distinctive personality functions: utilitarian, knowledge, value-expressive, and ego-defensive function (see ibid., pp. 6 et seq.; KATZ/LAZARSFELD/ROPER (2005)).
[196] See DAUGHERTY/EASTIN/BRIGHT (2008), pp. 6 et seq.
[197] See also in the following ibid., p. 17.

rums, and personal web sites), users who rather consumed than created UGC were more inclined to watch videos, view pictures, listen to audio and visit wiki sites. As one reason for the differences the scholars assumed the impact of individual skills or self-efficacy given the higher requirements for audio and video production and wiki entries than for forum participation.

Understanding the motivations of UGC creators and consumers is essential for brand managers when dealing with unprompted brand related UGC or striving to stimulate UGC in favour of the brand. Even though the existing studies refer to UGC in general, the findings are regarded transferable to the branding context. These results thereby confirm the insights from motivational studies in open source and word of mouth research, stressing intrinsic drivers.

1.5.2 User generated advertising

Among various terms used to describe UGC in an advertising context, user generated advertising (UGA) is the most common.[198] The phenomenon of customer participation and user adoption of advertising is not new. As examples scribbling on outdoor advertisements or on ad pages in reader circle magazines, parodies of hobbyist cartoonists, the use of citizen testimonials and jingle contests may be cited.[199] What is boosting the latest UGA trend, however, was the current development of **moving image in the internet** due to high-speed broadband.[200] Almost all internet users are aware of online video[201] and most of them also view online videos on a frequent basis. The ONLINE PUBLISHERS ASSOCIATION (OPA) found that online videos were thereby well perceived as advertising vehicles: The majority of consumers took some kind of action after seeing an online video ad (e.g. checking the company site, talking to family and friends, go to the store); 12 % even made a purchase.[202]

In literature, there is no common definition for UGA. FRANK defined it as personal and individual interpretation of brand and product messages by the consumer associated with the sportsmanlike' ambition to make an own creation out of it.[203] WEIß referred to

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[198] Synonymously used terms include consumer or crowd generated advertising, user created advertising and participatory advertising (see WEIß (2007), p. 24; FRANK (2008), p.13).

[199] See BISHOP (2007); FRANK (2008), pp. 19 et seq.; BERTHON/PITT/CAMPBELL (2008), pp. 26 et seq.

[200] See FRANK (2008), pp. 22 et seqq.; BERTHON/PITT/CAMPBELL (2008), p. 27.

[201] According to the ONLINE PUBLISHERS ASSOCIATION (OPA) 93% of US internet users are aware of online videos and 69% have already watched one. The 2007 study found that the frequency of online video usage is continuously increasing (see OPA (2007)).

[202] See ibid.; results based on survey of US online video users (N=1422) from April 21 to May 1, 2007.

[203] See FRANK (2008), p. 14.

it as idea to allocate the design of advertising in detail or in total to users.[204] BERTHON/PITT/CAMPBELL pointed out subject and dissemination as key characteristics defining it as any publicly disseminated consumer generated advertising message whose subject is a collectively recognized brand.[205] In these definitions, however, content, application and management approach are blurred. To be consistent with the UGB understanding, it is suggested to understand **UGA as application of advertising related UGC** by the branded company.

In order to classify advertising related UGC according to its message, BERTHON/PITT/CAMPBELL suggested to distinct between **text and subtext.**[206] The 'surface' text level referred to the UGC's nominal relationship to the official brand message as sanctioned by the firm and could range from assonant to dissonant. The subtext level, on the contrary, represented the underlying or implicit message about a brand ranging from a positive to a negative take on the brand. As depicted in Figure 18 these two dimensions yield four distinct types of advertising related UGC: Concordant advertising related UGC expressed a positive message in general agreement with the firm's brand message, e.g. brand fan contributions driven by intrinsic enjoyment or self-promotion.[207] Incongruous advertising related UGC also represented a brand-positive subtext although the surface message is dissonant with the official message.[208] On the other hand, subversive advertising related UGC had a clearly negative subtext by using parody to subvert and undermine the official brand message.[209] Finally, contrarian advertising related UGC aimed at undermining and questioning the official brand message in order to change perceptions.[210] An analysis by BERTHON/PITT/CAMPBELL found that about 10% of ads posted on YouTube represented such spoof ads.[211]

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[204] See WEIß (2007), p. 24.
[205] See BERTHON/PITT/CAMPBELL (2008), p. 8.
[206] See also in the following ibid., pp. 14 et seq.
[207] Examples are fan contributions toward Apple iPod such as the user generated video entitled 'iPod Dance' (see UNKNOWN (2006e).
[208] A prime example is the car brand Polo 'suicide bomber' ad (see Appendix XV).
[209] An example is the 'Vote different' video based on Apple's Macintosh 'Think different' ad presenting the 2008 US presidency candidate Hilary Clinton as dictator in the style of George Orwell's novel '1984' (see UNKNOWN (2007f)).
[210] An example is a Starbucks spoof ad spuring critical thought on poverty issues (see UNKNOWN (2006i)).
[211] See BERTHON/PITT/CAMPBELL (2008), p. 28. Figure based on descriptive statistics on YouTube (accessed on 2 January 2008) analysing text and tags.

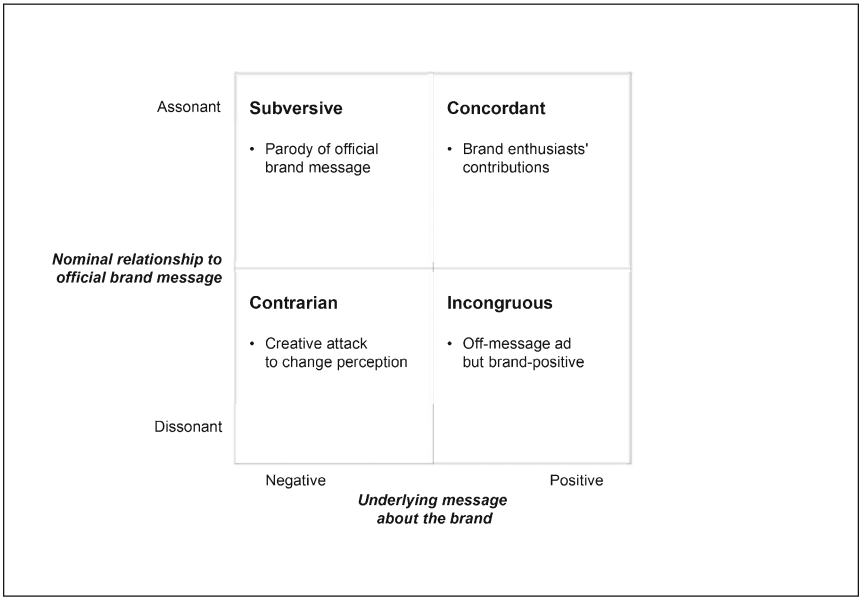

Figure 18 Types of advertising related UGC by message
Source: Own illustration based on BERTHON/PITT/CAMPBELL (2008), p. 14.

BERTHON/PITT/CAMPBELL also classified advertising related UGC according to the creator's motivations. They identified three motivational dimensions underpinning consumer created ads: **intrinsic enjoyment, self-promotion and change perceptions**.[212] First, intrinsically motivated consumers – usually tech savvy and artistically inclined individuals – created for the sake of creation; their often informative 'hobbyist ads' targeted brands they were passionate about or highly involved with, e.g. Linux. Second, self-promotion driven UGC creators aimed at attracting the attention of a potential employer or jury within an educational admission process. Their so-called 'me ads' piggybacked on positively associated high-profile brands dominating the media such as Apple and often applied humour and/or parody to highlight the creator's creativity. The third group of UGC creators intended to change hearts and minds and influence people by either promoting brands in need of support (e.g. Greenpeace) or disrupting disingenuous brands (e.g. oil companies with regard to environmental

[212] See also in the following ibid., pp. 10 et seqq.; 22 et seq. The classification is based on a small number of case study interviews.The factors were likely to occur in combination.

friendliness). Those 'activist ads' often used sharp humour and/or parody to get the message across (see Figure 19).

According to BISHOP UGA can be also classified with regard to sponsorship:[213] **Non-sponsored UGA** implied that consumers were generating advertisements without the sponsorship or even awareness of the company whose products they were touting.[214] Harnessing the power of video-sharing sites, blogs and social networks users might produce parodies to commercials.[215] Manifestations of non-sponsored UGA beside video sharing platforms are blogs on Social Shopping sites.[216] Users may create advertising boxes on these sites to introduce and recommend a product brand to other consumers via text, images, video and hyperlinks to the producer's corporate web site (co-called adgets). In this case, advertising related UGC is embedded into social commerce selling products on a social network site via consumer to consumer recommendations. Within the social shopping community advertising related UGC creators thereby act as unofficial sales representative and hold a share in the platform's advertising revenues as incentive.[217] To what degree such UGC creators are manipulated by the producers has not been explored so far.

[213] See also in the following BISHOP (2007).
[214] See also in the following ibid.
[215] For example, Apple iPod products with its iconic silhouettes have been subject to several homage videos on YouTube. Delicate iPod commercial parodies such as 'sexy vibes' (see UNKNOWN (2007e)) and 'iporn_and_itease' (see UNKNOWN (2007d)) with hundred thousands of views can be found on the video sharing site YouTube.
[216] For details on Social Shopping see WEIß (2007), p. 35.
[217] For example, the platform Shoppero grants 20% of related ad revenue to UGC creators in case other consumers visit their blog and 60% of ad revenues in case the consumer is linked to the producer's website via the adget (see ibid., p. 35).

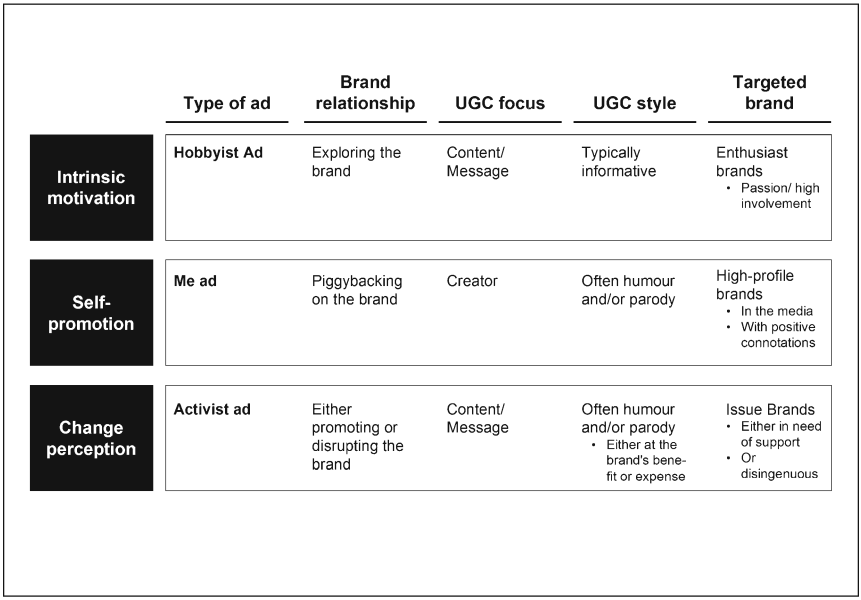

Figure 19 Types of advertising related UGC by creator's motivation
Source: Adapted from BERTHON/PITT/CAMPBELL (2008), p. 22.

In contrast to non-sponsored UGA, **sponsored UGA** implies that a company or network uses methods of encouraging consumers to create brand-related advertising content.[218] Objectives of such sponsored UGA campaigns included active customer involvement in brand building to strengthen brand loyalty and benefit from grassroots ideas for creative advertising as well as stimulation of positive word of mouth through forwarding of hyperlink to the respective content and favourable media coverage about the campaign and advertised brand.[219] One of the most popular methods appears to be holding a challenge. A prime example was the Doritos 2007 'Crash the Superbowl' contest which asked consumers to produce TV spots to be aired as real Doritos commercial at prime time[220] (see Table 2). The outcome of sponsored ad

[218] See also in the following BISHOP (2007).
[219] See WEIß (2007), p. 26.
[220] See DORITOS (2008b). The project drew 1 billion impressions and evoked temporary sales increases by 12 percent.

contest, however, might also be harmful to the brand if the customer sentiment is not favourable.[221].

Contests for brand fans
– Research question: How can marketers evoke user generated content?
– Research object: **Doritos** (tortilla chip brand by snack producer Frito-Lay, teenagers and twens as target consumers)
– Findings: Doritos launched a series of user-generated online marketing activities under an own specific label **Snack Strong Productions**; common patterns are: ▪ **Contest format**: 'Crash the Superbowl' prime time ad contest; 'When Spicy meets Sweet' contest for dating show; 'Unlock Xbox' contest for game design ▪ **Game character:** contests presented as 'How to play' or 'No game without rules' ▪ **'Be on air' aspiration:** media coverage (participants work or participants (themselves) and 'fame' as the grand prize; cash and goods prices of secondary importance ▪ **Public voting**: winners selected by public (# uploads, # votes or profile viewing time); also comments on other user's content ('I like'/'I love it' buttons) ▪ **Word of mouth**: chance to recommend content by 'tell a friend' button ▪ **Feedback loop**: 'add comment' and 'report abuse' button, guidelines
– Learning: Consumer empowerment achieved through web contests targeted at 'fans'; consumers invited to be part of the brand but only within the limits of rules[222]

Table 2 **Doritos' online contests**
Source: Own illustration based on DORITOS (2008b); DORITOS (2008a).

Apart from contests selective fan contribution is another sponsored UGA form.[223] Sponsored UGA may also be conducted through intermediaries – so-called marketing crowd sourcing platforms.[224] For instance, the intermediary Current connects major advertisers with hobbyists on its web site posting online video advertising assignments on behalf of the brand (see Appendix XVI).

Given the general understanding of classical advertising as tool of brand communications, **UGA** is regarded **as subordinate concept of UGB**. According to the identity-

[221] For instance, every sixth submission of the Chevy Tahoe ad contest 'The Apprentice' was a negative parody of the brand mostly created by environmentalists which shared the anti-brand UGC in the InternetSee also in the folowing WEIß (2007), pp. 25 et seq.; FRANK (2008), p. 48.

[222] The observed patterns in the case study are backed by Bishop's principles for sponsored UGA such as maintain minimum mediation, share all submissions; allow participants to select the winner (see BISHOP (2007)).

[223] For instance, Burger King sent out 25 masks of Burger Kings ad icons "the King" and "the Subservient Chicken" to the user group who went out in the field. The films were featured in the Burger King entertainment section of the Heavy.com website (see GUPTA (2005); BISHOP (2007)).

[224] See WEIß (2007), pp. 34 et seq. As examples for intermediary UGA platforms Current, zoopa, Brickfish, moviebackery, Revver, and Shycast are cited.

based brand management approach classical advertising is one of the marketing communications instruments which brand identity can be translated into.[225] With regard to advertising related UGC users mimic the forms of professional classical advertising including TV and radio spots and print advertisement. UGB, however, goes beyond these classical advertising forms comprising consumer stories, narratives on brand experience, song parodies, etc. as evidenced in brand community activities.[226] Also brand design competitions such as the Becks' label design contest[227] and the Converse MyChucks competition[228] go beyond UGA and may be considered within the context of UGB.

Key learning from UGA for the definition of UGB is the differentiation between sponsored and non-sponsored UGA – a distinction pattern which was also suggested by word of mouth research and brand community research described above. In particular, sponsored UGA campaigns may be regarded as specific application of UGB. Besides, the classification of advertising types (Hobbyist Ad, Me Ad, and Activist Ad) based on the creator's motivation helps understand the potential manifestation of brand related UGC. The depicted differentiation of message types according to the surface text and the subtext level is regarded critical for evaluating the effects of brand related UGC on the brand image.

1.5.3 Fan fiction

References to UGB related aspects of ownership and access can be found in the writing of fan fiction. Fan fictions is considered a similar form of **co-creation** since consumers appropriate and alternate media-based protected property (e.g. television programmes, movies, music, fiction) and write around and through its meta-text to meet their unique desires. LANIER/SCHAU/MUNIZ call this transformative process "*textual poaching*"[229] in which consumer take the media producers' mass commodities as cultural resources and turn them into popular culture "*...through a co-creative proc-*

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[225] Other marketing communications instruments include Public Relations, sponsoring, promotion, faires and exhibitions, event marketing, product placements and direct mailings (see MEFFERT/BURMANN/KIRCHGEORG (2008), pp. 379 et seqq.; 711).

[226] For the case study of the Newton community see Table 3; for Harley-Davidson community see Table 1.

[227] See BECK'S (2008). Professional designers were called to design Beck's bottle labels and sixpacks wraps for a special 'design edition'. 10 winner labels were selected out of more than 750 submissions.

[228] See CONVERSE (2008). Converse called for submitting own designs of the ChuckTaylor All Star basketball sneakers. The winning entry is to be produced and sold in early 2009.

[229] LANIER/SCHAU/MUNIZ (2007), p. 697.

ess of access, interpretation, and identity negotiation (individual and collective)"[230].

By studying fan communities[231] they found out that fans co-create **'immaterial' meanings** and interpretations based on the 'material' mass products. Fans adored the focal text, but were especially fascinated by the unwritten encouraging them to create broader meanings of popular culture meeting their needs and build fan communities. Thereby they replaced the original tension of mass culture versus popular culture by the tensions between equally adoring fans with disparate understandings of the focal storyline.[232] Their engagement depended on the richness and uniqueness of the brand meaning and the appropriation possibility.[233]

Further findings include that attempts by some producers to fully control both the 'material' and the 'immaterial' aspects of the focal text did not keep the fan community from co-creating, but forced them underground. LANIER/SCHAU/MUNIZ argued that producers could only maintain ownership of the 'immaterial' aspects by restricting access to the product itself which were against marketing purposes and impossible to control. They conclude: "*...traditional notions of ownership break down as we move from considering value as residing in the product to residing in the experience and meaning surrounding the product*"[234].

Fan fiction can be regarded as both coordinate and subordinate to UGB depending on the understanding of fiction as brands. If novels like 'Harry Potter', television shows like 'Xena: Warrior Princess' and music groups like 'Tom Petty and the Heartbreakers' are considered product brands, fan fiction can be understood as an **extreme form** of brand related UGC. Fan fiction creators thereby apply an especially high degree of creative efforts by co-creating and sharing interpretations of the focal text. This poses a big challenge to UGB as brand management approach.

1.5.4 Citizen journalism

While brand managers face brand related UGC creators, media manager face so-called citizen journalists. GILLMOR argued that techniques such as blogging, Short Message System (SMS) news services and Really Simple Syndication (RSS) evoked

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[230] Ibid.

[231] Three organically formed fan communities from different media types (novels, television shows, and music) were monitored: Harry Potter, Xena: Warrior Princess, and Tom Petty and the Heartbreakers (see LANIER/SCHAU/MUNIZ (2007)).

[232] See ibid.

[233] This may be the case in the Apple iPod community where brand enthusiasts build on the meanings offered by Apple extending the original device (see MUNIZ/SCHAU (2007)).

[234] LANIER/SCHAU/MUNIZ (2007).

a turning point in media history:[235] Since these technologies removed major barriers to information distribution, e.g. the need for a broadcast licence or a printing press, common people with a digital camera and internet access could provide journalistic content. Thus, a sort of **grassroots journalism** by the people for the people was emerging, transforming news coverage from a lecture to a conversation. Hence, the traditional closed one-to-many journalism system was rapidly shifting to many-to-many media. This tendency also caused problems to Public Relations since it was nearly impossible to manage and control the news. [236]

So-called citizen journalists publish in real time to a worldwide audience of shared interest mostly via blogs but also on common platforms such as Current TV[237]. They create or comment on news, monitor the traditional press and potentially correct it. Therefore, LOYALKA considered grassroots journalists "*...**watchdog's watchdog** critiquing journalists' work*"[238]. So they contributed to a better informed population and strengthened democracy. Unlike traditional media journalists, bloggers tended to use mostly second-hand sources and online documents employing a style of more like a commentator than an investigative journalist.

The reactions to citizen journalism vary: As UGC in general it has been critiqued for quality issues. Established media argue that grassroots messages were not meeting the quality produced by trained media professionals and therefore contributed to a decline of publishing standards. Besides, traditional media have lobbied aggressively to enforce new laws to ensure their publication monopoly. Other big media like the television news channels BBC, CNN and Fox have worked to engage citizen journalists[239]. Also print media such as the German tabloid BILD attempted to integrate interactive features allowing their readers to comment on stories, posting own stories or even co-writing stories with staff writers while journalists were blogging about their investigation from early stage directly from the media web site.[240] Especially political strategists have learnt how to benefit from the new journalism influencing and track-

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[235] See also in the following GILLMOR (2004).
[236] See ibid.; FITZGERALD (2005); LOYALKA (2005); MARKEN (2004).
[237] The internet platform Current themed 'You make the news' invites users to submit own stories which might be put on the homonymous television channel. Peers can vote on the best entries (see CURRENT (2008a)).
[238] LOYALKA (2005), p. 19.
[239] The British Broadcasting Corporation (BBC) set up a user generated content team in 2005, integrating contributions such as photos and videos of citizen journalists in the wake of special incidents. In 2006 CNN launched "iReport" and its rival Fox News Channel "uReport" in order to exploit user generated news.
[240] The US periodical News & Record was a pioneer in integrating citizen journalism already in 2004. The German tabloid BILD established citizen reporters as a permanent section.

ing their news and producing own online publications and blogs to raise donations.[241]

Merging tendencies between traditional and grassroots journalism can be observed: While traditional media enter the blogosphere and professional journalists started their own blogs, citizen journalists joined quasi-professional organizations like the Media Bloggers Association. However, professional journalistic principles do not necessarily apply to citizen journalists. A key question is whether a citizen journalist could attend a no-press event as a citizen and then report on the event as a journalist.[242]

Given the similar scope but different subject, citizen journalism is considered a **coordinate concept to UGB**. While UGB refers to brand related UGC citizen journalism relates to news related UGC and the media. Crucial for both concepts is the shift from one-to-many to many-to-many communication. With regard to UGB the professionalization tendencies of citizen journalism which once started out as grassroots movement might provide an indication for future developments of brand related UGC. Of interest is also the response of incumbent media which seem to pass through a process of adaptation and opening toward UGC content.

1.6 UGB research in a broader sense

As introductorily mentioned, there has been no solid comprehensive definition of UGB so far. However, a few scholars tapped on the issue: In the field of brand communities MUNIZ/SCHAU as well as KOZINETS have dealt with the phenomenon of brand related UGC. In the field of open source research, BERTHON/ PITT/WATSON et al. have examined the subject. Although none of the mentioned scholars has captured the full UGB picture, they provided valuable insights on single aspects of the phenomenon.

1.6.1 Vigilante marketing by MUNIZ/SCHAU

MUNIZ/SCHAU[243] have investigated consumer generated commercially centred communications within the scope of brand community research.[244] To describe brand related UGC observed in an organic brand community they used the term vigilante

[241] Examples are the presidential campaigns of Howard Dean and Barack Obama (see LOYALKA (2005); COX (2008)).
[242] See COX (2008).
[243] MUNIZ is an associate professor at the College of Commerce of DePaul University, USA. SCHAU is an assistant professor of marketing at the Eller College of Management of the University of Arizona, USA.
[244] MUNIZ and his colleagues can be regarded as pioneers in brand community research introducing the notion and a brand community model and studying the relationships between self-concept and community membership.

marketing[245] referring to the content-creating consumer as vigilante – *"...a self-appointed doer of justice"*[246]. They defined **vigilante marketing** as "*unpaid advertising and marketing efforts, including one-to-one, one-to-many, and many-to-many commercially oriented communications, undertaken by brand loyalists on behalf of the brand*"[247].

As extreme example for an organic community MUNIZ/SCHAU studied the community of the (Apple) Newton brand (see Table 3) which was discontinued in 1998 and therefore abandoned without any support by corporate communications.[248] This case allowed witnessing independent, self-sustaining consumer generated brand building approaches since the consumers have been free to fill in the void in the absence of the marketer. The consumers were not co-creating; they were sole-authoring. As the study showed Newton members engaged in vigilante marketing by creating powerful brand meanings and advertising resembling artefacts to keep the community together, revitalize its beliefs, values and the product itself. The content-creation was fuelled by the concept of enemy (i.e. Apple which discontinued the brand) and the threat of self-dissolution and perpetuated by quasi-religious motifs with regard to the miraculous performance, survival of the brand and the creator's return.[249] According to MUNIZ/SCHAU the Newton case documented that users were literate in generating brand meanings and applying advertising techniques and therefore capable to take over control of brand communications.[250] It also showed that notably in the technology field consumers not always accepted the brand meanings and product uses proposed by the marketer, but manipulated and anti-programmed them and worked them into their lives. Besides, the research suggested that a unique and powerful brand meaning – in the Newton case via the Apple parent brand – was a crucial part in fostering vigilante marketing.[251]

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[245] Vigilante marketing was originally introduced by IVES in 2004 describing the proliferation of ads and campaign ideas without client or agency involvement (see IVES (2004)).
[246] MERRIAM-WEBSTER (2008e).
[247] MUNIZ/SCHAU (2007), p. 187.
[248] For the Newton community case study see also in the following MUNIZ/SCHAU (2007); SCHAU/MUNIZ (2006); MUNIZ/SCHAU (2005).
[249] Such cultic, quasi-religious motifs have been also witnessed in other brand communities such as Macintosh (see BELK/TUMBAT (2005)), Star Trek (see KOZINETS (2001)) and X-files (see KOZINETS (1997)).
[250] See also in the following MUNIZ/SCHAU (2007), pp. 197 et seqq.
[251] See ibid., pp. 197 et seqq.

Consumers as substitute marketers
– Research question: How can a brand community build commitment to the brand and the community in the absence of corporate advertising and promotion? – Research object: **(Apple) Newton brand community** (first U.S. PDA brand introduced in 1993, discontinued in 1998, community with more than 20,000 active Newton users and up to 4,000 active forum participants) – Research method: Netnographic study[252] (long-time observation of member forums, member web pages, and interviews with community members) – Finding 1: Community is able to manage the entire brand-sustaining experience ▪ Members modify, repair, and advance the Newton PDA product ▪ Members create brand meaning and community in absence of the marketer – Finding 2: Community is skilled in producing meaningful brand content, mimicking the styles, logic, and grammar of advertising ▪ Members driven by angry, defiant, and rebellious sentiments due to abandonment ▪ Expressions directed at absent marketer (blaming Apple), market (defending the brand from competition), and the members themselves (boosting the community) ▪ Creation of artefacts mimicking professional advertising (e.g. user created logo, ad drawings from multiple brand and cultural sources, ad mimicking prior Apple campaigns, ad emphasizing oppositional brand loyalty themes) ▪ Supernatural, religious, and magical motifs used in narratives (tales of survival, persecution, faith being rewarded, miraculous discovery, resurrection) ▪ Narratives used in many formats (e.g. consumer story, consumer scripts, samplings, song parodies, pictorials) – Finding 3: Community membership and content creation is driven by several factors ▪ Religiosity in terms of revitalizing the beliefs and values of the community ▪ Concept of the enemy (Apple who discontinued the brand) ▪ Threat of self-dissolution – Learning: Newton community is an example for brand related UGC in an organic community

Table 3 **(Apple) Newton brand community**
Source: Own illustration based on MUNIZ/SCHAU (2007); SCHAU/MUNIZ (2006); MUNIZ/SCHAU (2005).

MUNIZ/SCHAU also examined the Jones Soda community as example for an **inorganic community** which demonstrated how marketers could harness consumer's creative potential[253] (see Table 4). As drivers for consumers' content creation they identified the Internet allowing an immediate feedback loop between the consumers, marketers and the marketplace, the offered ample room for personal transformation

[252] See KOZINETS (2002); KOZINETS (1997).
[253] See also in the following MUNIZ/SCHAU (2007b), p. 644.

as well as the strategic attempt by the marketers to make the brand marginal via the strategic choices.

Consumers as invited co-marketers
– Research question: How can marketers evoke and use UGC?
– Research object: **Jones Soda brand community** (U.S. beverage brand, 12-24 year old target consumers)
– Method: Netnographic study[254]
– Finding 1: Jones Soda **stimulated input of consumers** into brand attributes and personality
▪ Marketing decisions from innovation (e.g. flavours), packaging (e.g. labels) and pricing to promotions (e.g. stickers, web content) and advertising affected
▪ Offered room for brand experience and personal transformation
– Finding 2: Internet exploited as a medium for consumer communication
▪ Interactive web site with contests (e.g. T-Shirt design and label contest), video uploads, ratings, online community pages (e.g. widgets[255]) and personalized product designs
▪ Online activities supported by promotional vehicle for local events
– Learning: Jones Soda community is an example for UGB in an inorganic brand community

Table 4 **Jones Soda brand community**
Source: Own illustration based on MUNIZ/SCHAU (2007b); JONES (2008).

With regard to the purpose of this thesis, MUNIZ' and SCHAU's research provides valuable insights. On the one hand, their mentioned definition of vigilante marketing backs the proposed UGB and brand related UGC definition with regard to "*unpaid*"[256] voluntary efforts, the focus on "*commercially oriented communications*" and creators outside the routines acting "*on behalf of the brand*". However, there are two major shortcomings: First, the vigilante marketing definition lacks branding focus – MUNIZ/SCHAU generally talk about "*advertising and marketing efforts*" but not brand management activities. And second, the scholars only capture positively associated brand related UGC by referring explicitly to "*brand loyalists*". In the understanding of this thesis, however, brand related UGC also covers anti-brand messages. Therefore, it is argued that a UGB definition should have a broader scope comprising both positive and negative consumer feedback.

On the other hand, their differentiation of organic and inorganic brand communities suggests a similar differentiation of the UGB phenomenon. So far, only a general definition has been introduced in this thesis. Overall MUNIZ/SCHAU's vigilante market-

[254] See KOZINETS (2002); KOZINETS (1997).
[255] Widgets are small portable web applications, e.g. animated icons (for a definition see Appendix III).
[256] See MUNIZ/SCHAU (2007), p. 187; further quotations also refer to this source.

ing studies provide evidence of the advanced literacy and agility of consumers in understanding brand communications and copying professional advertising and thus prove the relevancy of UGB in today's marketing.

1.6.2 eTribalized branding by Kozinets

KOZINETS[257] has approached the UGB phenomenon from consumer behaviour research[258] dealing with the impact of technological innovations, ideological and cultural change. Although he has used both terms UGB and consumer generated branding within the context of a conference[259] the dominant notion in his academic research is eTribalized branding.

KOZINETS used the characteristics of consumer tribes to explore the emergence of new kinds of communities. He transferred the term to the virtual space naming the emerging virtual communities '**eTribes**' based on the formula 'tribes + internet = eTribal movement'.[260] He defined eTribes as "*...specific subgroups of virtual communities that explicitly centre upon consumption-related interests*"[261]. As sites of eTribes he named web applications such as boards, lists, rings, blogs, rooms, play spaces and virtual worlds, but also mobile devices.[262]

By studying the online coffee culture newsgroup of the US cyber café brand Alt.coffee[263] KOZINETS found that customers discussed and debated their consumption habits and purchase decisions online giving unfiltered feedback on brands.[264] Within this context he identified seven underlying eTribe principles ('7 Es')[265]: electronic, entangled, enculturating, emotive, emergent, empowered, and evangelical (see Table 5). As marketing research method to explore the nature of eTribes KOZINETS introduced **Netnography**[266] – an ethnographic analysis method adapted to the

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[257] KOZINETS is an Associate Professor of Marketing at the Schulich School of Business at York University in Toronto/Canada.

[258] In contrast, this thesis aims at analyzing brand related UGC from a brand management perspective.

[259] Terms used with regard to the homonymous Best Brands College conference in Munich in February 2008 (see KOZINETS (2008c)).

[260] See KOZINETS (2008b).

[261] KOZINETS (2006), p. 280.

[262] See KOZINETS (2008b).

[263] For details about the Alt.coffee brand see ALTCOFFEE (2008a); ALTCOFFEE (2008b).

[264] See KOZINETS (2002).

[265] See also in the following KOZINETS (2008b); KOZINETS (2008a).

[266] Netnography provides information on the symbolism, meanings, and consumption patterns of online consumer groups. The method has been used to study topics such as brand, media fan and gaming communities, specific consumer groups (e.g. technology users, cosmetic surgery users) as well as specific gatherings (e.g. weddings, concerts) (see also in the following KOZINETS (2002); KOZINETS (2008a).

study of online communities. Since insights about online consumer groups were generated by using information publicly available in online forums he also called it anthropology of the internet.

Passionate forum participants as lead users
– Research question: What is the identity of virtual communities which are centred upon consumption?
– Research object: **Alt.coffee virtual community** (U.S. internet café from 1995 to 2008 targeted to 'young bohemians' such as students, artists, etc.)
– Method: Netnographic study[267] (analysis of newsgroup (~56,000 readers), 33 months of research)
– Findings: Virtual community discusses consumption habits and purchase; nature of online forum can be summarized in seven constitutive principles ('7 Es') ▪ Electronic: connecting naturally through online communities (e.g. newsgroup) ▪ Entangled: building networks, being participative and (temporarily) connected ▪ Enculturating: applying special language and symbol systems (e.g. coffee lover terms), undergoing a cultural process (e.g. coffee preparing training) ▪ Emotive: experiencing pure passion, taking the subject seriously (e.g. coffee as human emotion) ▪ Emergent: coming up by themselves, fascinated by entertainment and news ▪ Empowered: deriving from belief, formed by activism and resistance ▪ Evangelical: having a quasi religious experience, an indefinable moment of glory and pleasure (e.g. coffee consumption as perfect moment, supernatural event)
– Learning: Online consumer discussions as rich data source for consumer understanding (e.g. brand feedback, consumption habits, market segmentation); passionate participants might serve as lead users to forecast future mainstream trends

Table 5 **Alt.coffee eTribe**
Source: Own illustration based on KOZINETS (2008b); KOZINETS (2002).

Based on the observed online consumer discussions KOZINETS concluded that eTribes were an increasingly important data source for consumer understanding with regard to explicit customer feedback, market segmentation and market trends.[268] He argued that heavily devoted online forum participants could be even regarded as lead users because their passionate perspective yielded insights into the more mainstream consumer behaviour of tomorrow. However, the non-representative online data needed to be carefully cross-validated for transferability to offline consumers in order to avoid being misled by overly vocal online forum participants.

[267] See footnote 266.
[268] See also in the following KOZINETS (2002), p. 70.

With regard to UGB KOZINETS identified four patterns how members of eTribes could influence branding[269] (see Figure 20): **Pummels** and **pings** were forms of pro-active (partly negative) consumer feedback revealing the real brand perception by consumers. While pummels were rough impolitic expressions of consumer activism including spoofs and alienations of brand logos and claims, pings reflected rather aesthetic brand feedback in form of texts and designs. Both forms were unprompted by the marketer and therefore provided insights on the perceived brand image. On the contrary, the so-called **spawns** and **spreads** were prompted forms of consumer input. Spawns included several tools of crowd sourcing such as contests and voting as well as consumer driven branding activities for wiki brands. Asking for spawns the marketer made use of the wisdom of crowds in order to achieve innovation. Spreads were rather seen by KOZINETS as a tool for the intensification of the defined brand positioning. They aimed at unconventionally disseminate branding messages applying peer-to-peer channels such as WOM campaigns, brand communities and virtual marketing.

However, it is necessary to clearly differentiate between content and dissemination of content on the one hand and between the sphere of influence of the branded company and the autonomous brand related behaviour of users as response to the brand proprietor's activities on the other hand. Hence, it is suggested to separate KOZINETS' spreads from the other three types. The reason is that pummels, pings and spawns meet the introduced definition of brand related UGC considering that the influence of the branded company is stronger on spawns than on pings and pummels. Spreads, on the contrary, represent a dissemination tactic and thus do not meet the general UGC criteria of applied creative effort in content generation on the part of the user. The desired market response of viral spread of brand messages thereby eludes the direct sphere of influence of the branded company.

[269] See also in the following KOZINETS (2008b), including the 'spoken word' during his presentation at the Best Brands College conference in Munich in February 2008.

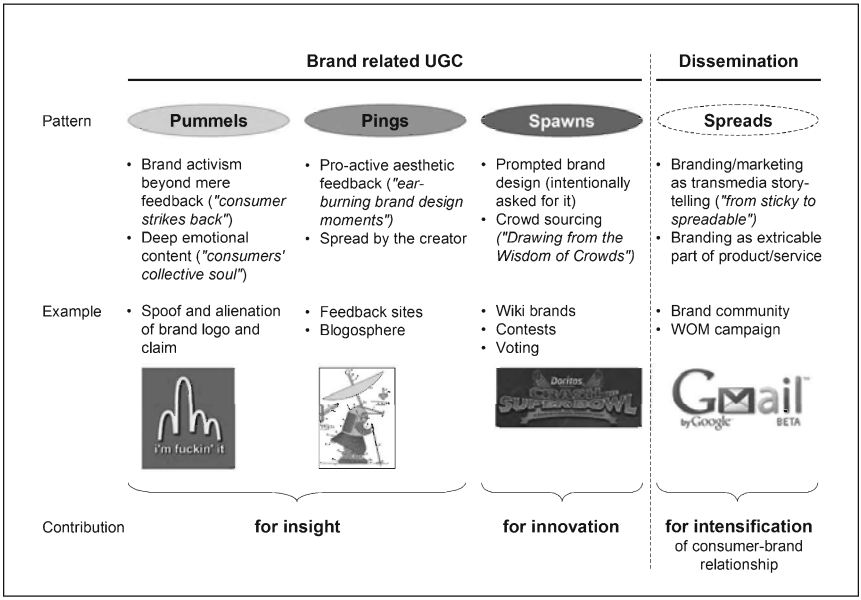

Figure 20 Patterns of eTribalized branding
Source: Own illustration based on KOZINETS (2008b).

With regard to UGB KOZINETS' differentiation of eTribal branding patterns is of high relevance. First, his separation of **pro-active consumer feedback** (in form of pummels and pings) and **prompted consumer input** (e.g. spawns) suggests a dichotomy of the UGB phenomenon as evidenced already by MUNIZ/SCHAU's differentiation of organic and inorganic brand communities. Second, KOZINETS explicitly stresses anti-brand content as result of consumer generated branding activities, notably expressed by pummels. Thus, his framework backs the understanding of a comprehensive UGB concept including **positive and negative consumer feedback**. Third, KOZINETS' eTribes construct regards **new media applications** as venues of brand related UGC. He thereby includes both Web 2.0 applications and mobile applications supporting the favoured view that UGB needs to be settled in the multimedia world beyond the internet. Fourth, KOZINETS based his eTribes concept on **approaches of related research fields**: He drew a parallel between passionate online forum participants and lead users, traced prompted branding input (spawns) back to crowd sourcing and the wisdom of crowds and named WOM campaigns, brand communities and virtual marketing tools as ways of spreading branding messages.

However, KOZINETS' eTribes concept does not meet the requirements of a holistic UGB model. His findings are rather anecdotal lacking a theory-based model or structure of causality. He does not provide a definition for UGB and makes rather use of examples than sound derivations from super-ordinate or co-coordinated concepts. Indeed, the components of the UGB phenomenon are rather adumbrated than explicitly described. Notably the status of the UGB creator remains indistinct. As discussed above, there is also disagreement with KOZINETS' classification of spreads in a row with brand related UGC patterns. It is argued that distributing pre-defined brand messages virally or by WOM does not comply with the creation of personal brand meaning.

1.6.3 Open source brands by Berthon/Pitt/Watson et al.

BERTHON/PITT/WATSON[270] et al. have published a series of research papers in the field of electronic commerce focusing on the implications of the open source (OS) movement[271] for marketing and branding. Their research is focused on so-called **open source (OS) brands** for which the intellectual input of the inventors and producers is non-proprietary in nature.[272] Prime examples for pure OS brands are the online encyclopaedia Wikipedia and the software project Linux.

The scholars review OS brands from a **postmodern perspective** in the web context arguing that OS brands embodied a number of characteristics of postmodernism[273] in contrast to traditional brands which represented modernist thinking[274]. A key feature of OS brands was fluidity of meaning as a result of an interactive game of multiple players with continuously changing rules.[275] In contrast to traditional brands OS

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[270] BERTHON is the Clifford F. Youse Professor of Marketing at Bentley College's McCallum School of Business in Waltham, Massachusetts. PITT is a Professor of Marketing at Simon Fraser's Segal Graduate School of Business in Vancouver, British Columbia, Canada. WATSON is the J. Rex Fuqua Distinguished Chair for Internet Strategy in the Department of MIS at the University of Georgia's Terry College of Business.

[271] For an introduction to the open source (OS) movement see chapter C 80.

[272] See PITT/WATSON/BERTHON et al. (2006), p. 116; also see PITT/BERTHON/WATSON et al. (2007), p. 319.

[273] In contrast to modernism, postmodernism stands for the rejection of the real, blurring of established distinctions, the fragmentation of integrated wholes, paradox, and anti-foundationalism (see PITT/BERTHON/WATSON et al. (2007), p. 319).

[274] Modernism or modernity is characterised by the rational subject as primary vehicle for progress and liberation aiming at developing objective knowledge and universal morality. Themes included the firm as central production unit, profit as driving motive, and the understanding of the customer as passive buyer (see ibid., p. 319).

[275] See also in the following CHAKRABARTI/BERTHON/WATSON et al. (2007), pp. 952 et seq.; PITT/BERTHON/WATSON et al. (2007), pp. 322 et seqq.; for further exploration of the postmodern phenomenon in the web context see BERTHON/PITT/WATSON (2000); BERTHON/KATSIKEAS (1998).

brands were generated by a community of prosumers[276] who created, improved, distributed and used the offering at the same time.[277] This blurring of consumer and producer role reflected the postmodern principle of dedifferentiation. Besides, OS brands were also highly reflective on the quality of fragmentation: While traditional brands were seen as highly integrated offerings aiming at conveying an integrated brand experience for the customer, the symbols and messages of OS brands tended to be loosely integrated. Furthermore, OS brands seemed to embody the postmodern patterns of subjectivity, inclusivity and radicality with regard to the personal creation of brand meaning and thus openly defined brand values. While traditional brands were set up on the belief in brand institutions OS brands rejected any hierarchies (see Figure 21).

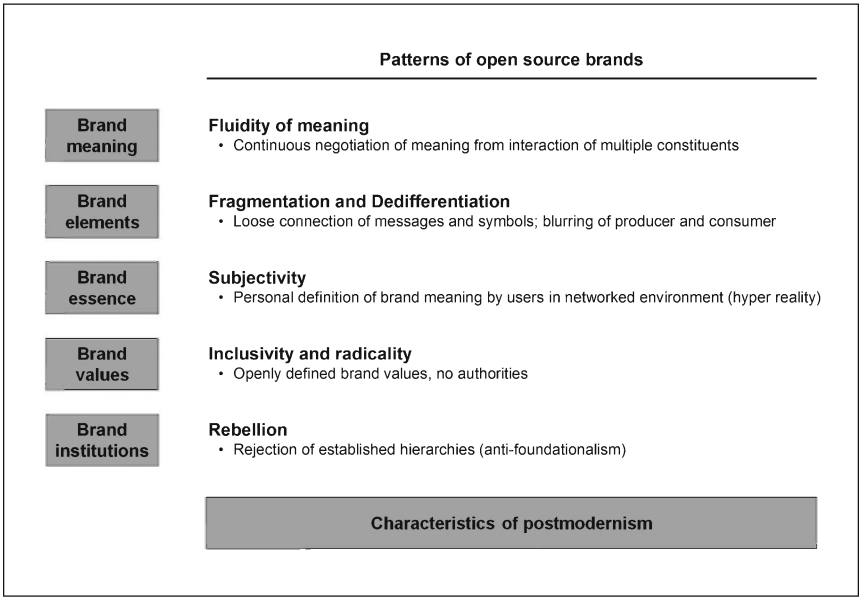

Figure 21 Postmodern qualities of OS brands
Source: Own illustration based on CHAKRABARTI et al. (2007), pp. 952 et seq.; PITT et al. (2007), pp. 322 et seqq.

[276] The notion of prosumers refers to the coalescing of producers and consumers. For an in-depth consideration of prosumers see chapter C 731.1.1
[277] See CHAKRABARTI/BERTHON/WATSON et al. (2007), pp. 948 et seq.

Reflecting the depicted postmodern qualities of OS brands against the background of the brand definition within the scope of the identity-based brand management approach which forms the foundation of this thesis[278] the following observations are to be made: First, the OS pattern of fluidity of meaning appears to be contradictory to the understanding of the brand as "*...a bundle of benefits with specific characteristics causing a sustainable differentiation*"[279] regarding similar offerings. This sustainability requirement is thereby regarded a constitutive criteria for the generation of a consumer's added value by means of a brand. In order to be fixed in the psyche of relevant target groups, specific characteristics need to have certain stability over time. Only memorized brand patterns may evoke a promise of a certain product or service quality which may then provide orientation and confidence for consumers and thus reduce their perceived risk during purchase and consumption. Hence, the proposed pattern of fluidity of meaning may rather refer to the **process of OS brand identity creation** than to the benefits and image of an OS brand. This essential distinction between brand identity as a management concept which reflects brand vision, personality, values, competencies and heritage on the one hand and brand image as a market response concept which reflects brand benefit associations, attributes and personality on the other hand remains blurred in BERTHON et al.'s study. Given the fact that customers are believed to use OS brands for the same reasons as traditional brands[280], however, it is essential to apply the brand constituting criteria of sustainable differentiation to OS brands, too.

Second, the shortcoming of a lacking separation of brand identity from brand image is also evident in the scholars' comparison of the essence of OS brands versus traditional brands. There is also disagreement with BERTHON et al.'s general classification of an "*objectively defined*"[281] essence of traditional offerings in contrast to subjective OS offerings and notably with the proposed definition of a traditional brand as "*...projection of the tangible of what is produced by the producer*"[282]. Within the scope of the identity-based brand management approach the brand image is under-

[278] For an in-depth consideration of the identity-based brand management approach see chapter B 2.
[279] MEFFERT/BURMANN/KIRCHGEORG (2008), p. 358 with reference to KELLER (2003), pp. 3 et seq. and BURMANN/MEFFERT/KOERS (2005), p. 3.
[280] The scholars stated that most stakeholders of OS brands faced relationship quality issues similar to those of traditional brands. Only the OS brand's community of prosumers showed distinctive features (see CHAKRABARTI/BERTHON/WATSON et al. (2007), pp. 948 et seq.).
[281] PITT/BERTHON/WATSON et al. (2007), p. 325.
[282] Ibid., p. 325.

stood as the result of a consumer's "*condense and judgemental perceptions*"[283] and individual subjective decryption of all – tangible and intangible – brand signals perceived via various brand touch points. Third, the scholars' assumption that values of traditional offerings tended to be "*orthodox…and exclusive*"[284] in contrast to inclusive values of the OS brand seems to be also contradictory to the identity-based brand management approach since the latter concept is centred on the consumer-brand relationship which is constituted by coherent interactions in respect of content.[285]

Overall, it is to be noted that the outline proposed by BERTHON et al. presents idealised extremes. As the argumentation above suggests, however, it should be necessarily regarded as a continuum. BERTHON et al. put their classification into perspective by allocating different offering types to differing points on the spectrum which ranged from commodities (e.g. gold, steel) at the 'modernist' endpoint, through branded goods (e.g. shampoo brands) and brand communities (e.g. Harley-Davidson, Apple), to OS offerings (e.g. Linux) at the 'postmodern' endpoint[286] (see Figure 22). From a relationship quality perspective the scholars categorised these offering types as stages in the **evolution of brands**. Reviewing brand benefits for sellers and buyers[287] they argued that in the mindset of the industrial age brands disproportionally drove relationship quality for the seller.[288] Therefore, they regarded most branded goods as seller-dominant. In their understanding, only few strong brands had already entered the next level in brand evolution – the community phase – valuing customers as active purchasers and creating communities to mutually determine relationship quality. In their view, OS brands represented the final stage of brand evolution since they offered greater service for its users by creating a common identity. This evaluation of brand evolution is subject to criticism. From a brand management perspective the global classification of branded goods as seller dominant is regarded inaccurate since long-term customer relationship building represents one

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[283] MEFFERT/BURMANN/KIRCHGEORG (2008), p. 364 with reference to BURMANN/BLINDA/NITSCHKE (2003), p. 6 (translated from German). For details about the brand image concept see chapter 2.1.2.

[284] PITT/BERTHON/WATSON et al. (2007), p. 325.

[285] The consumer-brand relationship is defined as "*…the degree of the subjectively perceived cognitive and affective relatedness of a consumer to a brand*" (MEFFERT/BURMANN/KIRCHGEORG (2008), p. 367 with reference to BURMANN/MEFFERT (2005b), p. 101). For an in-depth consideration see chapter B 2.1.3. Within this context, GERKEN dealt with the 'fractal brand' already in the mid-90s (see GERKEN (1994)).

[286] See PITT/BERTHON/WATSON et al. (2007), p. 326.

[287] For brand benefit definitions for sellers and buyers see PITT/WATSON/BERTHON et al. (2006), p. 120; the concept corresponds to the benefit dimensions for providers and consumers within the identity based brand management approach.

[288] See also in the following CHAKRABARTI/BERTHON/WATSON et al. (2007), pp. 950 et seq.; PITT/WATSON/BERTHON et al. (2006), pp. 120 et seqq.

constitutive criteria of marketing understanding.[289] The updated marketing definition by the American Marketing Association (AMA) explicitly positioned marketing as providing long term value rather than narrowly as an exchange of money for the benefit of the organization.[290] Relationship orientation and customer retention are thereby the core values of relationship marketing which has induced a shift in marketing thinking since the beginning of the 1990s.[291] Hence, BERTHON et al.'s black and white argumentation that customers in the conventional view of offering development which was based on the industrial value creation system might be seen as destroyers of value whereas co-creators of value could be (only) found in the context of OS offerings[292] appears to be contradictory to modern marketing. Furthermore, the classification of OS brands as 'buyer dominant' raises the question of the extent to what OS brands may still be regarded as economic goods. According to the identity-based brand management approach the economic principle is a constitutive requirement of brands.[293] If no commercial sense at all is involved – that is sales promoting impact of a brand in the narrower sense or commercialisation of the business idea in the broader sense – the definition of OS products as 'brands' is to be questioned.

Elaborating on the closed versus open source comparison BERTHON/PITT/WATSON also introduced source types which could be an aspect of a brand and develop either in a closed or open dimension.[294] Considering substance – information versus matter – and attitude – subjective versus objective – they differentiated four different source types: meaning (e.g. symbols), experience (e.g. taste), code/text (e.g. software) and physical (e.g. chemicals). The scholars argued that in a radically open dimension producers and consumers coalesced into prosumers by evolving the brand meaning, generating the experience, authoring the text and creating the physical offering (e.g. OS software Linux). In a radically closed dimension, in contrast, the meaning appeared to be broadcasted, the experience directed, the text narrated and the physical offering produced. Of interest is the consideration of midway stages in the spectrum

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[289] See MEFFERT/BURMANN/KIRCHGEORG (2008), p. 16.

[290] AMA defined marketing in 2007 as "...the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large" (LOTTI/LEHMANN (2007). Compared to the previous definition in 2004 marketing is regarded as an 'activity' instead of a 'function' and positioned as a broader activity.

[291] Relationship marketing regards market oriented management as investment in customer relationships which comprised the set up of a loyal customer base and portfolio throughout the customer lifetime cycle (acquisition, retention, selection). For an in-depth consideration of relationship marketing see amongst others BERRY (1983); CHRISTOPHER/PAYNE/BALLANTYNE (1993); GRÖNROOS (1994); BACKHAUS (1997); BRUHN (2007).

[292] See PITT/BERTHON/WATSON et al. (2007), pp. 326 et seq.

[293] For brand benefits and objectives see amongst others BURMANN/ARNHOLD (2009), pp. 43 et seqq.

[294] See also in the following PITT/WATSON/BERTHON et al. (2006), pp. 117 et seqq.

from closed to open which represented current management issues: brand communities (e.g. Harley-Davidson) on the meaning level, customer participation on the experience level (e.g. Disneyland), interactivity (e.g. computer games) on the code/text level and mass customization (e.g. Dell) on the physical level. Figure 22 summarises the values of the four source types on the spectrum from closed to open source.

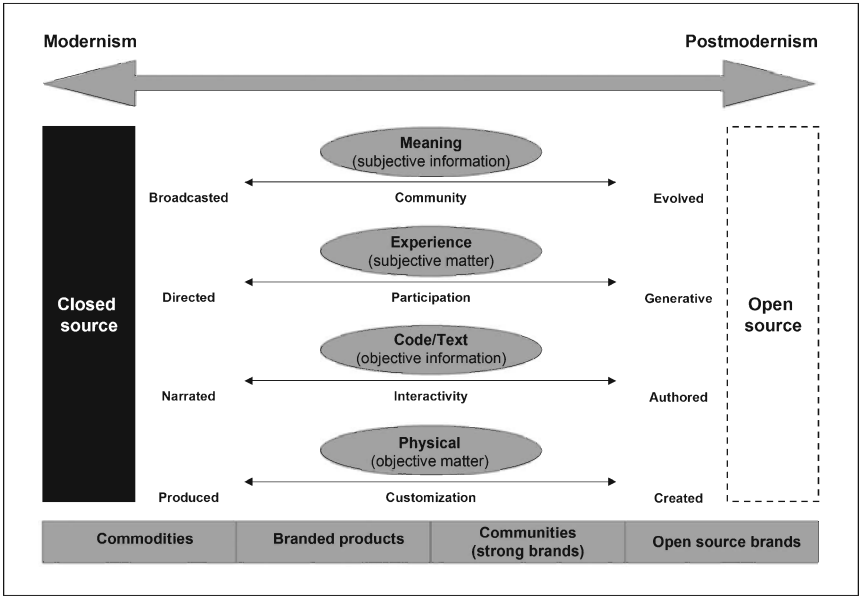

Figure 22 **Values of source types on the spectrum from closed to open source**
Source: Own illustration based on PITT et al. (2006), p. 118; PITT et al. (2007), p. 326; CHAKRABARTI et al. (2007), pp. 950 et seq.

To understand the emergence of OS brands the scholars proposed three theoretical frameworks: transaction cost economics, agapic giving, and symbolic capital.[295] Considering the shift in product development and distribution from hierarchy to the marketplace they argued that the **transaction costs**[296] of OS brands were notably lower than of traditional brands. OS brands needed fewer infrastructures and relied in

[295] See also in the following CHAKRABARTI/BERTHON/WATSON et al. (2007), pp. 951 et seq.; PITT/WATSON/BERTHON et al. (2006), pp. 124 et seq.
[296] The transaction costs model refers to how organisations set organisational bounderies to maximize the efficiency of economic exchange. Transaction costs include costs of coordination, quality assurance, marketing and communication (see CHAKRABARTI/BERTHON/WATSON et al. (2007), p. 951).

terms of communication rather on word of mouth than on formalised advertising tools. The **agapic giving** concept suggested that an OS brand community member contributed and shared knowledge without anticipating something in return.[297] This unselfish, altruistic behaviour is seen as key driver of the OS phenomenon and contrasted to the exchange-based relationships which were typically associated with conventional branding. Thus, OS branding had to be seen rather in the context of a gift economy[298] and **symbolic capital**[299] which valued relationships more than monetary benefits: The more creativity, innovation and development services were given away as gift, the more prestige, status, and reputation were achieved as capital in the marketplace. Hence, the quality of relationship in an OS community depended on the contribution to the community.

To sum up, BERTHON/PITT/WATSON et al.'s research on the OS brand can be considered as important step into an emerging research direction relevant to UGB. On the one hand, they explored the OS phenomenon as one of the first in branding and provided valuable insights into the nature of OS brands and the drivers for their emergence. On the other hand, they presented a distorted picture of traditional brands positioning them as other extreme of the spectrum. As discussed above, there is disagreement in particular with descriptions suggesting that traditional brands tended to be objective, exclusive and seller dominant. Besides, a lack of distinction between brand identity and brand image when exploring the patterns and benefits of OS brands versus traditional brands has been observed.

Nevertheless, BERTHON/PITT/WATSON et al. provided thought-provoking impulses for the understanding of brand related UGC and UGB applications. First, the scholar's differentiation of OS types (meaning, experience, code/text, and physical) with regard to the evolution from the closed to the open dimension is considered essential. In particular, the described mid stages (communities, participation, interactivity, and customization) may be indicators for possible UGB approaches of how to set up an environment for positive consumer feedback and stimulate positive brand related UGC. Second, the proposed theoretical frameworks of agapic giving, gift economy and symbolic capital to explain the motivations of the OS community may also serve

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[297] According to BELK/COON agapic giving is based on the agapic love paradigm in contrast to the exchange paradigm and emphasized idealization of the recipient, the irrelevance of cost, and the giver's passion, altruism, and submissiveness (see BELK/COON (1993), p. 409); for agapic giving in the context of donations also see PITT/KEATING/BRUWER et al. (2001).

[298] A gift economy refers to the exchange of products and services with no reciprocal obligations such as monetary benefits (see CHAKRABARTI/BERTHON/WATSON et al. (2007), p. 952).

[299] BOURDIEU defined symbolic capital as any form of capital "...when it is perceived by social agents endowed with categories of perception, which cause them to know it and to recognize it, to give it value" (see BOURDIEU (1998), p. 47). A typical form was the concept of honor.

as explanatory theories for understanding the motivation of brand related UGC creators, especially with regard to brand fan contributions. Third, the scholars discuss OS brands in the context of the new media age which is also essential to the UGB understanding. However, they do not differentiate between the internet and other multimedia devices.

Overall, it is to be noted that the OS concept by BERTHON/PITT/WATSON et al. does not represent a UGB model in the narrower sense. Their study focus is on pure OS brands such as Wikipedia and Linux, while this thesis focuses on brand-related UGC regarding company-owned brands. Besides, the scholars refer mainly to the genesis of (OS) brands but not specifically to (OS) branding. That is, Wikipedia and Linux allow user input as regards their core service (article entries and software development respectively). However, in contrast to the introduced Newton community where members took over the whole branding process in the absence of a marketer, Wikipedia and Linux do not wholly entrust the brand communication to the safekeeping of the prosumer community. Wikipedia has a paid head of communications[300] and Linux a chief editor[301]. Hence, given this – even though small – organisational overhead also OS brands may face brand related UGC undertaken by non-marketers outside their branding routines. Although the brand offering is created by a prosumer community there is still a market response to this offering – the brand image.

1.7 Discussion and summary of the literature review

In order to specify the new concept of UGB, a comprehensive literature review of user-centred research fields was conducted. Scanned concepts focused on users who create and innovate (innovation research), collaborate (collective intelligence research), spread the word (word of mouth research), join networks (community research) and create content (UGC research), notably in the branding context (UGB related research). Although none of the sources provided a comprehensive and explicit UGB approach, UGB relevant principles and thoughts may be derived from all research areas.

The UGB principle of **mutual value creation and collaboration** between brand and consumers can be traced back to innovation research and the theory of prosumption. Key learning is that a certain 'do it yourself' ambition is inherent to consumer behaviour, striving for self-actualization, personal satisfaction and better quality. Lead user

[300] The position refers to the superordinate Wikimedia Foundation which employs paid staff but also project volunteers including the Board of Trustees (see WIKIMEDIA (2008)

[301] The position refers to the official website Linux.com (see LINUX (2008).

research showed that end users are able to improve products and generate new offerings. As evidenced by the open source movement, users might be even the sole authors of advanced products, services and ideas. Thus, innovation research provides evidence of the high creative potential of consumers. It also points out how branded companies can make use of consumer creativity by setting up an identification process and toolkit approach. The collaboration idea is backed by collective intelligence research, highlighting the predictive power of the 'wisdom of crowds'. The wikinomics approach, in particular, stresses the benefits of mass collaboration in terms of open innovation platforms and virtual talent pools outside and inside company walls. All in all, innovation and collective intelligence research establish a basis for the key UGB idea of making consumers co-creators to harness collective capability.

Word of mouth (WOM) research spotlights the **peer-to-peer dissemination** of brand related UGC as subject of UGB. The findings explain why people start talking about brands and why others listen to it. WOM drivers such as category involvement, opinion leadership and brand satisfaction seem to be transferable to the UGB context. Since UGB is embedded into the new media environment, it may benefit from the power of online WOM, reaching viral spread due to highly influential nodes. Key takeaway from WOM research is the idea that the natural WOM potential of a brand can be stimulated and amplified by branded companies. This distinction between organic and amplified word of mouth shall be adopted within the context of UGB.

Brand community research highlights UGB relevant **consumer-brand relationships**. Again, the distinction between organic brand communities emerging on consumers' initiative and inorganic communities prompted by the marketer is regarded critical for the specification of UGB. Moreover, it is explored why and to what extent consumers identify with a brand. Factors such as a brand's underdog status, transformative experiences, metaphors and symbols may also drive brand related UGC creation. Some users are likely to take on a producer role and live the brand rituals, while others are assumed to feel satisfied by spreading a corporate message, using corporate platforms as 'shorthand'. Learning from online brand community research also includes approaches how to leverage social networks for market research, customer acquisition and retention.

From UGC research, key motivational drivers of **content creation** can be derived. The findings imply that users are driven by intrinsic motivations such as enjoyment, information dissemination, desire for contact and personal documentation. In particular, fan fiction and user generated advertising (UGA) understood as subordinate UGB concepts serve as a showcase in terms of creator motivation. Both fields show how users might appropriate and 'hack' the official brand message, playing with text and

subtext. Key take-away from UGA, again, is the distinction between non-sponsored UGA occurring unprompted and sponsored UGA encouraged by the branded company. An increasing professionalization among creators and openness toward UGC among companies can be observed in the field of citizen journalism understood as coordinate concept to UGB.

Finally, **content creation in branding** is addressed by recent concepts such as 'vigilante marketing' (MUNIZ/SCHAU), 'eTribalized branding' (KOZINETS) and 'open source brands' (BERTHON/PITT/WATSON). These approaches are of high relevance for a UGB specification, although none of them covers the whole picture: MUNIZ/SCHAU distinguish between organic and inorganic initiatives, but their definition lacks brand management focus and does not consider anti-brand messages. KOZINETS also separates pro-active consumer feedback and prompted consumer input in a new media environment and even includes negative consumer feedback. However, he rather explains by example than by sound derivations and theoretical reference. In contrast, BERTHON/PITT/WATSON provide theoretical considerations regarding a brand's evolution from the closed to the open dimension, suggesting clues for stimulating brand related UGC. While they give thought-provoking impulses regarding open source types and motivations, they present a distorted picture of traditional brands. Moreover, they focus on non-proprietary brands instead of company owned brands.

All in all, the literature review implies that UGB principles can be traced back to a variety of user-centred concepts. A holistic UGB definition, in contrast, has not been elaborated so far. Classification from word of mouth, community and UGC research, however, suggest to separate unprompted brand related UGC from stimulated brand related UGC within corporate campaigns.

2 UGB definition and differentiation from related concepts

Based on the learning from the literature review presented in the chapter above, the preliminary UGB definition shall be specified in the following. In response to the first research problem, a brief differentiation of UGB from neighbouring terms and a detailed UGB definition are provided.

2.1 Differentiation of UGB from neighbouring terms

In terms of differentiating between UGB and neighbouring fields the following differences and interdependencies are regarded crucial:

- First, UGB does **not equal mass customization**. While mass customization refers to a co-design process which allows consumers to adapt and personalize certain product or service features within a fixed solution space UGB goes beyond this toolkit approach, dealing with creative brand related content generated by users.
- Second, UGB does **not equal online word of mouth (WOM)**. Basically, WOM represents a channel; UGB, in contrast, refers to content. However, online WOM and brand related UGC as subject of UGB are interdependent in the way that UGC requires online WOM to get awareness and influence and online WOM requires UGC as object of dissemination.
- Third, UGB does **not equal online brand communities**. Again, UGB refers to content while online brand communities represent groups of people with a common interest. However, within such a network brand related UGC may be generated and shared by members. Hence, online brand communities are considered a reference point for UGB.
- Fourth, UGB does **not equal open source (OS) brands**. While OS brands (e.g. Linux, Wikipedia) refer to brands with users as sole authors of the offering UGB corresponds to company-owned brands. However, by making use of the principles of community, participation, interaction and customization, UGB adopts patterns of a rather open system.
- Fifth, UGB does **not equal eBranding**. eBranding focuses on the question how to present and profile a brand in the channel internet from a corporate perspective. UGB, however, refers to a grassroots movement in internet usage beyond conventional internet brand management behaviour.
- Sixth, brand related UGC creators do **not equal lead users**. With regard to the lead users' characteristics of dealing with novel products, facing needs that be-

come general and solving a specific problem for own use not every UGC creator may be regarded a lead user. However, in a broader sense, UGC creators can be understood as creative consumers.

2.2 Elaboration of detailed UGB definition

Based on the notion of content and the identity-based brand management approach, UGB was defined at the beginning of this thesis as *"...the strategic and operative management of brand related user generated content (UGC) to achieve brand goals."* Brand related UGC as the subject of UGB was defined as *"...the representation of the voluntary creation and public distribution of personal brand meaning undertaken by non-marketers outside the branding routines and enabled by multimedia technology."*

Overall, the literature review has backed this definition. However, the findings suggest a **distinction** between the natural, non-sponsored incident of brand related UGC and an amplified version which is stimulated by brand management. A comparable separation has been observed in user generated advertising (UGA) contrasting sponsored and non-sponsored UGA, in word of mouth research (WOM) distinguishing between organic and amplified WOM and in brand community research separating organic versus inorganic brand communities. Besides, KOZINETS differs between pummels und pings as forms of consumer brand activism and spawns and spreads as prompted UGC in the broader sense. Therefore, the preliminary UGB definition is further specified in the following by distinguishing between non-sponsored and sponsored UGB.

2.2.1 Non-sponsored UGB

Non-sponsored UGB is understood as the management of naturally occurring unprompted brand related UGC, in short **natural brand related UGC**. As observed with organic WOM, organic brand communities, non-sponsored UGA and KOZINETS' consumer brand activism, this grassroots form of brand related UGC happens without the sponsorship or interference of the marketer. Users pro-actively create personal brand meanings and ad resembling artefacts which the marketer did not ask for. Natural brand related UGC is considered an 'off-brand' process characterized by a reversed flow of ideas where users create without the consent or even knowledge of the brand-owning company. Natural UGC creators are considered self-appointed brand activists driven by an emotional relationship towards the brand. They are assumed to be motivated intrinsically enjoying the act of creating and self-expression

and not expecting any remuneration beyond symbolic capital such as peer recognition.[302]

In the understanding of this thesis, natural brand related UGC creators do not only represent brand fans or advocates but also brand critics or opponents. This understanding of natural UGC extends the vigilante marketing idea by MUNIZ/SCHAU to anti-brand content. While MUNIZ/SCHAU merely refer to brand loyalists acting on behalf of the brand, this thesis explicitly includes negative brand feedback. This differentiation acts on REICHHELD's separation of promoters and detractors[303] and is shared with KOZINETS. Taking into account **pro-brand and anti-brand** motivations natural brand related UGC creators are called in the following '**brangilants**'.

Examples for pro-brand natural brand related UGC include the brand building efforts of evangelist grassroots communities such as the Newton community (see Table 3 above), the Harley-Davidson community in its beginnings (Table 1 above), and the Nogger brand fans group (see Appendix XIII). Brangilants may also be individual brand fans such as the creator of the Apple iPod spot (see Appendix XII). Examples for anti-brand natural brand related UGC comprise parodies and alienations of brand logos, claims and advertisements – so-called spoof ads[304] – as well as anti-brand web sites[305] and video games.[306]

Brangilants are assumed to openly define brand meaning disrespecting the marketer's authority. In its extreme value, natural brand related UGC might represent the principles of subjectivity, inclusivity, radicality and rebellion inherent to BERTHON/PITT/WATSON et al.'s open source brands. Given the mentioned intrinsic motivation and the underlying 'off-brand' creation process, the launch of natural brand related UGC is considered out of marketer's control. Hence, non-sponsored UGB rather refers to **monitoring** natural brand related UGC and incorporating the won in-

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[302] For the Apple iPod fan and commercial user-creator Masters the free act of creating was the main UGC motivation: "I love motion graphics. I like creating visuals...That's the fun of being one guy. You're not limited by a style guide or a creative director. You can branch out and think different." (KAHNEY (2004)).

[303]. Promoters are customers with the highest rates of repurchase and referral. Detractors, in contrast, are unsatisfied consumers likely to spread negative WOM (see REICHHELD (2003).

[304] For examples of spoof ads in print advertisement see ADBUSTERS (2008). Brands which have faced spoof ads include the coffee house brand Starbucks, the fast food food brand McDonald's, the tabacco brand Malboro, and the liquor brand Absolute Vodka.

[305] Brands which have faced anti-brand web sites include the IT brand Dell (URL: http://www.ihatedell.net), the software brand Microsoft (URL: http://www.ihatemicrosoft.com), the coffee house brand Starbucks (URL: www.ihatestarbucks.com) and the video rental brand Blockbuster (http://www.ihateblockbuster.com) (see GARFIELD (2005a).

[306] For instance, an online video game spoof attacked the fast food restaurant brand McDonald's (see UNKNOWN (2006f).

sights into the brand management process. That may even include integrating the work of brangilants after 'market entry' into the corporate brand communication strategy.[307]

Summing up, non-sponsored UGB aims predominantly at **applied market research** in the sense of monitoring natural brand related UGC (see Figure 23) and implementing the won insights. It thereby addresses mostly external target groups.

2.2.2 Sponsored UGB

Sponsored UGB, on the contrary, is understood as the management of prompted or **stimulated brand related UGC**. As observed with amplified WOM, sponsored UGA, inorganic brand communities and KOZINETS prompted consumer input, the brand manager intentionally asks for consumer contribution through contests, voting, selected fan contributions or other forms of campaigns. In case the outcome is used for corporate purposes, sponsored UGB corresponds to the crowd sourcing idea in user innovation research. Thus, users do not create brand related UGC pro-actively but prompted and incentivised. Beside the joy of creating artefacts and expressing themselves, it is assumed that stimulated brand related UGC creators also long for fame and acknowledgement both by peers and the marketer – they want to be noticed or even hired.[308] Given the campaign format, the motivation of participating users can be rather opportunistic. Therefore, it is proposed to call them '**branticipants**' (deriving from the formula brand + participant = branticipant) – in contrast to brangilants.

Unlike natural brand related UGC, stimulated brand related UGC can be canalized within the scope of campaign instructions. Therefore, sponsored UGB is assumed to have a hybrid nature: On the one hand, since the brand manager may set the campaign rules sponsored UGB corresponds to a certain degree to the traditional one-way flow of ideas. On the other hand, since consumers are invited to express themselves the brand message of the submissions cannot be controlled. Given the 'contest' character of campaigns and assuming the branticipant's ambition to receive social recognition, the brand feedback is overall expected to be rather positive. Examples for successful sponsored UGB campaigns include the UGA contest of Doritos (see Table 2 above) and the inorganic brand community efforts of Jones (see Table 4

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[307] For example, the food company Mentos made use of the user generated Diet Coke/Mentos 'geyser experiment' by sponsoring follow-up geyser contents as part of its communication strategy (see MELILLO/VOIGHT (2007)).

[308] JAFFE argued that consumers created media motivated by the chance to get their "*15 posts or 15 streams of fame*" (JAFFE (2006). A critical number of user-creators were ambitious students or advertising creatives looking for a job.

above). However, as shown by the high number of critical entries at the Chevy Tahoe UGA contest, anti-brand content cannot be prevented.[309]

In summary, sponsored UGB aims at **crowd sourcing** in the sense of stimulating brand related UGC within the context of commercialisation, targeting both actual and potential customers. Since it fosters customer interaction, it may be also used as an instrument for **customer retention** and stakeholder loyalty. Like non-sponsored UGB, it may also aim at market research and can be amplified to both external and internal target groups. Figure 23 summarizes the two types of UGB contrasting their subjects – natural versus stimulated brand related UGC – and primary goals.

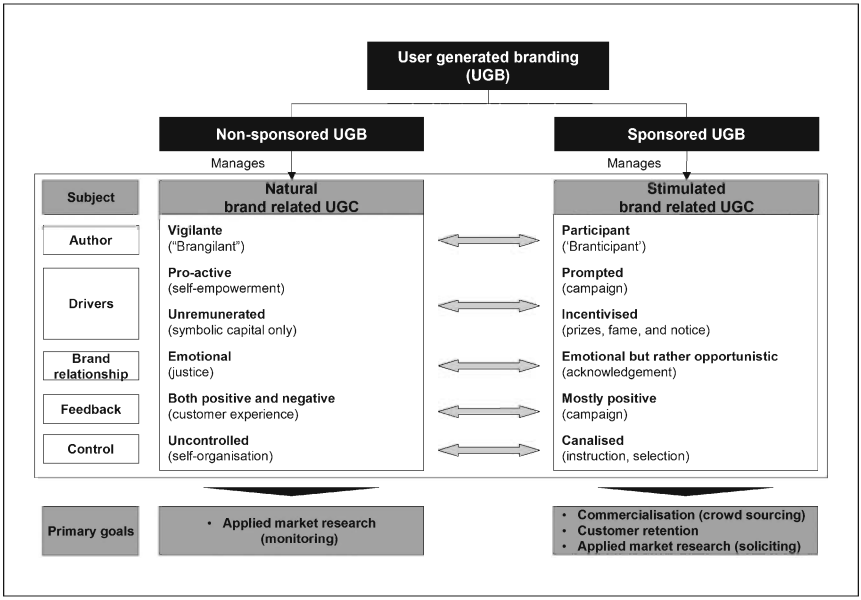

Figure 23 Differentiation of non-sponsored and sponsored UGB
Source: Own illustration.

[309] See Weiß (2007), pp. 25 et seq.

3 Application of UGB

UGB may be applied for different purposes **along the value chain**: It may leverage brand related UGC within the phase of research and development (R&D), marketing, sales and customer service.[310] In the R&D phase, two tactics could be applied in order to gain market intelligence and generate ideas: First, natural brand related UGC might be monitored on third party social media platforms as part of a non-sponsored UGB strategy. Second, brand related UGC might be stimulated on sponsored idea portals to develop the offering and test product or service concepts within a sponsored UGB strategy. Beside market research, sponsored UGB may also aim at commercialisation in the marketing communication and sales phase as well as customer retention with regard to service and loyalty. On the one hand, brand related UGC may be leveraged by so-called crowd sourcing delegating marketing decisions such as brand communications to consumers. On the other hand, it could be evoked by means of social media participation using interactive platforms for promotion, after-sales service and community building. The mentioned tactics may thereby apply to both external and internal target groups.

Since brand related UGC is regarded as the consumer's answer to brand management, UGB may also be understood as a tool for brand performance measuring within the controlling phase. It can be considered at the same time as the completion of the management process and starting point of a situation analysis within the research and development phase of a new process cycle. Figure 24 provides an overview of the potential UGB applications along the value chain.[311] The key concepts are described in the following sub chapters.

[310] See also in the following BARTON/VIDAL/VENTURI et al. (2008), p. 42.
[311] Given the branding focus of this study, not all parts of the classical value chain are considered.

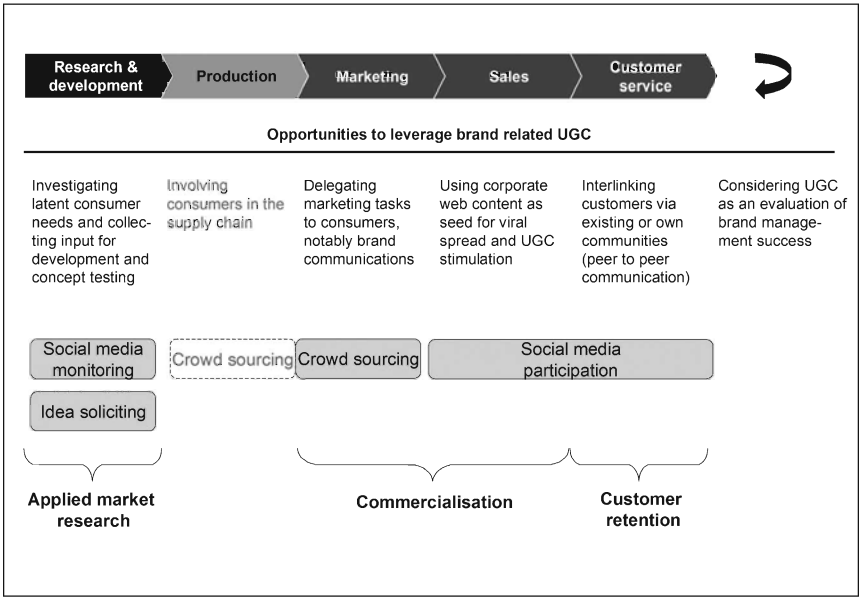

Figure 24 UGB applications along value chain
Source: Own illustration based on BARTON et al. (2008), pp. 42 et seqq.

3.1 UGB for the purpose of applied market research

In order to gain marketing intelligence via brand related UGC, brand managers can engage in social media monitoring as data gathering method. This refers first and foremost to third party platforms allowing companies to explore natural brand related UGC. However, feedback and ideas may also be solicited by using own internal and external platforms. Monitoring brand related UGC enables branded companies to see their organisation from the viewpoint of their target groups considering their likes, dislikes, interests and concerns.[312] Once relevant brand related UGC has been detected the branded company can conduct a range of actions depending on its attitude toward notably brangilants and the nature of their work.

[312] See SINGH/VERON-JACKSON/CULLINANE (2008), p. 286

3.1.1 *Social media monitoring*

Social media monitoring – also known as web content mining[313] or opinion mining[314] – is an observation method to generate understanding of what consumers and in particular opinion leaders feel and communicate about companies, products, brands, campaigns and individuals in the internet.[315] Observation platforms include social media such as blogs, forums, newsgroups, discussion boards and other Web 2.0 distribution platforms (see Appendix I). The objective of this research method is to recognize opinion shifts and trends in consumer behaviour at an early stage. Monitoring brand related UGC can be understood as a **brand focused form of social media monitoring**.

Brand related UGC may be monitored manually for small text volume or automatically on a large scale based on modular software systems applying tools from computer linguistics, market research and data mining.[316] With respect to machined analysis of large text volume, the focus of monitoring studies may be qualitative and quantitative, explanatory and descriptive.[317] According to GFK a main advantage of this empiric research method is the non-reactive measuring being free of interviewer influence.[318] Thus, authentic expressions of opinion leaders regarding a wide range of topics could be explored and identified before mass media coverage started. SINGH, VERON-JACKSON et al. argue that in comparison to traditional focus groups blog monitoring in particular is less time-consuming and could be considered as "*never-ending focus group*"[319] due to its fluid and flexible nature. However, the significance of the empiric data is regarded limited due to the non-representativeness of the sample regarding the target group and mostly incomplete socio-demographic and psychographic descriptions of UGC creators.[320] The anonymity of feedback makes it difficult to evaluate the context and understand the true root of the problem.[321] Hence, the results need to be validated by classic market research.

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[313] The term web content mining is used amongst others by the German market research institute GfK (see JARCHOW (2008), p. 12).
[314] See BARTON/VIDAL/VENTURI et al. (2008), pp. 44 et seqq.
[315] See also in the following JARCHOW (2008), p. 12; BARTON/VIDAL/VENTURI et al. (2008), p. 45.
[316] See JARCHOW (2008), pp. 15 et seq. For instance, within the scope of a GFK web content mining project 1000 user entries on three blogs and online forums were scanned for comments on four brands to find out their strengths and weaknesses. The study dealt with weight reduction focusing on the brands Weight Watchers, Herbalife, Nutrivar N and Reductil (see JARCHOW (2008), pp. 19 et seqq.).
[317] See JARCHOW (2008), p. 15.
[318] See also in the following ibid., pp. 14; 25.
[319] SINGH/VERON-JACKSON/CULLINANE (2008), p. 291.
[320] See JARCHOW (2008), pp. 14; 25.
[321] See SINGH/VERON-JACKSON/CULLINANE (2008), p. 289.

Within the identity-based brand management approach monitoring brand related UGC can be considered a tool to explore the **fit between brand identity and brand image**. It may complement the so-called GAP analysis contrasting the results of customer and brand manager interviews.[322] While GAP analyses may show contrasting values which interviewed consumers versus brand managers allocate to a brand[323] brand related UGC monitoring may reveal consumer brand perceptions beyond predefined categories. Thereby not only brand related UGC works (e.g. single blog comments, videos, etc.) may be identified but also their usage numbers and audience statistics (e.g. age, gender, geographic location, web page visit history).[324] Thus, advertising professionals may use the data to learn about their audience and tailor upload strategies and improve their popularity.

3.1.2 Idea soliciting

Although observing natural brand related UGC on non-corporate sponsored platforms (e.g. third party blogs, social networking, review, rating and video sharing sites) is regarded a valuable method to identify customer needs and create ideas, marketing insights may be also gained by stimulating brand related UGC on corporate sponsored platforms.[325] Such platforms include user generated blogs on company web sites for internal and external target groups as well as corporate sponsored online communities.

The branded company thereby establishes the platform and provides guidelines and if necessary incentives for contribution. However, as much as for third party social media monitoring the objective of idea soliciting should be gaining unfiltered user feedback. According to SINGH/VERON-JACKSON/CULLINANE the information users provide on corporate-sponsored platforms can be considered uncensored and candid since blogs were anonymous and the single postings appeared widely unprompted.[326] Another option to stimulate brand related UGC for the purpose of mar-

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[322] See BURMANN/MEFFERT (2005b), pp. 81 et seq. GAP analysis has been used primarily in brand controlling but provides insights for the situation analysis, too.

[323] For an example of a situation analysis see ibid., p. 82.

[324] For instance, the video sharing site YouTube is able to provide marketing data of audience members who watch a video to the account holder who uploaded the video to the site (see YOUTUBE (2008); BEAUBIEN (2008).

[325] See also in the following BARTON/VIDAL/VENTURI et al. (2008), pp. 49 et seq.

[326] See SINGH/VERON-JACKSON/CULLINANE (2008), p. 288. For instance, the moped manufacturer Vespa offers forums on the so-called Vespa World Club community web site inviting users to freely share their opinion about the brand and related travel experiences and post their activities (see VESPA (2008)).

ket research are sponsored windows on third party sites (e.g. internet radio shows).[327]

3.1.3 Implications from social media monitoring and idea soliciting

With regard to the identity-based brand management process, monitoring or soliciting brand related UGC for the purpose of idea generation corresponds to the situation analysis within the **strategic sub process**. Translating the won insights into action – i.e. applied market research – may result in adjustments of brand positioning and operative brand management instruments. According to the nature of brand related UGC, the grassroots suggestions may be translated into the four instruments of the marketing mix (Figure 25).

According to JARCHOW detected user criticism notably refers to **brand performance** (product politics).[328] Product or service related customer complaints expressed by brand related UGC might be applied to eliminate weaknesses of the offering.[329] Monitoring social media may also enable companies to separate fads from lasting trends. Provided that the monitored brand related UGC indicates unaccomplished customer desires, it represents a promising pool for product innovation. A prime example for predicting market trends by social media monitoring is the introduction of the '100 Calorie Packs' by Kraft foods after the company had learned from monitoring online communities that consumers were more interested in portion control than diet foods (see Appendix XVII).[330] Furthermore, user generated comparisons with competitors as observed on review and ranking web sites might give insights regarding the offering's competitive advantage or disadvantage.

With regard to **brand pricing**, brand related UGC may also disclose price related customer criticism.[331] In particular, Social Shopping sites may reveal the price tolerance of target groups toward a brand since users engage in a price discussion in the run-up to purchases.[332] Similar to brand pricing brand managers may gain insights

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[327] See SINGH/VERON-JACKSON/CULLINANE (2008), p. 287.
[328] See also in the following JARCHOW (2008), p. 13.
[329] For instance, the learning for the wellness brand Weight Watchers from a web content mining study conducted by GfK was that participants were unsatisfied with the offered group meetings and desired a better explanation of the score card used to evaluate the nutritive value of food (see ibid.).
[330] Similarily, the food producer ConAgra succeeded in anticipating changes in eating habits by monitoring blog comments which foreshadowed the 'low carb' craze (see LEVINGSTON (2006)).
[331] For instance, within the mentioned GFK web content mining project the brand managers of the dietary supplement Herbalife and the fat burner Nutrivar learned that their target group considered their brands as too expensive (see JARCHOW (2008), p. 22 et seq.).
[332] See MÖHLENBRUCH/DÖLLING/RITSCHEL (2007), p. 209.

about **brand distribution** from channel related customer comments.[333] Monitoring brand related UGC is of special relevance for **brand communication**. On the one hand, blog comments, spoof ads or other parodies and alienations of logos, claims and advertising campaigns may provide insights for campaign optimization.[334] On the other hand, social media monitoring may serve as an early warning system in case rumours about a branded company or its executives were spread. The gained insights might be essential for crisis communication and reaction strategy building.[335]

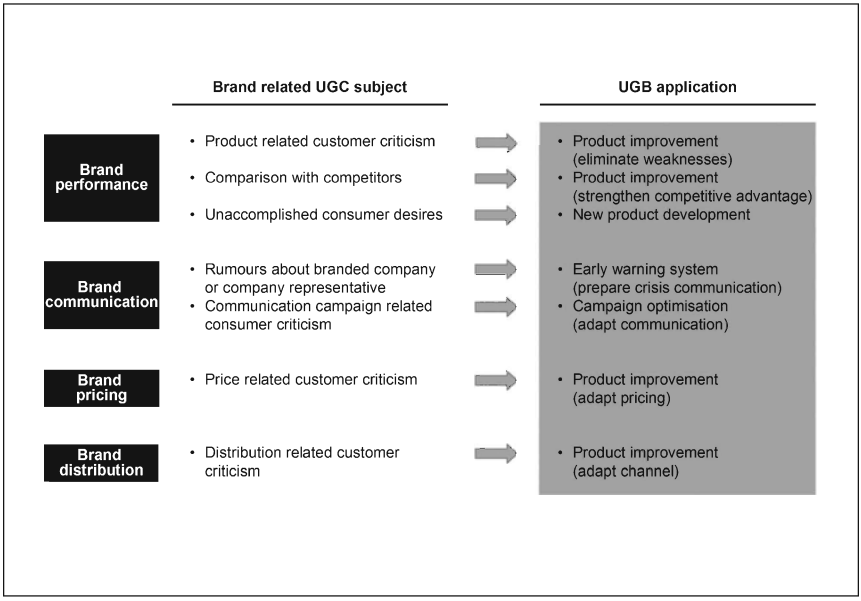

Figure 25 Translation of social media monitoring insights into marketing action
Source: Own illustration based on JARCHOW (2008), p. 13.

[333] For instance, the GFK study revealed that customers of the brand Herbalife perceived the sales system and consultancy competences inadequate (see JARCHOW (2008), p. 22).

[334] For instance, the merchandising team of the soccer world championships 2006 could have learned from 10,000 of blogger entries that the fact that the mascot Goleo was not wearing pants was perceived inappropriate and a reason to restrain from purchasing the souvenir (see Google search for 'Goleo' AND 'pants' (URL: www.google.com, accessed 4 September 2008).

[335] For instance, the rumours about Kryptonite's deficient bike lock were spread in social media days before the mass media picked the story up informing a greater public and putting pressure on Kryptonite's management (see KNAPPE/KRACKLAUER (2007), pp. 83 et seq. and Appendix IX).

MÖHLENBRUCH/DÖLLING/RITSCHEL argued that notably monitoring and learning from social shopping sites[336] might improve customer confidence and acceptance of the brand.[337] In this sense, brand related UGC monitoring might be regarded not only as a marketing research tool but also – in a broader sense – as a UGB strategy for increasing brand loyalty.

3.2 UGB for the purpose of commercialisation and customer retention

Beside applied market research, UGB may also serve the purpose of commercialisation and customer retention. On the one hand, brand related UGC may be stimulated within a sponsored UGB campaign via crowd sourcing to market the offering. On the other hand, it may also be prompted by a company's active social media participation leveraging existing online platforms and creating own communities for promotional, service and loyalty reasons.

3.2.1 Crowd sourcing

Crowd sourcing – also known as crowd casting – refers to the act of taking a job traditionally performed by a designated agent and outsourcing it to a large group in the form of an open call.[338] In a broad sense, this call may refer to a variety of services, e.g. gathering of product ideas, design solutions and application support. Within the context of UGB, brand communication related tasks are of relevance. Crowd sourcing thereby corresponds to sponsored UGB, assuming that brand knowledge generation and the development of applications may be handed over to branticipants. A prime example for crowd sourcing is a **sponsored UGA campaign**.

Based on the literature review, a SWOT analysis[339] for sponsored UGA is conducted (see Figure 26). Strengths include the gathering of creative ideas from external talent – an innovative and low cost advertising production option.[340] The authenticity of advertising related UGC was found to generate a high acceptance of the advertising

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[336] For a definition of Social Shopping see WEIß (2007), p. 35.
[337] See also in the following MÖHLENBRUCH/DÖLLING/RITSCHEL (2007), p. 209.
[338] See KNAPPE/KRACKLAUER (2007), pp. 23 et seq.; BRANDEL (2008). Some authors differ between crowd casting as open idea generation in the broader sense and crowd sourcing as open idea selection in the narrower sense (see BARTON/VIDAL/VENTURI et al. (2008), p. 47). However, we do not make this distinction and define crowd sourcing in the broader sense as outsourcing of a task to users.
[339] A SWOT analysis explores strengths, weaknesses, opportunities and threats of a given issue and may be applied in strategic brand management to picture the risks and potentials of a brand (see MEFFERT/BURMANN/KIRCHGEORG (2008), pp. 236 et seq.).
[340] See also in the following WEIß (2007), pp. 29 et seq.

messages within the target group.[341] Besides, UGA offers opportunity space for brand fans and interested consumers to identify with and 'live' the brand and also stimulates brand community building. This high customer interactivity is considered a driver of brand loyalty and customer retention. Furthermore, UGA campaigns may increase brand awareness by leveraging word of mouth deriving from participants and media coverage. The campaign reach may be explored by the number of page visits, downloads of guidelines, 'tell a friend' recommendations and hyperlinks to the campaign site in the blogosphere; the target group fit may be measured by customer data gathering through registration processes and submissions.[342] UGA may also be used to counter potential threats. The unconventional set-up in the new media environment may tap new customer groups such as the 'digital natives' which are difficult to target by traditional tools. The user contributions to UGA campaigns thereby provide customer feedback to act on.

On the weakness side of UGA campaigns, the partial handover of power from advertisers to users and thus loss of control is often cited.[343] This handover involves the risk of making brand deficits public[344] since UGA may be abused by brand opponents. Through the inflation of stimulated advertising related UGC quality may fluctuate and the consistency of the brand message is put in jeopardy. The corporate usage of advertising related UGC also involves legal challenges with regard to rights of use, patent and property rights. In particular claims on audio and video footage integrated by users in their works as well as offensive or illegal content may cause problems.[345] Overall, sponsored UGA campaigns require high coordination efforts in terms of establishing and maintaining UGA platforms and promote the campaign. However, given the dependency on user contributions the success of an UGA campaign is difficult to predict.[346]

[341] See TOMCZAK/SCHÖGEL/SULSER (2006), p. 76.
[342] For an overview of measuring aspects see WEIß (2007), p. 33.
[343] See also in the following ibid., pp. 29 et seq.
[344] See WUNSCH-VINCENT/VICKERY (2007), pp. 34 et seq.
[345] See ibid., pp. 43 et seqq.
[346] See WEIß (2007), p. 30.

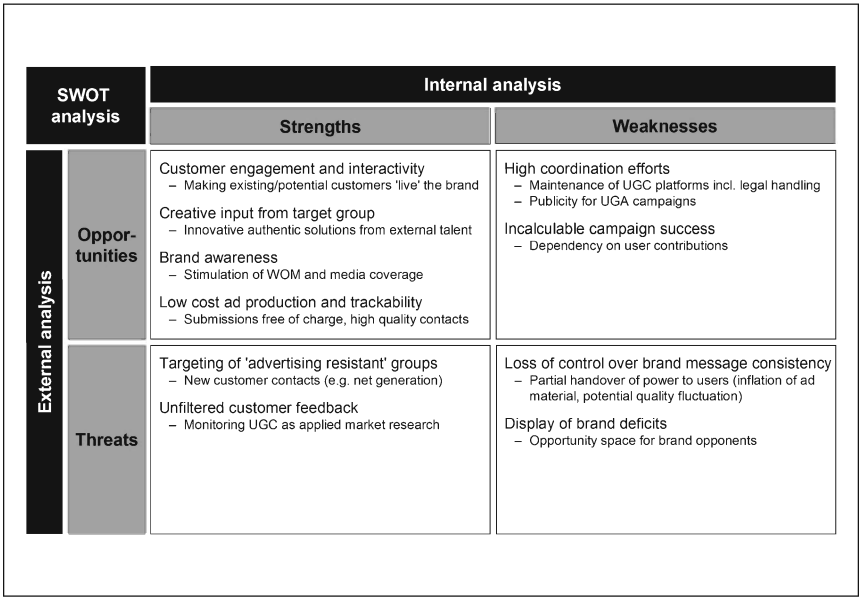

Figure 26 SWOT analysis for sponsored user generated advertising
Source: Own illustration based on WEIß (2007), pp. 29 et seq.

Sponsored UGA tactics to face the risks and ensure that authentic, legally inoffensive advertising related UGC is selected include mediation procedures before, during and after the UGC publication process.[347] So a certain degree of control might be maintained by setting participation guidelines, arranging a pre-selection of officially published UGC by a jury and involving public voting on the ranking of submissions trusting on collective intelligence and reputation mechanisms.[348] Successful UGA campaigns appeared to give users as much room as possible for creativity and interaction allowing building a community around the campaign.[349] Incentives to meet a user's intrinsic motivations such as self-expression and social reputation are cited as

[347] See also in the following WUNSCH-VINCENT/VICKERY (2007), pp. 53 et seq.
[348] See also Doritos case study in Table 2.
[349] For examples for success factors see WEIß (2007), pp. 31 et seqq.

further success factor.[350] Professional planning and publicity are also considered a prerequisite of a successful campaign.[351]

A consumer survey conducted by the AMERICAN MARKETING ASSOCIATION (AMA) revealed positive effects of UGA campaigns.[352] According to the study the majority of consumers evaluated companies which used sponsored UGA more positive than companies which used professionally produced advertising with regard to customer-friendliness, creativity and innovativeness. However, the often-targeted young consumers between the ages of 18 and 24 were found to be more sceptical of sponsored UGA campaigns than their older counterparts. According to AMA this scepticism might be rooted in the young generation's desire to distance themselves from company-sponsored messages. Correlations between UGA tactics and specific opportunities and risks have not been empirically validated so far.[353]

In the understanding of this thesis, crowd sourcing within sponsored UGB is not limited to the creation of advertising. As the example of the inorganic Jones Soda community (see Table 4 above) has shown branticipants may be also involved in other **operative brand management decisions** such as promotions (e.g. stickers, web content) and packaging (e.g. labels).[354] A prime example for a business which utilizes the crowd sourcing model is the online T-shirt manufacturer Threadless with runs online contests to solicit designs for T-shirts (see Appendix XVIII). Further examples for brand design competitions include the Becks' label design contest[355] and the Converse MyChucks contest[356]. However, such crowd sourcing activities may be considered UGB only on two conditions: First, the campaign subject needs to meet the content requirement of UGC with regard to the sensory and technical form of representation of implicit information. Second, the campaign has to ask for user creativity. Selecting from pre-defined options is regarded mass customization but not UGB.

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[350] For instance, the 'Chain' campaign by the sports apparel company Nike during the 2006 World Cup stringing together the longest UGC soccer video of the world offered users the benefit to be 'on air' as part of a unique campaign (for 'Nike chain' video see UNKNOWN (2006g)).

[351] See TOMCZAK/SCHÖGEL/SULSER (2006), p. 74

[352] See also in the following AMA (2006). The survey is based on online interviews (N=1,098) among US internet users age 18 and older.

[353] See WEIß (2007), p. 31.

[354] For details on the Jones Soda case see Table 4.

[355] See BECK'S (2008). Designers were called to design Beck's bottle labels and sixpacks wraps for a special 'design edition'. 10 winner labels were selected out of more than 750 submissions.

[356] See CONVERSE (2008). Converse called for submitting own designs of the ChuckTaylor All Star basketball sneakers. The winning entry is to be produced and sold in early 2009.

3.2.2 *Social media participation*

To leverage brand related UGC branded companies may not only make open calls in the form of online contests but also actively engage in social media such as social networking sites, brand communities and virtual worlds for the purpose of promoting their offering, providing customer service and strengthening brand loyalty. In academia, there is consensus that effective customer acquisition and retention management is based on an interactive design of the customer-brand relationship which can be enforced by Web 2.0 applications.[357] Sponsored UGB applications thereby either stimulate brand related UGC in the narrower sense or leverage UGC platforms in the broader sense.

The critical question for brand managers with regard to social media participation is whether to make use of existing online communities or create their own brand community.[358] This strategic decision depends on brand objectives, brand attributes, the market environment as well as the competitive landscape. **Engaging in existing communities** might be advantageous if a rapid reach was desired, the brand lacked appropriate draw power or competitors had already created 'digital walls'. Rapid reach may be achieved by leveraging the **viral distribution power** of existing UGC platforms such as social networking sites, video sharing sites and blogs for the dissemination of corporate brand messages. STANOEVSKA-SLABEVA called such Web 2.0 conform content which was created and distributed online by the branded company 'brand generated content'.[359] As one of the most common forms she classified branded videos designed to go viral.[360] A prime example is the so-called 'Dove evolution' video which was posted by the cosmetics brand Dove on the video sharing site YouTube reaching approx. 8 million downloads by now (see Appendix XIX).[361] However, viral distribution of brand generated content within communities might be only considered an UGB application in a broader sense. It is to be understood as seed which might evoke both viral spread of the corporate brand message and brand related UGC in answer to it. In this sense, it corresponds to KOZINET's spreads[362] which first and foremost represent a dissemination tactic and thus do not meet the general UGC criteria of applied creative effort in content generation on the part of the user.

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[357] See HOMBURG/BRUHN (2005), p. 8; WIRTZ/SCHILKE (2008); for online platforms as customer retention instrument see BAUER/HAMMERSCHMIDT (2004).
[358] See also in the following BERNHARDT/MORIEUX (2008), p. 13.
[359] See STANOEVSKA-SLABEVA (2008), pp. 230 et seq.
[360] See also in the following ibid., p. 230.
[361] Another example is the web thriller 'The Porter' for the launch of the CLS model by Mercedes-Benz (see UNKNOWN (2006h); GÖTTGENS/DÖRRENBÄCHER (2008), pp. 211 et seqq.).
[362] For details about KOZINETS' spreads as tool of eTribalized branding see chapter C 1.6.2.

Hence, the viral spread of branded videos and other corporate brand messages might be rather understood as exploitation of the brand related UGC environment than the management of brand related UGC.

A further tactic to benefit from reach of existing communities is **hosting a sponsored group on a social networking site**.[363] For example, the financial service enterprise JPMorgan Chase started advertising student-targeted credit cards on the social networking site Facebook via a sponsored group called 'Chase +1' (see Appendix XX). Another option is **sponsoring a user generated third-party community**.[364] Taking to a large extent a back seat on the web site, the brand may appear within the context of co-postings, collaboration on blog entries or reader surveys. Compared to the spreads mentioned above, those sponsoring tactics involve a higher level of brand related UGC. However, the level of control over brand related UGC on the part of the branded company tends to be still relatively high.

Branded companies may also create a micro-site within existing **virtual worlds** such as Second Life[365]. This user generated environment has been increasingly utilized by branded companies such as Adidas (see Appendix XXI) to enhance 'real life' product launches.[366] Thus, it can be concluded that branded companies have incorporated UGC based virtual worlds as promotion channel. At the same time, 'launching' a product in a virtual world also serves concept testing.[367]

Micro-sites within existing communities may also refer to corporate entries on **Wikipedia**. STANOEVSKA-SLABEVA stated that branded companies increasingly engaged in articles about their corporate brand and product brands on the online encyclopaedia.[368] However, these tactics touch the borderline to stealth marketing[369] de-

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[363] See also in the following BERNHARDT/BOYLE/CLARK et al. (2008b).

[364] For instance, the pharmaceutical company Pfizer has sponsored third party-blogs in the pharmacy field. Pfizer appears as web site sponsor of The Arthritis Society in Canada (see ARTHRITISSOCIETY (2008).

[365] Second Life is a 3D digital universe where users may enjoy an anonymous virtual life interacting through so-called avatars. More than 15 million registered users may purchase virtual land and products by means of a virtual currency (Linden dollars) corresponding to a daily transaction volume of $US 1.2 million (see SECONDLIFE (2008b); SECONDLIFE (2008c).

[366] Besides, the introduction of the C class of Mercedes-Benz in March 2007 may be cited as example. Two weeks before 'real life' car dealers sold the new model, the 'virtual' branch in Second Life already offered a digital copy of the car to Second Life 'residents' for Linden dollars (see GÖTTGENS/DÖRRENBÄCHER (2008), pp. 211 et seqq.). A further example is Toyota which offered virtual replicas of the model Scion xB to enhance the model's exposure (see SECONDLIFE (2008c).

[367] Starwood hotels, for example, checked their new 'aloft' hotel concept in Second Life and incorporated the user feedback before the actual hotels were built (see BARTON/VIDAL/VENTURI et al. (2008), p. 75).

[368] See STANOEVSKA-SLABEVA (2008), p. 231.

[369] For details about stealth marketing see chapter C 1.3.3; for an overview of stealth marketing types see Appendix VI.

ceiving people about the marketer's involvement in the communication since Wikipedia is commonly considered an independent source created by users. Overall, the boundaries between using corporate brand messages as seed to evoke brand related UGC and faking brand related UGC appear to be blurred. Since it is estimated that conversion rates were typically 20-30% higher when user generated content is involved[370] branded companies may be tempted to post reviews in favour of their brand camouflaged as peer comment.

The viral capacity of existing communities may be also used to stimulate UGC by **offering trial products to online opinion leaders**. For example, the mobile service provider Sprint offered free mobile phones to influential bloggers hoping for positive online word of mouth, but received also negative comments in answer to the so-called 'Ambassador Programme' (see Appendix XXII). This example showed that stimulated UGC – despite attempts to manipulate branticipants – cannot be kept under control. According to GÖRING/HAPP/MÜLLER such tactics come along with loss of authenticity and thus breach of confidence implicating a high risk of reversal of positive effects for the brand.[371]

Next to leveraging an existing community branded companies may also participate in social media by creating an **own community**. This option seems appropriate in case the brand's image was strong enough to cultivate long-term relationships and the online consumer needs were unaccomplished. On the one hand, branded companies may create own target group specific communities as a **tool of word of mouth** marketing.[372]Such communities usually do not bear the proper name of the corporate brand although its goods are offered as trial products and discussed in the community. A prime example is the online community 'Vocalpoint' by the consumer goods enterprise Procter & Gamble (P&G) created in 2006 to stimulate peer to peer communication about product launches among mothers (see Appendix XXIII).[373] The objective is to target opinion leaders who then spread the word on products to friends and family members.[374] Thus, the level of brand related UGC in the narrower sense is limited to text postings on the community's online message board.

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[370] See BARTON/VIDAL/VENTURI et al. (2008), p. 66.

[371] Instead of shooting messages to opinion leaders, it is regarded more effective for marketers to engage in conversations with bloggers employing the two-way nature of web communication. If bloggers felt that marketers aimed at establishing a genuine dialog they were likely to provide negative feedback in private first giving the marketer a chance to respond (see GÖHRING/HAPP/MÜLLER (2006), p. 64).

[372] See VOCALPOINT (2008).

[373] Already in 2001, P&G launched a similar platform for teenagers called 'Tremor' building relationships with more than 200,000 teen connectors (see P&GTREMOR (2008)).

[374] See BERNER (2006).

On the other hand, branded companies may also design own communities in the form of an **interactive club**.[375] The main objective thereby is to foster interaction among members to build a community around the brand. As a side effect, these communities also provide insights regarding consumer needs and product perception which can be leveraged for market research.[376] Brand related UGC may be stimulated regarding the brand itself. A prime example represents the inorganic Jones Soda brand community (see Table 4 above) involving customers in all kinds of marketing decisions.[377] A branded company may also prompt brand related UGC regarding a lifestyle the brand expresses. For instance, the beverage producer Red Bull established the Red Bull Music Academy as a community around events for music-affine people worldwide stimulating UGC to be published in online and offline media (see Appendix XXIV). In this case, the brand relatedness of UGC does not focus on the primary product offering but on the underlying values and personality of the brand.

In a broader sense, also **soliciting user generated advertising** may be understood as a community building measure. Brands such as the snack producer Doritos (see Table 2 above) conducted contest inviting users to create their own ads. Despite of contest rules the marketer's influence on the stimulated brand related UGC is considered low, since user are free in UGC creation and distribution. Figure 27 summarizes the described UGB tactics within the scope of social media participation.

[375] In this context, the term club is used in a broader sense highlighting the brand focus of the community. For customer club definitions in a narrower sense see BUTSCHER/MÜLLER (2006); HOLZ (1998).
[376] For details about applied market research as UGB application see chapter C 3.1.
[377] For a case study of the Jones Soda community see Table 4.

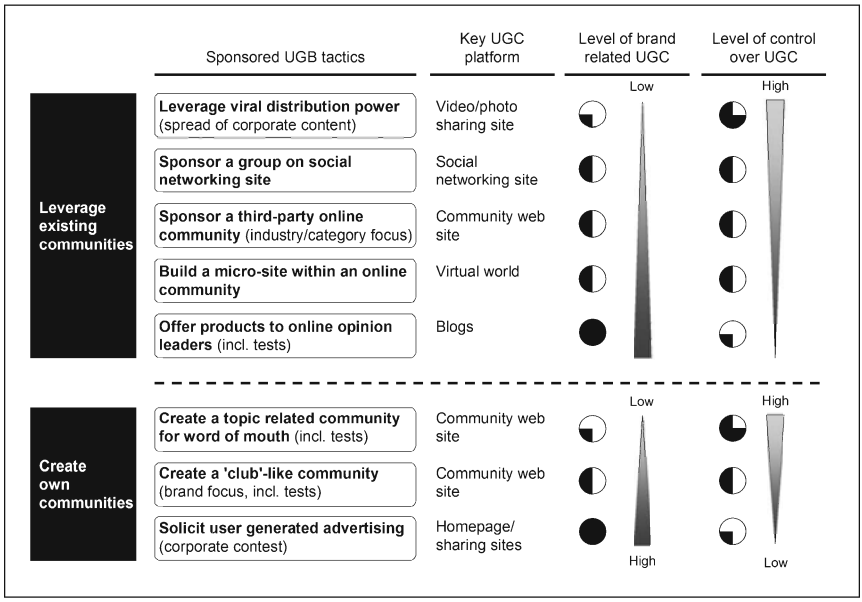

Figure 27 UGB tactics within social media participation
Source: Own illustration based on BERNHARDT et al. (2008b).

With regard to support of brand loyalty especially **corporate blogging** adds value to the communication chain.[378] SINGH/VERON-JACKSON/CULLINANE regarded blogging as instrument to cultivate relevant communities by sharing expertise and experiences with interested users on a global platform and offering customers a space for reflecting their brand experiences. This enabled users to have a role and certain ownership in the brand which drove brand loyalty.[379]

Overall, social media participation for the purpose of commercialisation and customer retention allows precise targeting since the customer has expressed prior interest by

[378] See SINGH/VERON-JACKSON/CULLINANE (2008), pp. 285 et seq.
[379] A prime example for blogs as marketing communication tool is the blog site of the car manufacturer General Motors (GM) which offers various targeted blogs written by GM leaders, engineers and other employees for external and internal target groups who are invited to comment on it and contribute ideas. Blog scopes include car and trucks related discussions, GM specific news, GM test drive reports, racing event coverage, fan community networks and 'humanized' leadership discussions (see GENERALMOTORS (2008).

engaging in UGC platforms.[380] Furthermore, it is considered an easy way to disseminate information and interact with the target group at a low cost. Beside the initially discussed partial loss of control ongoing resource requirements represent one of the major challenges since social media participation demands commitment and continuity. All in all, the application of UGB tools within customer acquisition and retention is considered a potential for competitive advantage.[381] Since users are likely to participate only in a limited number of interactive platforms due to disposable resources early mover companies which succeed in winning a critical mass of users by means of UGB may be able to build long-term market entry barriers. However, the assumed correlations between UGB strategies and customer retention have not been empirically validated so far.[382] In branding practice, UGB tactics have not been exploited so far.[383]

3.3 UGB for the purpose of internal branding

As operative brand management in general UGB may be applied to both internal and external target groups. The UGB applications mentioned above – social media monitoring, idea soliciting, crowd sourcing, and social media participation – may be transferred to employees and other internal shareholders.

In the figurative sense, '**internal market research**' refers to monitoring and applying natural brand related UGC generated by employees in an unprompted way predominantly on corporate UGC platforms.[384] Employee criticism discovered on these platforms may be an indicator for necessary product and service improvements but also for deficient brand commitment[385] of employees. Thus, monitoring employee generated content may also serve as early warning system for decreasing brand citizen-

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[380] See also in the following SINGH/VERON-JACKSON/CULLINANE (2008), p. 288. The statements of the scholars originally referred to blogs only.

[381] See MÖHLENBRUCH/DÖLLING/RITSCHEL (2007), p. 209.

[382] MÖHLENBRUCH/DÖLLING/RITSCHEL see significant research need in exploring the effects of Web 2.0 applications on customer retention (see ibid., p. 211).

[383] For example, in 2006 less than 5% of Fortune 1000 companies used corporate blogs strategically (see SINGH/VERON-JACKSON/CULLINANE (2008)).

[384] For example, at Sun Microsystems more than 5,500 employees are involved in blogging on the corporate platform commenting on everything from company culture to product news. According to the blog site statistic of Sun Microsystems there are more than 4,500 employee created blogs registered on the web page (see SUNMICROSYSTEMS (2008)).

[385] Brand commitment is defined as "...extent of psychological attachment of employees to the brand, which influences their willingness to exert extra effort towards reaching the brand goals..." (BURMANN/ZEPLIN (2005a), p. 284; also see BURMANN/MEFFERT/KOERS (2005), p. 10; BURMANN/ZEPLIN/RILEY (2008), p. 3).

ship behaviour[386]. As initially stated, meeting the brand promise on the part of employees[387] but also marketing intermediaries[388] and call centre agents[389] has gained in importance in the internet era with regard to preventing negative brand related UGC.

A further crucial UGB application is **'internal crowd sourcing'**. Providing virtual space to leverage employees' ideas UGC could be explicitly stimulated in a corporate environment.[390] Within the scope of the identity-based brand management approach such UGC platforms could be integrated into internal brand communication as lever to strengthen the brand commitment of employees.[391]

With regard to internal UGB for the purpose of **brand loyalty tactics** to create communities may be transferred from external to internal target groups. According to SINGH/VERON-JACKSON/CULLINANE this included enterprise blogging by executives delivering messages less formal in first person UGC format to their teams.[392] Since the expressed opinion or idea could be linked directly to a person these personal executive messages were more likely to be read than corporate memos or newsletters and contributed to relationship building.[393]

It is essential to note that UGB for the purpose of internal branding does not necessarily equal applications for peer-to-peer collaboration at the workplace. So online project coordination tools to share knowledge and experiences[394] and TAPSCOTT's Wiki Workplace refer rather to mass collaboration than to UGB.

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[386] Brand citizenship behaviour is defined within the scope of internal branding as "...the intention of each employee to voluntarily exhibit certain generic (brand- and sector-independent) behavioural characteristics outside of the formally defined role expectation system, which strengthen the identity of the brand" (BURMANN/ZEPLIN/RILEY (2008), p. 3).

[387] See ibid., pp. 3 et seq.; BURMANN/ZEPLIN (2005a), pp. 281 et seqq.

[388] MALONEY provided empiric evidence that brand commitment among marketing intermediaries can be generated by marketing intermediary brand identity fit, brand relevancy and brand understanding and brand oriented marketing intermediary leadership (see MALONEY (2007), pp. 342 et seqq.).

[389] For details on brand commitment in call centers see BURMANN/PANNENBÄCKER (2008).

[390] See SINGH/VERON-JACKSON/CULLINANE (2008), pp. 286 et seqq.

[391] Brand communication as driver of brand commitment was identified through expert interviews (see BURMANN/ZEPLIN (2005a), p. 286; BURMANN/ZEPLIN (2005), p. 124) and empirically validated (see BURMANN/ZEPLIN/RILEY (2008), pp. 13 et seq.; 18; ZEPLIN (2005), pp. 235 et seq.).

[392] See also in the following SINGH/VERON-JACKSON/CULLINANE (2008), pp. 286 et seqq.

[393] As example GM's 'humanized' leadership discussions on the blog 'GM Driving Conversations' can be cited (see GENERALMOTORS (2008)).

[394] See SINGH/VERON-JACKSON/CULLINANE (2008), pp. 286 et seqq.

3.4 Firm's stances regarding UGB and brand related UGC

The application of UGB is closely linked to corporate strategy. According to BERTHON/PITT/MCCARTHY et al. there is a **four-fold typology of firm postures** to consumer innovation, considering a firm's attitude toward creative consumers as well its actions on the detected phenomenon.[395] Depending on the mindset of top management the company's philosophy towards brand related UGC might range from negative to positive; the resulting actions might vary from passive to active (see Figure 28).

The scholars argued that **'discourage'** was the default or initial stance for many firms: They had a negative attitude toward creative customers but took no action against them. For example, the Coca Cola Company verbally berated the mentioned Diet Coke/Mentos 'geyser experiment' but did not back the sentiment up with punitive action.[396] With respect to interactive marketing communication, SCHÖGEL/HERHAUSEN/WALTER refer to the 'discourage' stance as 'traditional strategy'.[397] Due to marketing spend habits, lacking experience with new media and fear of uncontrollable touch points, companies at this stage neglected participatory communication.

Some companies in the context of consumer innovation, however, were found to take on a **'resist'** stance, serving user-innovators with legal instructions to desist from hacking products.[398] With regard to brand related UGC, examples have shown that firms rather engaged in active complaint handling after detecting anti-brand content in order to make brangilants restrain from further postings.[399]

Since this thesis is dedicated to the integration of brand related UGC into brand management, the focus is to a lesser extent on the mentioned negative firm's attitude but on a positive firm's stance. Having a welcoming attitude, branded companies may either 'encourage' or 'enable' brand related UGC.[400] According to BERTHON/PITT/MCCARTHY et al. the **'encourage' stance** is a positive but rather hands-off approach; thus, brand related UGC is observed but not actively assisted. This stance corresponds to the 'moderate strategy' in the classification of SCHÖGEL/HERHAUSEN/WALTER, treating interactive marketing rather as test phase.[401] With regard to blogs

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[395] See also I the following BERTHON/PITT/MCCARTHY et al. (2007b), pp. 44 et seq.
[396] See MELILLO/VOIGHT (2007).
[397] See SCHÖGEL/HERHAUSEN/WALTER (2008), pp. 345 et seq.
[398] Examples of branded companies which sued user-innovators include Ford and Sony (see BERTHON/PITT/MCCARTHY et al. (2007b), pp. 44 et seq.).
[399] See MCGREGOR (2008)
[400] See also in the following BERTHON/PITT/MCCARTHY et al. (2007b), pp. 45 et seq.
[401] See SCHÖGEL/HERHAUSEN/WALTER (2008), p. 346.

as example for brand related UGC, SINGH/VERON-JACKSON/CULLINANE call this stance 'limited use' referring to companies which utilized blogs in conjunction with other third party UGC resources in order to gain valuable customer insights.[402] Hence, this stance corresponds to applied market research as UGB application.

On the contrary, the **'enabling' stance** means actively supporting creative consumers.[403] SCHÖGEL/HERHAUSEN/WALTER talk about a 'concentrated strategy' which fits best to the corporate culture of young dynamic enterprises targeting consumers with social media affinity.[404] In this context, SINGH/VERON-JACKSON/CULLINANE refer to 'tactical use' and 'strategic use' companies:[405] Tactical use companies offered corporate sponsored platforms for both B2C and C2C communication in order to gain customer insights but also building brand loyalty by linking users with promotional events. Thus, beside market research the focus here was on customer retention. Strategic use companies finally geared towards gaining insights, building brand loyalty and connectedness to both external and internal target groups by exploiting UGC platforms as true interactive vehicles. Hence, this 'enabling' stance corresponds to sponsored UGB campaigns for the purpose of commercialisation and customer retention. All mentioned UGB applications may also be transferred to internal communication in order to leverage the creativity of employees.

[402] See also in the following SINGH/VERON-JACKSON/CULLINANE (2008), p. 287.
[403] See BERTHON/PITT/MCCARTHY et al. (2007b), pp. 45 et seq.
[404] See SCHÖGEL/HERHAUSEN/WALTER (2008), p. 347.
[405] See also in the following SINGH/VERON-JACKSON/CULLINANE (2008), p. 287.

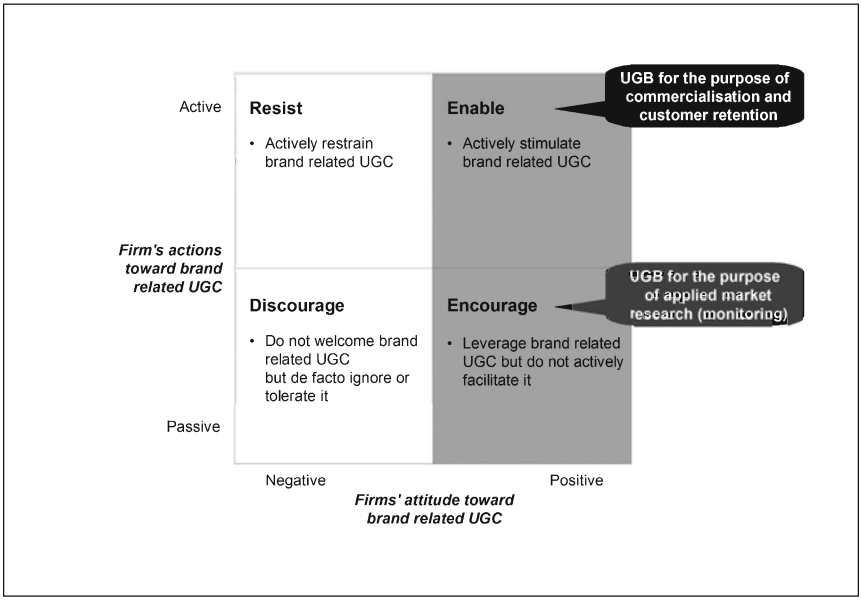

Figure 28 Firm's stances toward brand related UGC
Source: Own illustration based on BERTHON ET AL. (2007B), p. 44.

With respect to interactive marketing communication in a broader sense, SCHÖGEL/HERHAUSEN/WALTER link the discussed firm's stances to **marketing costs**.[406] They hypothesize that the higher the share of interactive programmes at the expense of traditional mass media communication, the higher the saving potential at similar effectiveness (see Figure 29). The effectiveness, however, depended on the diffusion and acceptance of new media among the target group. If the potential customers lacked interactive media affinity, the application of interactive instruments according to the 'enable' stance might be inefficient and ineffective.

[406] See SCHÖGEL/HERHAUSEN/WALTER (2008), pp. 345 et seqq.

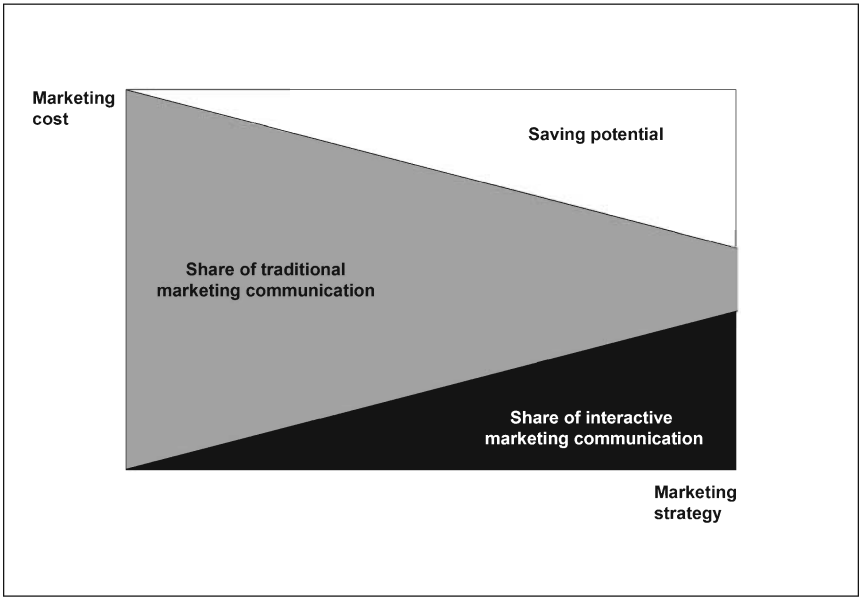

Figure 29 Saving potential regarding interactive marketing application
Source: Adapted from SCHÖGEL/HERHAUSEN/WALTER (2008), p. 345.

D Development of the explanatory UGB model

Having specified user generated branding (UGB) and its application space, the following section deals with the development of a conceptual framework as a basis for empiric inquiry. Given the management orientation of this thesis, the role of **sponsored UGB** programmes shall be investigated. The objective is to validate sponsored UGB programmes as new instruments within the brand communication mix.

Since the research objective comprises the interrogation of causal interdependencies, the causality term is explained first. Then, in response to the second research problem, **determinants** of attitude toward the sponsored UGB programme shall be identified. This step serves primarily at characterising the new construct of UGB attitude and is considered a prerequisite for the exploration of the third – and main – research problem of **UGB effectiveness**. In order to derive hypotheses[1] regarding the effects of sponsored UGB programmes, a reference framework is set up, pointing out the necessity of communication effect analysis and introducing existing models from advertising and brand relationship research. The identified constructs and interdependencies are then related to the UGB specific research problem and transferred to the graphical and mathematical structure of a comprehensive structural equation model[2]. The objective is to develop a UGB effectiveness model which enables quantitative validation of the assumed causal relationships.

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[1] A hypothesis is a tentative proposition—a hunch, assumption or guess in most cases about a relationship between two or more variables—whose validity is unknown and is thus to be tested through an inquiry (see among others BLACK/CHAMPION (1976), p. 126; GRINNELL/STOTHERS (1988), p. 200; KERLINGER (1986), p. 17).

[2] A structural equation model is a practice of causal analysis. For explanation see chapter D 0 and E 2.2.1.

U. Arnhold, *User Generated Branding*, DOI 10.1007/978-3-8349-8857-7_4,

1 Understanding of Causality

This study follows the causality definition by BLALOCK assuming that variations of a variable[3] X cause variations of a variable Y ($X \rightarrow Y$).[4] According to scientific theory, there are four conditions for considering a variable X a direct cause of a variable Y: First, if X changes, a change in Y must be regularly observed. Second, the change in Y must chronologically succeed the change in X. Third, there must be a true dependency between X and Y rather than a spurious correlation caused by a third variable. And fourth, the hypothesis that X brings about change in Y must be derived from theory. Since those strict requirements are only guaranteed in experimental research designs, possible deficits in condition 2 and 3 may be balanced by applying a careful theoretical foundation.

Causal relations may be formally described by the terms **covariance and correlation**, measuring how much two variables change together.[5] If the variables x_1 and x_2 are independent, then their covariance $s(x_1,x_2)$ is 0. If the values of the variables tend to the same or contrasting direction, the covariance is above or below 0. Since there is no defined interval, the absolute values of covariance do not indicate the strength of the relation between the two variables. By contrast, correlation, which depends on the covariance, is a scaled measure of linear dependence. Values of the correlation coefficient $r(x_1,x_2)$ may range from -1 to +1. The more the value tends to 1, the stronger the dependence between the variables. The correlation coefficient, however, does not indicate which variable is the agent.

Thus, there are basically four interpretation options of correlation: If a clear direction of impact from the one to the other variable exists, it is referred to as a causal correlation. This may be the case if a) x_1 brings about change in x_2 ($x_1 \rightarrow x_2$) or if b) x_2 brings about change in x_1 ($x_2 \rightarrow x_1$). If c) the relation between x_1 and x_2 is influenced by a hypothetical variable ξ, the dependence between x_1 and x_2 can only be partially interpreted as a causal correlation since variations in x_2 are not only directly caused by variations in x_1 but also by the power of ξ in both a direct and indirect (via x_1) way. The same is true for the direction $x_2 \rightarrow x_1$. If d) the dependence between x_1 and x_2 is

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[3] A variable is a concept that is capable of measurement and thus can take on different values. The degree of precision varies from scale to scale (see amongst others KUMAR (2005), p. 55; MCDAVID/HAWTHORN (2006), p. 452).

[4] See also in the following BLALOCK (1985), pp. 24 et seq.; BACKHAUS/ERICHSON/PLINKE et al. (2003), pp. 340 et seqq.; KENNY (1979), pp. 1 et seqq.

[5] For a formal definition of covariance and correlation see also in the following BACKHAUS/ERICHSON/PLINKE et al. (2003), p. 340 et seqq.

only a result of the influence of ξ, there is no causal correlation between x_1 and x_2 at all. Changes in x_2 or x_1 respectively are solely due to ξ.

With regard to the different interpretation options, it is essential to postulate the direction of relations between variables based on sound theoretical considerations prior to statistical analysis. Assumed causality shall be reflected in a constructed set of hypotheses which is then transferred to a structural equation model[6] and validated by means of empiric data. That is, causal analysis – as applied within this study – is of confirmatory character.

Although there is a widely accepted need of causal modelling in social sciences to assist the development, modification and extension of measurement and substantive theory, it has definite limitations. KENNY lists three restrictions:[7] First, the data must be grounded in a solid foundation of careful observation. Second, the driving themes of theory are rather images, ideas and structures than causal laws. And third, causal modelling can be abused.[8] Therefore, it is regarded crucial to put theoretical assumptions up front.

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[6] For an in-depth consideration of structural equation models see chapter E 2.2.1.

[7] See KENNY (1979), pp. 5 et seqq.

[8] For technical and conceptual issues regarding causal modelling see ibid., pp. 312 et seqq. and explanations in chapter E 5.5.

2 Reference framework for the explanation of determinants of UGB attitude

In order to define determinants of UGB attitude beyond the individual programme liking, neighbouring research areas such as advertising and community research are consulted. From this, research hypotheses are derived and transferred to a conceptual model. This analysis is conducted in order to better understand the new construct of UGB attitude. The demands of a comprehensive explanatory model, however, are not met.

2.1 Determinants in user-centric research fields

Attitude toward the sponsored UGB programme shall be measured by means of the indicator areas programme appeal, quality, identification, and trust.[9] Indications for such determinants are provided by word of mouth (WOM), advertising,[10] brand community[11] and UGC research.

As introduced in chapter C 1.3, product category involvement, brand experience and opinion leadership proved to be essential drivers of **WOM** output. Furthermore, satisfaction and dissatisfaction with the product or service were found to evoke positive and negative WOM respectively. Although UGB is not the same as WOM, the findings might be transferred to the UGB context.

In advertising, the **attitude toward the ad** (A_{ad}) construct is used to explore both the development of attitudes towards an advertising medium and the influence of those attitudes on other constructs.[12] A_{ad} was thereby found to be determined by the ad exposure level, message involvement, cognitive and affective responses generated during ad exposure, ad message quality and content, and the brand processing set.[13] Further indication for possible antecedents is provided by the reference frame by VAKRATSAS/AMBLER, considering programme related factors such as message con-

[9] For detailed measurement model see chapter E 3.1.

[10] Advertising research was also used as basis within the context of the evaluation of other brand communication instruments such as events (see DRENGNER (2003), p. 102 et seqq.).

[11] Although the overall UGB phenomenon goes beyond the brand community concept, brand communities can be regarded as UGB applications in the circumstances of sponsored UGB programmes inviting consumers to contribute self-made content for brand community building.

[12] See amongst others HOMER (1990), pp. 79 et seq. For a definition of attitude toward ad see STEFFENHAGEN (1993), p. 10.

[13] See BIEHAL/STEPHENS/CURLO (1992), p. 19.

tent, media scheduling and repetition as well user related factors such as motivation, involvement and experience.[14]

In brand community research, VON LOEWENFELD introduced the brand **community quality construct** (BCQ).[15] Based on the triad by MUNIZ/O'GUINN[16], BCQ was found to be determined by three factors: customer-brand relationship, customer-customer relationship, and customer-community relationship. With respect to official online brand communities, customer-brand relationship operationalised by permanent brand involvement, brand identification and customer-brand interaction proved to be the strongest determinant (38%), followed by customer-customer relationship (36%) meaning shared interests, friendship and support. Customer-community relationship in the sense of meeting needs, social identity, and influence has a weaker influence (26%).

Moreover, UGC research found differences in social computing behaviour regarding **demographic and psychographic** user patterns. According to the Social Technographics study introduced in chapter A 1.2, active participants – so-called creators and critics – are mostly younger than passive and notably inactive users and have a higher household income (see Figure 30). Besides, they appear to be stronger technology optimists and opinion leaders. From this it follows that demographic and psychographic factors might be determinants of UGB attitude, too.

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[14] See VAKRATSAS/AMBLER (1999), p. 26.

[15] See also in the following VON LOEWENFELD (2006), pp. 164; 205 et seqq. The BCQ construct was validated by means of online surveys regarding official and inoffical communities (N=~1,200).

[16] For a description of brand community models see chapter C 1.4.1.

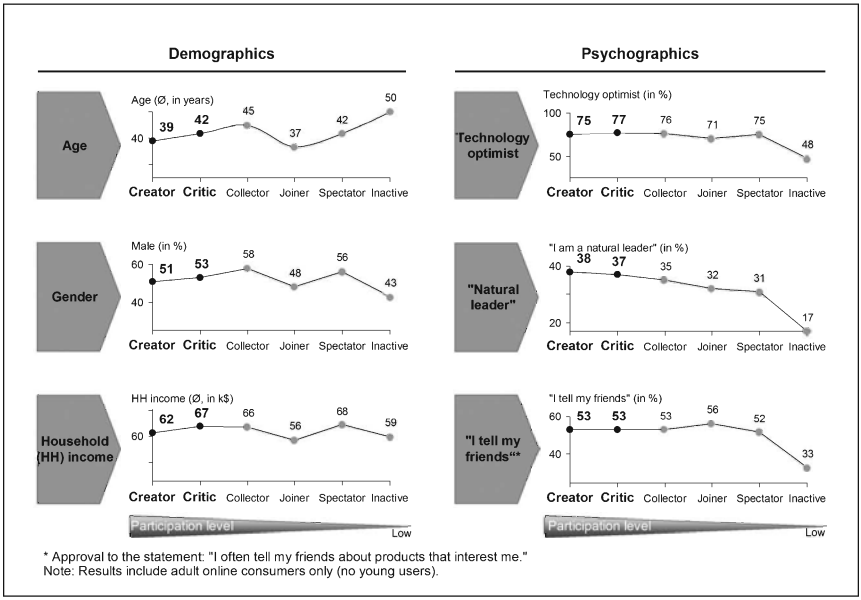

Figure 30 Demographics and psychographics of Social Technographics segments
Source: Own illustration adapted from LI (2007a); HEMPEL (2007).

2.2 Derivation of hypotheses regarding UGB determinants

The findings from user-centric research fields imply that determinants of UGB attitude might be programme, category and user personality related factors. On the one hand, 'hard facts' are to be considered which are directly measurable. This includes usage frequencies and demographics. On the other hand, a user's attitudes and personality are to be taken into account.

2.2.1 Hypotheses regarding usage and demographics

With regard to directly measurable factors, the level of **UGB programme participation** might be crucial for the attitude toward the UGB programme. This hunch is backed by the empiric study of VON LOEWENFELD who identified exercise of influence as a key indicator of the customer-community relationship.[17] Moreover, awareness – as a preliminary step of participation – has been picked out as a central theme in ad-

[17] See VON LOEWENFELD (2006), pp.205 et seqq.

vertising research.[18] Unlike classical advertising, sponsored UGB programmes additionally invite consumers to take part in the programme. Thus, it is hypothesized that active UGB programme participation loads UGB attitude.

H_1	Attitude toward the sponsored UGB programme is the stronger… …the more active the user's participation in the UGB programme.

Alike, active **brand usage** is assumed to have influence on the attitude toward the UGB programme. This assumption is derived from VON LOEWENFELD's finding that the relatedness to the brand as evidenced by brand usage drives brand community liking. FOURNIER also stresses the importance of the brand status.[19] Thus, it is hypothesized that consumers might appreciate sponsored UGB programmes solely because the initiatives are offered by the brand they consume.

H_2	Attitude toward the sponsored UGB programme is the stronger… …the heavier the brand usage.

Beside usage patterns, **demographic factors** are to be considered as potential determinants of UGB attitude. Given the Web2.0 setting and innovative nature of UGB programmes, a correlation with **age** appears to be manifest. The Social Technographics study provided evidence that content creators and critics are younger than inactive users.[20] Hence, UGB attitude is assumed to be stronger among the young generation.

H_3	Attitude toward the sponsored UGB programme is the stronger… …the younger the user.

With respect to the necessary internet literacy and self-confidence for UGB programme participation, a greater UGB appeal is assumed among the higher **educated** group. This hunch is backed by the finding of the Social Technographics study that social computing activity was the stronger the higher the household income.

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[18] It is the first stage of the well-known AIDA model of advertising effectiveness and recurs in modified ways (e.g. involvement, experience) in advanced stage models. For details on advertising effect stage models see chapter D 3.1.1.

[19] For details on FOURNIER's approach see chapter C 3.1.2.1.

[20] For study details see also in the following LI (2007a); HEMPEL (2007) and explanations in the chapter above.

H_4	Attitude toward the sponsored UGB programme is the stronger… …the more educated the user.

Regarding **gender** no clear indication was found for the assumption that men and women respectively have a strongly different attitude toward UGB programmes. Indeed, the Social Technographics study testifies to a slight male bias in overall social computing, but in terms of the creator segment no gender differences are observed. Thus, gender is not hypothesized to be a determinant of UGB attitude.

H_5	Attitude toward the sponsored UGB programme is not determined by gender.

2.2.2 Hypotheses regarding attitudes and user personality

Beside 'hard facts', attitudes and user personality related factors are assumed to influence UGB attitude. An evident assumption is that UGB programme liking is correlated to **programme characteristics** such as the liking of the user generated content stimulated within the UGB programme. It is assumed that users who appreciate peer contributions to the programme (e.g. blog comments, uploaded videos) also approve the UGB programme as a whole. This hunch is backed by the empiric study of VON LOEWENFELD who identified customer-customer relationship (i.e. peer-to-peer interaction, similarities and mutual support) as one of three determinants of brand community quality.[21]

H_6	Attitude toward the sponsored UGB programme is the stronger… …the stronger the attitude toward stimulated UGC within the UGB programme.

Moreover, the role of the UGB programme as a specific brand offering is to be investigated. In particular, the **fit** between the brand and the UGB programme is of matter, understood as perceived similarities between denotative and/or connotative characteristics of the programme and the brand.[22] Within this study, the focus is on the general fit perception; reasons behind the fit assessment are not inquired.[23]

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[21] See VON LOEWENFELD (2006), pp. 205 et seqq.

[22] For a fit definition see amongst others NITSCHKE (2006), pp.28 et seq.; DRENGNER (2003), pp. 112 et seq.

[23] In literature, the assessment of general fit perception is referred to as global analysis. For a definition and discussion of the analysis approaches see BAUMGARTH (2000), pp. 48 et seqq.; also see DRENGNER (2003), pp. 166 et seqq.; MARTIN/STEWART (2001), p. 476; AAKER/KELLER (1990), p. 31.

The fit variable has been explored within the context of event marketing, sponsoring and brand extensions,[24] considering image transfer as a central concept.[25] According to VON WEIZSÄCKER, image change is the result of the relation between new and known information.[26] As shown in Figure 31, a certain share of known information (confirmation) is necessary to enable the docking of new information while a certain share of new information (first exposure) is necessary to change the status quo. These insights about the degree of novelty of information required for evoking change can be transferred to the context of brand communication programmes:[27] Findings suggest that the fit between the two components brand and communication programme might affect the brand image in a positive way.[28] If consumers do not perceive a fit at all, the reliability of the programme is doubted, resulting in no or even a negative image influence. On the other hand, if the fit is too 'high' so that consumers are accustomed to the conjoint presentation of the two transfer objects, the positive impact on image might also shrink due to habit and acceptance (classical conditioning). Thus, a mid fit is considered most effective in general.

[24] For an overview of fit studies see NITSCHKE (2006), pp. 83 et seqq.; DRENGNER (2003), p. 111.
[25] Image transfer refers to both the transfer of new denotative and/or connotative associations between objects of different categories and the amplification of already existing associations. Within this study, image transfer is understood as a response in the psyche of consumers to a sponsored UGB programme related to brand associations. For details see amongst others GLOGGER (1999), pp. 68 et seq.
[26] See also in the following VON WEIZSÄCKER (1974), pp. 82 et seqq.
[27] See NITSCHKE (2006), p. 176
[28] See also in the following DRENGNER (2003), pp. 114 et seq.

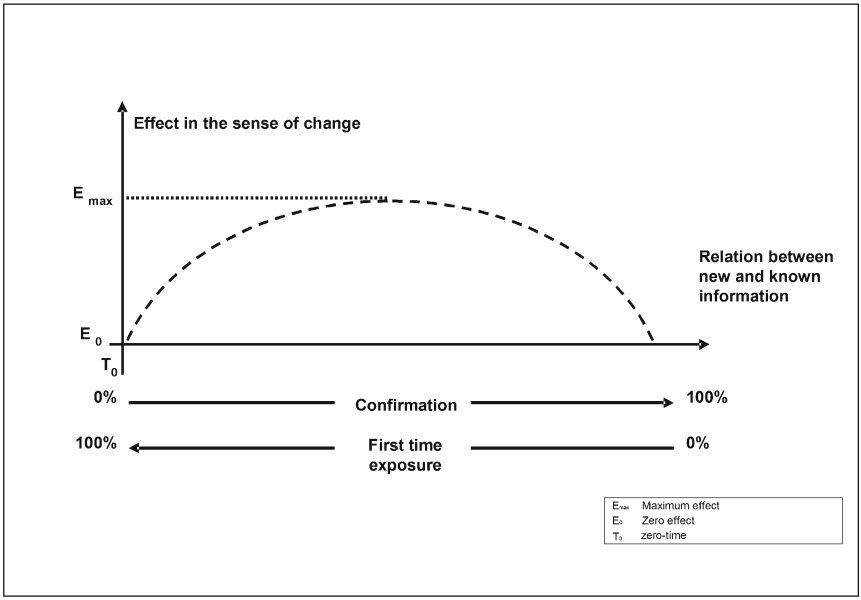

Figure 31 **First exposure confirmation model by VON WEIZSÄCKER**
Source: According to VON WEIZSÄCKER (1974), p. 99 (translated from German).

In the context of UGB, however, habituation cannot be expected given the emerging character of sponsored UGB applications. Therefore, only the left-hand side of VON WEIZSÄCKER'S model referring to a high share of first exposure is applicable. With regard to the linear relation within this part, it can be concluded that the change in UGB attitude is the more positive the better the fit perception between the brand and the UGB programme.

H_7	Attitude toward the sponsored UGB programme is the stronger… …the better the perceived fit between the UGB programme and the brand.

As discussed within the context of brand usage, the relatedness to the product category is assumed to play a crucial role in UGB attitude. This hunch is backed by WOM and advertising research, considering product category involvement as an intervening variable. FOURNIER also considers product category involvement in her brand re-

lationship studies.[29] Thus, it is hypothesized that a high **product category involvement** causes a high UGB programme liking.

H_8	Attitude toward the sponsored UGB programme is the stronger… …the stronger the product category involvement.

Beside UGB programme and product category related factors, **user personality** factors are taken into account. It is assumed that a user's openness toward innovation plays a crucial role given the innovative and playful nature of UGB programmes. Indeed, various measures exist, capturing **personal innovativeness** in the sense of creative, playful and explanatory user behaviour.[30] However, no explicit empiric evidence for a positive influence of innovativeness on the attitude toward a brand communication programme was found. A vague indication is provided by a study by NOVAK/HOFFMAN/YUNG, examining playfulness to validate the so-called flow construct in computer mediated environments.[31] Research has also demonstrated that playfulness related positively to exploratory behaviours during interactions with tasks,[32] intrinsic motivation,[33] and fun loving.[34] Thus, a positive impact of a user's innovativeness on UGB liking is hypothesized.

H_9	Attitude toward the sponsored UGB programme is the stronger… …the higher the user's innovativeness.

With respect to the participatory character of UGB programmes inviting consumers to express themselves in public, it is furthermore assumed that the appeal of such blogs, challenges and communities is particularly high among **opinion leaders**. Although the role of opinion leaders is highlighted in WOM and UGC research, only vague indications for opinion leadership influence on UGB attitude can be derived from literature. On the one hand, creative style as demanded by participatory programmes was found to correlate positively to personality indicators in the domains of

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[29] For details on FOURNIER's approach see chapter D 3.1.2.1.

[30] For instance, GLYNN/WEBSTER consider five factors to describe playfulness: fun (or fun-loving), silly (or frivolous), spontaneous, expressive, and creative (see GLYNN/WEBSTER (1992), pp. 83 et seqq.). For a comprehensive list of innovativeness scales see ROEHRICH (2004), pp. 671 et seqq. The innovativeness measurement model applied within this study is introduced in chapter E 3.53.5.

[31] See NOVAK/HOFFMAN/YUNG (2000), pp. 26 et seqq.

[32] See WEBSTER/MARTOCCHIO (1992), p. 203.

[33] See AMABILE/TIGHE/HILL et al. (1994), pp. 950 et seqq.

[34] See MAXWELL/REED/SAKER et al. (2005), p. 226.

conscientiousness, openness to experience, and extraversion.[35] On the other hand, information dissemination and contact were identified as key motivational factors for UGC creation, which appears to be driven by ego-defensive and social functions.[36] Hence, a positive influence of opinion leadership on UGB attitude is assumed.

H_{10}	Attitude toward the sponsored UGB programme is the stronger… …the stronger the user's opinion leadership.

Since sponsored UGB programmes are not only creative offerings for self-expression but also web applications, **Web2.0 experience** as a further personal trait shall be investigated. Web experience was found to play an essential role in an online environment since familiarity with the new medium cannot be assumed in equal measure as for traditional media.[37] For instance, within the context of web commercials BRUNER II/KUMAR proved that the greater a consumer's web experience the more favourable would be his or her attitude towards web sites and the web ad.[38] THATCHER showed that subjects with higher web experience used more sophisticated cognitive search strategies than subjects with lower web experience.[39] With respect to the technical components of UGB programmes (e.g. log-in, setting up profiles, uploading files, etc.), it is thus assumed that a high Web2.0 experience has a positive influence on UGB programme attitude.

H_{11}	Attitude toward the sponsored UGB programme is the stronger… …the higher the user's Web2.0 experience.

Estimating the **power of impact**, however, user personality and demographic factors are assumed to exert a less substantive influence on UGB attitude than UGB programme and participation related factors. This hypothesis is backed by the direction of the cited empiric studies. While brand fit, awareness and programme participation

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[35] Overall, creative style as measured by the Kirton Adaption-Innovation Inventory (KAI) appeared to be correlated with more than 30 different personality traits (see GELADE (2002)).

[36] For motivation of UGC creation and consumption see chapter C 1.5.1.

[37] This tendency is confirmed by information system researchers who considered technology experience a strong predictor of attitudes toward the technology (see THOMPSON/HIGGINS/HOWELL (1994), pp. 167 et seqq.).

[38] BRUNER II/KUMAR measured the advertising hierarchy-of-effects of commercials running on the web. By means of an experiment incl. online questionnaire (N=95) they identified internet experience as antecedent to the flow of advertising effects (see BRUNER II/KUMAR (2000), pp. 37 et seqq.).

[39] See THATCHER (2008). The study (N=80) comprised two researcher-defined and two participant-defined information seeking tasks.

are considered as antecedent variables in advertising, event marketing and relationship research, user personality and demographic factors are found to be less discussed in the respective literature. On the other hand, UGB programme and participation related factors may be manipulated through brand management – unlike user personality related factors. Awareness and participation can be raised by media campaigns and the originality of the offering; user personality traits, in contrast, constitute pre-defined factors which are to be considered in the offering design and target group segmentation.

H_{12}	UGB programme related factors and participation have a stronger substantive influence on the attitude toward the sponsored UGB programme than user related factors.

2.3 Specification of the conceptual model for UGB determinants

In the following the constructed set of hypotheses is transferred to the graphical structure of a path model in order to enable quantitative validation by means of empiric data. It is thereby essential to distinguish between the variables which are directly measurable and the latent variables[40] which refrain from direct observation.[41]

Relations among latent variables can be investigated by means of **structural equation models**. According to scientific theory, structural equation models are a practice of causal analysis combining theoretical language (latent variables) with observation language (indicators[42]) bridged by correspondence hypotheses.[43] From this it follows that structural equation models include two major hypotheses categories: the structural and the measurement model.[44] The structural model, on the one hand, represents the theoretically derived hypotheses regarding relations among latent variables. The measurement model, on the other hand, reflects hypotheses for the latent

[40] They are also called hypothetic constructs. They are of high interest in social sciences and may be exemplified by terms such as attitude, image, behaviour intention, social status, motivation and frustation (see BACKHAUS/ERICHSON/PLINKE et al. (2003), pp. 336 et seq.).

[41] See also in the following ibid., pp. 334 et seqq.

[42] Indicators or indicator variables are directly observable terms which indicate the existence of phenomenons. They are also known as items within the context of questionnaires. For details see amongst others SCHNELL/HILL/ESSER (2005), p. 146; KROEBER-RIEL/WEINBERG (2003), p. 31; KUMAR (2005), p. 57, BACKHAUS/ERICHSON/PLINKE et al. (2003), p. 336.

[43] For the context of theoretical and observation language see HEMPEL (1974), pp. 72 et seq.; HODAPP (1984), p. 47.

[44] See also in the following BACKHAUS/ERICHSON/PLINKE et al. (2003), pp. 336 et seqq.; BOLLEN (1989).

variables and their relations to empirically measured indicator variables. Mathematical basics are explained in chapter E 2.2.1.

Within the structural equation model for UGB determinants, attitude toward the sponsored UGB programme is the dependent variable which is explained by causal relationships inherent to the model. UGB-brand fit; attitude toward stimulated UGC; product category involvement; innovativeness, opinion leadership and Web2.0 experience are regarded independent variables: They serve as explanatory concepts but are not explained themselves. Since the exploration of UGB determinants is regarded a complementary analysis as a prerequisite for the main UGB effectiveness estimation, the model is kept knowingly simple.

Beside latent variables, directly measurable variables are included into the UGB determinants analysis. These variables refer to demographics (age, education, gender) as well as UGB programme participation and brand usage. Given their nature, they are treated as classification variables allowing sample manipulations for the purpose of multi group comparisons. Thus, they complement the structural equation model within the analysis of UGB determinants (see Figure 32).

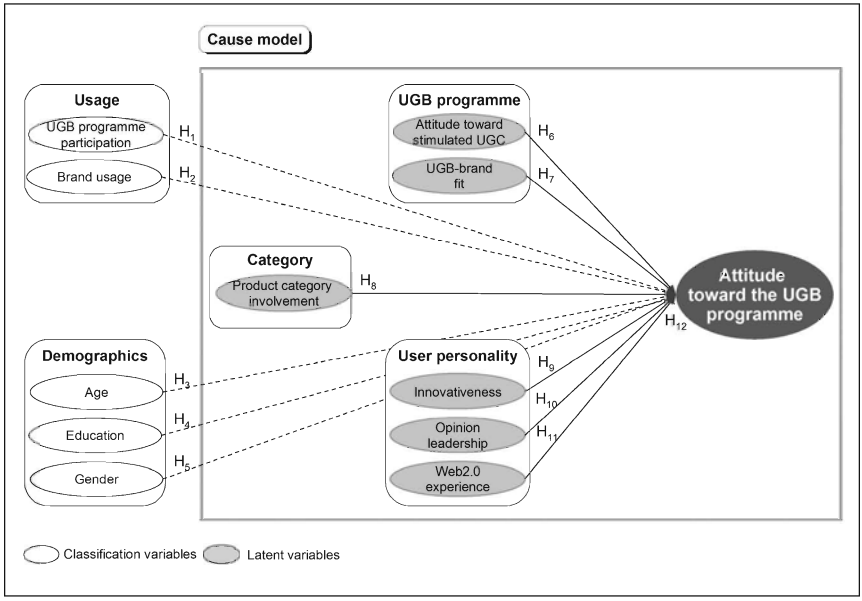

Figure 32 Conceptual model for determinants of UGB attitude
Source: Own illustration.

3 Reference framework for the explanation of UGB effectiveness

The following chapter provides the basis for the development of a specific UGB effectiveness model. Since effect analysis has a tradition in advertising and relationship research, existing models are briefly introduced which build the framework for hypothesis construction. Special attention is paid to the consumer-brand relationship construct. As discussed within the context of the identity-based brand management approach and relationship marketing in the chapters B 2.1.3 and B 3.3 respectively, the consumer-brand relationship is considered an essential pre-economic target value of brand management and is thus regarded suitable as a dependent variable of effect analysis. This study focuses on the external target group – a brief UGB effectiveness analysis regarding the internal target group is provided as an extra.

3.1 Basic models of communication effectiveness

UGB effectiveness shall be represented by a scientific model, aiming at representing complex relationship in a simplified way.[45] The UGB effectiveness model shall be thereby designed as an **explanatory model** for the purpose of problem understanding, claiming empiric validation of the stated relationships.[46] With respect to communication effectiveness, such explanatory models were developed within advertising effect research and relationship marketing within the scope of consumer behaviour research. In the following established models are briefly introduced and tested for suitability to explain the impact of sponsored UGB programmes.

3.1.1 Advertising effect models

Advertising effect models are generally based on the neobehaviouristic **S-O-R paradigm** of causal connection between stimulus (S) and response (R) under consideration of the evoked – not directly observable – processes in the organism (O).[47] It is assumed that the processes in consumers' minds are influenced by so-called intervening variables such as perception, attention, motivation, involvement, emotions, at-

[45] In management research, a model has to meet two basic requirements: First, it shall represent real facts referring to elements of the real system and the relations among each other. Second, structural similarity between the original system and the model is demanded. For an in-depth consideration see amongst others BAMBERG/COENENBERG (2000), pp.13 et seqq.; HOMBURG (2000), pp. 31 et seqq.

[46] Beside explanatory models, descriptive, prognostic and decision models are classified regarding model purpose (see amongst others HOMBURG (2000), p. 34).

[47] See also in the following amongst others MEFFERT/BURMANN/KIRCHGEORG (2008), pp. 101 et seq. KROEBER-RIEL/WEINBERG (2003), p. 29 et seq.

titude, etc. Applying this paradigm to UGB effectiveness means that the effect of a sponsored UGB programme (S) on response values (R) may be positively or negatively influenced by programme and user related factors (O).

S-O-R models may be grouped into stage models and advanced stage models. Stage models represent the whole effect process regarding a targeted consumer in a fixed hierarchy, from receiving an advertising message to purchase action.[48] Based on the original **AIDA model** comprising the effect stages attention (A), interest (I), desire (D) and action (A), the effect stages were further specified in various adaptations.[49] Although such stage models consider the influence of psychographic constructs for the economic success of brand communication, they lack plausibility due to strict effect hierarchy. Neither reciprocal effects nor inter-stage effects and the particularity of subpopulations are taken into account so that these models do not bear up against empirical validation.

Advanced stage models tend to overcome those critical points by considering further constructs and interaction effects among the stages so that the hierarchy might change depending on the particular subpopulations. Various partial models exist which can be classified according to the reference frame by VAKRATSAS/AMBLER regarding advertising input (e.g. message content, media scheduling, repetition), filters (e.g. motivation, ability, involvement), consumer (e.g. cognition, affect, experience)[50] and consumer behaviour (e.g. choice, consumption, loyalty, habit).[51] Focusing on the organism, **persuasive hierarchy models** are well-known which refer to both cognition and affect and consider different effect paths depending on different determinants.[52]

Indeed, advanced stage models from advertising effect research offer explanatory potential for the exploration of UGB effectiveness. In particular, attention is raised to intervening 'organism' variables such as attitude, perception and involvement which might overshadow a cause-effect relationship and sensitise to consider different subpopulations. However, the proposed complex stage models do not suit the purpose of this study. Since sponsored UGB programmes constitute an emerging brand communication tool, the focus is on providing evidence of effectiveness at all rather

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[48] See also in the following amongst others MEFFERT/BURMANN/KIRCHGEORG (2008), p. 706, NIESCHLAG/DICHTL/HÖRSCHGEN (2002), p. 1061.

[49] For an overview of stage model approaches see amongst others MEFFERT/BURMANN/KIRCHGEORG (2008), p. 705; KIRCHGEORG/SPRINGER (2006), pp. 13 et seqq.

[50] Model types include cognitive information, pure affect, persuasive hierarchy, low-involvement hierarchy, integrative and hierarchy-free models (see VAKRATSAS/AMBLER (1999), p. 26).

[51] See also in the following ibid., p. 26.

[52] See amongst others KROEBER-RIEL/WEINBERG (2003), pp. 622 et seqq.

than documenting individual stages of the effect process. Besides, these effect models cannot be transferred without further ado from the context of top-down advertising to UGB as bottom-up and peer-to-peer phenomenon. Moreover, advertising effect models tend to focus on consumer action as target value. Given the participatory character of sponsored UGB programmes, however, reference to relationship building seems to be more appropriate. Thus, following the ideas of the identity-based brand management approach and relationship marketing, the consumer-brand relationship construct shall be further analysed as outcome variable.

3.1.2 Consumer-brand relationship models

Consumer-brand relationship models are relatively new in brand research as evidenced by the exploratory character of numerous studies within the last years.[53] Most studies refer to theories of psychology and behavioural research and obtain understanding from the consumer's perspective. In general, it is differed between economic (e.g. revenue) and **pre-economic effects** (i.e. behaviour and attitude related values) whereby pre-economic values are considered drivers of economic values.[54] Thus, the consumer-brand relationship is assumed to affect economic values indirectly. Direct economic effects, in contrast, are found hard to prove. Thus, the examination of antecedent pre-economic values is widely accepted and even preferred in brand relationship research.[55] Since all reviewed papers are based on the pioneer work of FOURNIER, her brand relationship approach is introduced first. Then the advanced model by WENSKE and STICHNOTH is briefly described which reflects antecedents and effects of customer-brand relationship within the identity-based brand management approach.

3.1.2.1 Brand relationship model by FOURNIER

As a diagnostic tool for conceptualizing and evaluating relationship strength FOURNIER introduced the concept of **brand relationship quality** (BRQ). This construct was assumed to have a multi-faceted nature distinguishing between affective and socio-emotive attachments (love and passion; self connection), behavioural ties

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[53] For a summary of the scope and outcome of recent brand relationship studies see WENSKE (2008a), pp. 149 et seqq.

[54] While economic effects evolve at a macro-economic level (provider), pre-economic values evolve at the individual, micro-economic level (consumer). For an in-depth consideration see WENSKE (2008b), pp. 124 et seqq.

[55] See amongst others BRUHN/EICHEN (2007), p. 248; ESCH/BRUNNER/HARTMANN (2007), p.147.

(interdependence; commitment), and supportive cognitive beliefs (intimacy; brand partner quality) as drivers of strong brand relationships.[56]

According to FOURNIER brand relationship quality evolves through meaningful **brand and consumer behaviour interactions** (see Figure 33). In a metaphoric sense, brand and consumer are thereby considered as relationship partners. That is, the behaviour of the brand may influence the consumer behaviour[57] but also the consumer behaviour may affect – directly or indirectly via peer-to-peer interactions – the behaviour of the brand. FOURNIER identified traditional marketing tools (e.g. TV advertising and sponsoring) as well as customer service tactics (e.g. customer complaint handling) as brand behaviour types.[58] From this it follows that sponsored UGB programmes might also be considered as brand behaviour instrument.

Brand relationship quality, on the other hand, is assumed to influence brand stability and durability. Regarding BRQ effects, FOURNIER considers nine pre-economic **consumer-response variables**:[59] As dependent variables of behavioural nature, she identified frequency of use, share of uses regarding a category, repeat purchase intention, relationship duration, resistance to competitive thread, insulation from competitive activities, and supportive customer responses. Supportive customer responses thereby include willingness to try new extensions introduced under the parent brand name, willingness to testify on behalf of the brand in an advertising setting, willingness to pay a significant higher price for the brand than that commanded at present, and willingness to recommend the brand to a friend. Besides, top-of-mind saliency and consideration set size were measured as variables of cognitive structure defences. While FOURNIER's empiric results imply that BRQ influence on the latter cognitive variables was rather low, strong positive impact on supportive customer responses and repurchase intention were proven.[60]

To provide understanding of the dynamics governing the BRQ construct, FOURNIER also included **personal and category moderators** into her model.[61] Personality factors included relationship styles, relationship drive, interpersonal orientation, and relationship value centrality. Besides, information on gender, education and age is considered as classification variable. Category moderators refer to product category in-

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[56] See FOURNIER (1998), p. 366. For further details on BRQ operationalisation see chapter E 3.2.
[57] The brand-as-partner behaviour is thereby understood as the application of general marketing tactics but not as specific one-on-one initiative (see FOURNIER (1994), p. 21).
[58] See ibid., p. 21.
[59] See also in the following ibid., pp. 160 et seq.
[60] See ibid., pp. 171 et seq.
[61] See also in the following ibid., pp. 162 et seq.

volvement on the hand and brand classifications (e.g. personal pioneer status, favourite brand rank, usual brand position) on the other hand.

For the purpose of developing a UGB effectiveness model, the suggested influence of brand behaviour instruments on brand relationship quality is of matter.[62] Equating sponsored UGB programmes with a marketing tool, it follows that the impact of attitude toward a sponsored UGB programme can be related to brand relationship as outcome variable. FOURNIER's consumer response variables are of relevance, too. In particular, it appears appropriate to relate UGB attitude effects to repurchase intention and supportive customer responses (e.g. recommendation behaviour, cross-buying behaviour) given the empiric verification and the suitability to the effect scope of brand communication instruments. Furthermore, FOURNIER raises awareness for the consideration of personal and category moderators which should also be considered in the UGB effectiveness model.

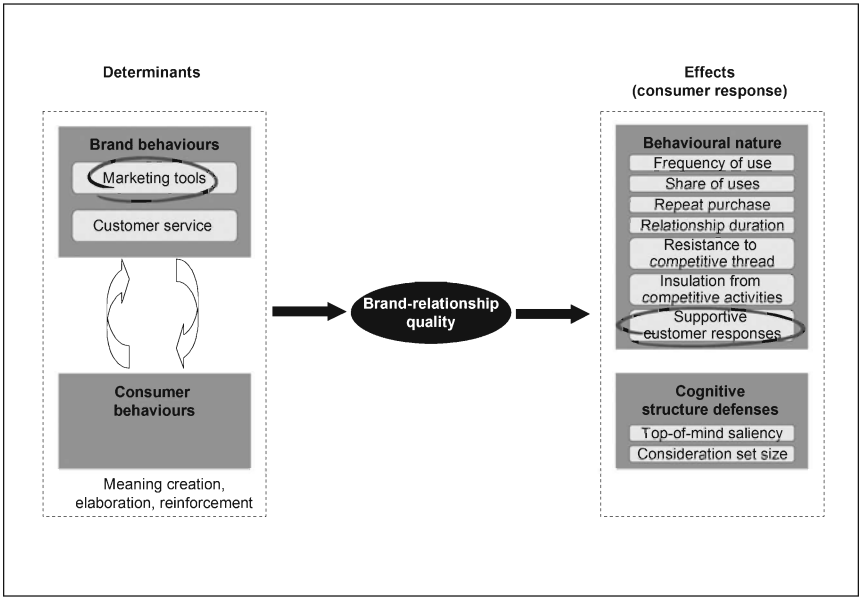

Figure 33 **Brand relationship model by FOURNIER**
Source: Own illustration based on FOURNIER (1994), pp. 160 et seqq.; FOURNIER (1998), p. 366.

[62] The measurement model of brand relationship quality, however, is subject to critic. For a discussion see chapter E 3.2.

3.1.2.2 Customer-brand relationship model by WENSKE and STICHNOTH

Based on FOURNIER, WENSKE developed an own customer-brand relationship model with focus on customer complaint management.[63] In terms of operationalisation, WENSKE questioned FOURNIER's multi-dimensional BRQ conceptualisation and provided evidence of customer-brand relationship as one-dimensional construct.[64] In terms of the structural model, WENSKE followed FOURNIER's approach, considering both determinants and effects of customer-brand relationship (see Figure 34).

With regard to **determinants**, WENSKE proved that advertising liking and customer satisfaction with complaint handling had a substantive direct positive influence on customer-brand relationship. Besides, the empiric analysis implied that product category involvement and opinion leadership can be regarded as further determinants. However, those factors did not account for a high proportion of variance in customer-brand relationship so that further determinants are assumed.[65] As possible factors, WENSKE pointed out further brand communication instruments such as Public Relations and internet marketing measures as well as brand management instruments from the realm of distribution, price and product politics.

With regard to **effects**, WENSKE provided evidence that customers with a strong brand relationship showed high repurchase and recommendation intentions and accepted a higher price level.[66] Furthermore, a positive relation between customer-brand relationship and brand image as attitude related value was shown although the causality could not be finally validated.

From WENSKE's model it follows that attitude toward the sponsored UGB programme might be explored – similar to advertising liking – as determinant of customer-brand relationship. Furthermore, the impact of UGB liking on behaviour and attitude related values could be tested. This influence could be detected directly but also indirectly via the customer-brand relationship.

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[63] WENSKE's study refers to customer-brand relationship as subset of consumer-brand relationship, that is, only actual (current) buyers are included. The research design comprised three surveys (N=2,334; N=177; N=147) of customers of a hot beverage system brand in the coffee segment (see WENSKE (2008a), pp. 177 et seqq.).

[64] See ibid., pp. 208 et seqq. Besides, WENSKE critized FOURNIER's separation of consumer-brand relationship and brand relationship quality (BRQ) since BRQ represented just the measuring instrument of customer-brand relationship (see WENSKE (2008a), p. 99 et seq.). For further discussion of the operationalisation see chapter E 3.2.

[65] See also in the following WENSKE (2008a), pp. 286 et seq.

[66] See also in the following ibid., pp. 268 et seq.

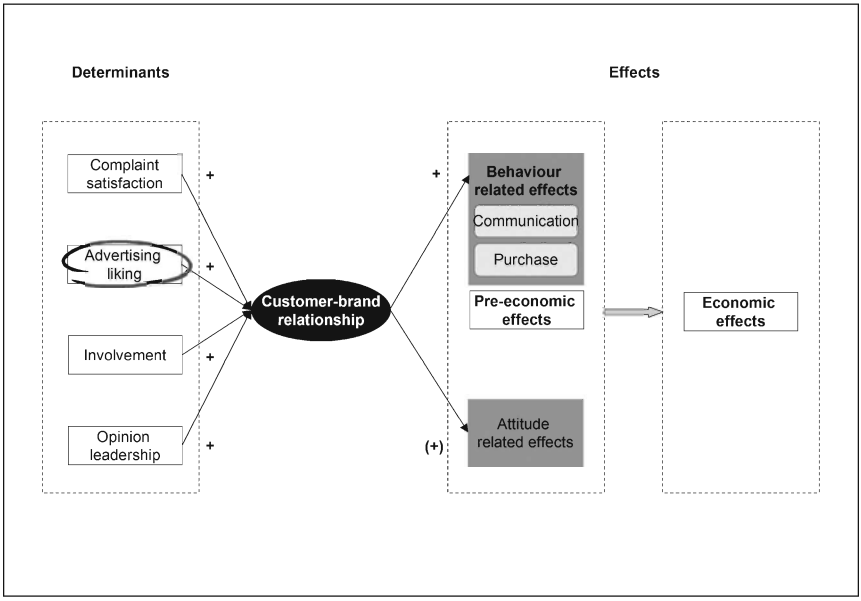

Figure 34 Customer-brand relationship model by WENSKE
Source: Adapted from WENSKE (2008a), pp. 139 et seq.

The transferability of WENSKE's customer-brand relationship model to the context of Web2.0 communication is proven by STICHNOTH who studied virtual customer clubs and online brand communities. Adopting WENSKE's model, he provided empiric evidence that the liking of virtual customer clubs and online brand communities had a positive influence on the customer-brand relationship.[67] Additionally, he validated that customer participation in virtual customer clubs and brand communities strengthened the customer-brand relationship. Furthermore, his study confirmed the positive impact of customer-brand relationship on pre-economic values such as customer's repurchase and cross-buying intention, willingness to pay a higher price and to recommend the brand. Besides, he showed that the customer-brand relationship had a positive influence on the brand image and a negative influence on the attractiveness of competing brands. Since virtual brand communities serve as venues for UGC it can be concluded that the described factors also influence the brand relationship of brand related UGC creators.

[67] See also in the following STICHNOTH (2008), pp. 81 et seqq.; 95.

Considering the simplicity but high explanatory power of the described consumer-brand relationship model, this model is selected as basis for the development of a UGB effectiveness model. Thus, the impact of UGB attitude shall be measured toward the consumer-brand relationship. Furthermore, attitude and behaviour related pre-economic values shall be integrated as dependent variables. Hence, UGB effectiveness is validated by testing the impact of the sponsored UGB programme as communication instrument to strengthen the consumer-brand relationship and influence the attitude and behaviour toward the brand.

3.2 Derivation of research hypotheses regarding UGB effectiveness

Having identified the consumer-brand relationship as the key outcome variable of UGB effects analysis, the introduced constructs and relations shall be transferred in the following to the UGB specific research problem. Sponsored UGB programmes as new brand communication instruments are thereby hypothesized to strengthen the consumer-brand relationship and evoke attitudinal and behavioural consumer responses. Apart from describing the overall causality, the power of UGB effectiveness shall be also compared to traditional communication instruments. Furthermore, intervening variables are regarded which might overshadow the relation between the UGB attitude and the consumer-brand relationship. UGB effectiveness regarding the internal target group is briefly addressed, too.

3.2.1 UGB as an instrument to strengthen the consumer-brand relationship

UGB effectiveness shall be measured in terms of impact on the consumer-brand relationship. That is, it shall be detected to what degree the attitude toward the sponsored UGB programme might strengthen the degree of the subjectively perceived relatedness of a consumer to a brand.[68] According to FOURNIER, the consumer-brand relationship may be manipulated by the brand behaviour featuring marketing communication tools and customer service initiatives.[69] Considering only the active management part of the whole UGB phenomenon aiming at stimulating UGC to achieve brand goals, a sponsored UGB programme can be understood as a **brand communication tool** within this context.

Various studies provided evidence that such communication instruments might build and **strengthen the consumer-brand relationship**. A high relevance is thereby at-

[68] For a detailed definition within the scope of the identity-based brand management approach see chapter B 2.1.3.

[69] For details on FOURNIER's approach see chapter D 3.1.2.1.

tached to the influence of advertising.[70] With regard to proponents of the identity-based brand management approach, WENSKE provided empiric evidence of the positive influence of advertising liking.[71] Besides, brand communities – either offline or online – are considered as valuable instruments to foster the consumer-brand relationship. In the broader sense, PITT/WATSON/BERTHON et al. identified communities as management instrument to move from the traditional closed branding system to an open dimension[72] which fostered interaction, customer participation and brand experience. MUNIZ/SCHAU argued that a brand's capacity for transformative experiences such as communal encounters drove brand identification.[73] In the narrower sense, THORBJORNSEN/SUPPHELLEN/NYSVEEN et al. provided evidence that internet instruments such as customer communities and personalized web sites positively influenced brand relationship building and enhancement.[74] Within the identity-based brand management approach, STICHNOTH provided empiric evidence that the liking of virtual customer clubs and brand communities had a positive influence on the customer-brand relationship.[75] Thus, it is hypothesized that the attitude toward the sponsored UGB programme positively affects the consumer-brand relationship.

H_{13}	Attitude toward the sponsored UGB programme has a substantive direct positive influence on the consumer-brand relationship.

As shown in chapter D 3.1.2, consumer-brand relationship is proven to evoke attitudinal and behavioural effects. Following FOURNIER's **consumer responses** approach,[76] WENSKE validated brand image related effects as well as behavioural effects such as repurchase intention, cross-buying intention, willingness to pay a higher price, recommendation, and negative appeal of competitive brands.[77] STICHNOTH reconfirmed those effects of customer-brand relationships in terms of Web2.0 applications.[78] From this it follows that attitudinal and behavioural effects might be indirectly evoked by UGB programmes via the consumer-brand relationship construct. **Consumer-brand relationship** serves in this sense as a **mediator** which represents ac-

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[70] For an overview of advertising related models see KOEPPLER (2000), pp. 358 et seqq. Also see BARNES (2003), p. 180 and explanations in chapter D 3.1.1.
[71] WENSKE also validated satisfaction with customer complaint management as determinant (see WENSKE (2008a), p. 270 and explanations in chapter D 3.1.2.2).
[72] See PITT/WATSON/BERTHON et al. (2006), pp. 117 et seqq. and explanations in chapter C 1.6.3.
[73] See MUNIZ/SCHAU (2005) and explanations in chapter C 1.4.1 and 1.6.1.
[74] See THORBJØRNSEN/SUPPHELLEN/NYSVEEN et al. (2002).
[75] See STICHNOTH (2008), pp. 81 et seqq.; 95 and explanations in chapter D 3.1.2.2.
[76] For details on FOURNIER's approach see chapter D 3.1.2.1.
[77] See WENSKE (2008a), pp. 130 et seqq.
[78] See STICHNOTH (2008), p. 95.

cording to BARON/KENNY "*...the generative mechanism through which the focal independent variable is able to influence the dependent variable of interest*".[79]

Beside those indirect effects, STICHNOTH also explored **direct influence** exerted by customer clubs and online brand communities on word of mouth, brand relationship building, trust, brand image and purchase behaviour.[80] Since direct attitudinal effects were confirmed within STICHNOTH's study, it is hypothesized that the attitude toward the sponsored UGB programme has a positive influence on **attitudinal effects**. The UGB impact is thereby assumed to occur directly and indirectly via the consumer-brand relationship as a mediator.

H_{14}	Attitude toward the sponsored UGB programme has a substantive direct positive influence on attitudinal effects toward the brand.	
	H_{14a}	Attitudinal effects are, however, mediated by the consumer-brand relationship.

STICHNOTH, however, could not confirm direct behavioural effects of web based brand communication programmes – neither in terms of recommendation behaviour nor purchase behaviour. In lack of further empirical evidence and under consideration of the innovative and extraordinary nature of UGB programmes, a direct influence of UGB attitude on **behavioural effects** shall be assumed though. The mediating role of the consumer-brand relationship is incorporated.

Unlike the proposed models by WENSKE and STICHNOTH, interdependency between attitudinal and behavioural effects is presumed. That is, in case positive change in image, trust and brand relationship status is evoked, those attitudinal changes are likely to cause, in turn, behavioural changes, i.e. foster recommendation and purchase behaviour. Thus, two mediators regarding the UGB-behaviour relation are hypothesized: the consumer-brand relationship and attitudinal effects.

H_{15}	Attitude toward the sponsored UGB programme has a substantive direct positive influence on behavioural effects toward the brand.	
	H_{15a}	Behavioural effects are, however, mediated by the consumer-brand relationship and attitudinal effects.

[79] BARON/KENNY (1986), p. 1173.

[80] It is to be noted that STICHNOTH applied membership of virtual customer clubs and brand communities—not attitude—as independent variable (see STICHNOTH (2008), p. 95).

3.2.2 *UGB effectiveness in comparison to advertising effectiveness*

In order to size the power of impact of UGB effectiveness, a reference communication tool is needed. **Advertising** seems appropriate for two reasons: First, it represents an established traditional brand communication tool. If sponsored UGB reached a similar effect level, its suitability as new brand communication tool could be verified. Second, the positive impact of advertising liking on the consumer-brand relationship was confirmed in previous studies.[81] Thus, sponsored UGB could be compared to a validated construct based on an established effect model.

Since attitude toward the sponsored UGB programme constitutes a new construct, no empiric evidence of UGB-advertising comparison was found in academic literature. Thus, hypotheses of the impact power of UGB versus advertising are based on assumptions derived from the nature of the two communication instruments. Given the participatory character of UGB programmes inviting consumers to take an active part in brand communication, a stronger effect on the consumer-brand relationship through 'open' UGB programmes than 'closed' advertising campaigns is presumed. Coherent interactions between brand and consumers are a constitutive feature of the consumer-brand relationship. Thus, the aspect of relationship partners appears to be better reflected by participatory UGB programmes than top-down advertising.

H_{16}	Attitude toward the sponsored UGB programme exerts a stronger substantive direct positive influence on the consumer-brand relationship than attitude toward the ad.

The same is assumed for attitudinal effects. Sponsored UGB programmes are not only innovative and creative applications, they also symbolise openness and transparency of a brand. Since the branded company provides access to previously closed areas and integrates the consumer into corporate communication, stronger direct positive changes in image, trust and relationship building are assumed through 'pulling' UGB than 'pushing' advertising. This is backed by the emergence of "*...the increasingly cynical, sceptical, and marketing-savvy consumer*"[82] type, turning away from biased messages of traditional advertising to peer-to-peer formats.

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[81] For effects on consumer-brand relationship see amongst others WENSKE (2008b), pp. 228 et seqq.; 269; for effects on attitude toward the advertised brand see amongst others HEATH/GAETH (1994); BROWN/STAYMAN (1992); MAST/HUCK/GÜLLER (2005), p. 137.

[82] ROSEN (2006), p. ix and explanations in chapter A 1.2.

H_{17}	Attitude toward the sponsored UGB programme exerts a stronger substantive direct positive influence on attitudinal effects than attitude toward the ad.

In terms of behavioural effects, however, a stronger impact of advertising is assumed. On the one hand, advertising is a learnt tool. Consumers are aware that advertising messages aim at selling a product or service. UGB programmes, on the contrary, do not have a manifest selling message. Sponsored blogs, challenges and brand communities often do not refer directly to the brand offering but related topics, e.g. the product category, a current event, 'behind the scenes', etc. Therefore, the impact of UGB programmes on recommendation and purchase behaviour is regarded weaker than through advertising.

H_{18}	Attitude toward the sponsored UGB programme exerts a weaker substantive direct positive influence on behavioural effects than attitude toward the ad.

3.2.3 UGB effectiveness regarding different user groups

Following FOURNIER, the impact of UGB attitude shall be considered for different user groups.[83] On the one hand, UGB effectiveness shall be explored regarding active **UGB programme participants** (so called branticipants) and passive participants (so called lurkers). It is assumed that UGB effectiveness is greater among branticipants who blog, comment on stories, upload videos, etc. than among lurkers who read the web site without actively contributing. This hunch is backed by the mere exposure effect by which people tend to develop a preference for things merely because they are familiar with them.[84] Presumingly, this familiarity effect becomes even stronger with active involvement. As shown in advertising research, however, high exposure may also lead to ambivalence because it brings about a large number of associations both favourable and unfavourable.[85] Since UGB programmes have just been emerging and are thus new to a lot of consumers, a favourable effect is assumed.

H_{19}	UGB effectiveness is greater with active UGB participants (branticipants) than passive participants (lurkers).

[83] For details on FOURNIER's model see chapter D 3.1.2.1.
[84] For details on the mere exposure effect see amongst others ZAJONC (1968).
[85] For a literature review on advertising studies regarding exposure effect see amonst others BROOKS/HIGHHOUSE (2006).

On the other hand, UGB effectiveness shall be explored for **actual versus potential customers** of the brand. Importance to brand usage as a classification variable is attached by advanced advertising stage models.[86] FOURNIER also incorporated this factor into her cause-and-effect model. However, the direction of influence of brand usage is not clear: Indeed, FOURNIER showed that consumers might build relationships through communication (advertising) without using the brand or having direct experiences.[87] By comparison, brand usage testifies to a stronger brand bond which might boost effects. Estimating brand bond as an essential factor, it is thus assumed that UGB effectiveness is stronger among actual customers.

H_{20}	UGB effectiveness is greater with actual customers than potential customers.

3.2.4 Assumed moderators

The relation between UGB attitude as the key independent variable and consumer-brand relationship (CBR) as the key dependent variable may be overshadowed by third variables with a moderator function. According to BARON/KELLY a moderator "*...partitions a focal independent variable into subgroups that establish its domains of maximal effectiveness in regard to a given dependent variable*".[88] That is, a moderator affects the direction and/or strength of the predictor-criterion relation so that the relation changes as a function of the moderator variable.[89] The assumption is that the UGB-CBR relation may be inconsistent, that is, holding in one UGB programme related setting or for one user sub group but not for another. In the following, assumed interaction effects regarding the UGB-CBR relation are described.

Most moderator variables were already introduced as assumed determinants of UGB attitude.[90] This is not regarded contradictory since different aspects are highlighted: For instance, Web2.0 experience as a user personality factor may be regarded a determinant of UGB attitude in case both variables correlate, i.e. heavy web users like web based UGB programmes more than weak web users. On the other hand, Web2.0 experience may be regarded a moderator of the UGB-CBR relation if

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[86] For details on communication effectiveness models see chapter D 03.1.1.

[87] See FOURNIER (1994), pp. 181 et seqq.; 195; 270. Advertising is regarded as a prerequisite for brand knowledge development.

[88] BARON/KENNY (1986), p. 1173. The moderator is to be distinguished from a mediator which represents "*...the generative mechanism through which the focal independent variable is able to influence the dependent variable of interest*" (ibid.).

[89] For an in-depth conceptual and strategic consideration of moderator effects (in comparison to mediating effects) see ibid., pp. 1174 et seqq.

[90] For hypotheses on determinants of UGB attitude see chapter D 2.22.2.

Web2.0 experience changes the strength and/or direction of this relation, i.e. the impact of UGB attitude on the consumer-brand relationship is stronger among heavy Web2.0 users.

As in the case of determinants, programme and user personality related factors are considered. When asking by what **programme related factors** UGB attitude affects the consumer-brand relationship, perceived fit between the sponsored UGB programme and the brand as well as the attitude toward stimulated UGC within the UGB programme are assumed to act as moderators. In the first case, the value of UGB as specific brand offering is investigated. In the latter case, the role of the actual UGB implementation is examined. Both factors are thereby assumed to positively moderate the UGB-CBR relation.

H_{21}	The impact of the attitude toward the sponsored UGB programme on the consumer-brand relationship is the stronger... ...the better the perceived fit between the UGB programme and the brand.
H_{22}	...the stronger the attitude toward stimulated UGC within the UGB programme.

With respect to the attitude toward stimulated UGC, not only the interaction effect on the UGB-CBR relation but also the main effect on CBR is of interest. The question is whether the overall UGB programme idea (e.g. blog, challenge) or the actual user generated output (e.g. popular blog entries, winning videos) is more effective in terms of the consumer-brand relationship. Taking the innovativeness and power of open brand communication as a whole into account, a stronger direct impact of general UGB attitude is hypothesized.

H_{23}	Attitude toward the sponsored UGB programme has a stronger influence on the consumer-brand relationship than attitude toward stimulated UGC.

In terms of **user related factors**, it is regarded essential to inquire to what extent Web2.0 experience and innovativeness affect the impact of UGB attitude on the consumer-brand relationship. That is, the character of UGB programmes as a web offering as well as creative offering is investigated. Web2.0 experience was validated as moderator in a comparable study by THORBJORNSEN/SUPPHELLEN/NYSVEEN et al.[91]

[91] See also in the following THORBJØRNSEN/SUPPHELLEN/NYSVEEN et al. (2002), pp. 17 et seqq. The study was based on the conceptual framework of HOLLAND/BAKER (2001) and comprised an experiment with two samples (N=62; N=61). Web experience is referred to as internet experience.

The scholars proved that the higher the internet experience of consumers the stronger was the consumer-brand relationship developed through personalised web sites. Reasons were the interest in efficient information search and hypermedia content access, so-called 'machine interactivity'.[92] On the contrary, they found that customer communities developed stronger consumer-brand relationships if consumers had limited internet experience. These findings are supported by results from WOM and personal influence research showing that novices were more susceptible to such risk-reducing information sources than experts.[93] Thus, it is concluded that the causality between the UGB attitude and the consumer-brand relationship may be moderated by a user's Web2.0 experience.[94] Speculative at this point appears the direction of influence. Following the findings of THORBJORNSEN/SUPPHELLEN/NYSVEEN et al. it is essential to decide whether to associate sponsored UGB programmes with the pattern of customer communities or personalised web sites. Highlighting the technology seduction aspect, the latter pattern is followed, suggesting a stronger effect of UGB programmes for experts in Web2.0.

H_{24}	The impact of the attitude toward the sponsored UGB programme on the consumer-brand relationship is the stronger... ...the higher the user's Web2.0 experience.

Regarding innovativeness, no empiric studies were found backing an interaction effect in terms of the UGB-CBR relation. With regard to the innovative and creative nature of UGB programmes, however, a positive interaction effect is hypothesized.

H_{25}	The impact of the attitude toward the sponsored UGB programme on the consumer-brand relationship is the stronger... ...the higher the user's innovativeness.

Moreover, the role of product category involvement and opinion leadership shall be examined. In a similar model, WENSKE could not confirm an interaction effect of these

[92] NOVAK/HOFFMAN/YUNG also proved in their study (N=1,962) on customer experience in online environments that over time, web navigation became more task-oriented (see NOVAK/HOFFMAN/YUNG (2000), p. 34).

[93] For details about personal influence research see amongst others CIALDINI (2001).

[94] Since UGB programmes are based on participatory features of Web2.0, e.g. 'live' commenting, ranking, uploading and sharing files, web experience is narrowed down to Web2.0 experience. For a differentiation of web experience according to the purpose of usage (e.g. fun, recreational, experiential versus work-related) also see NOVAK/HOFFMAN/YUNG (2000), p. 40.

two factors, but found a direct positive impact on the consumer-brand relationship.[95] Thus, it is assumed that both product involvement and opinion leadership have a rather direct than moderating influence.

H_{26}	Product category involvement has a rather direct than moderating influence on the consumer-brand relationship.
H_{27}	Opinion leadership has a rather direct than moderating influence on the consumer-brand relationship.

3.3 Specification of the conceptual model for UGB effectiveness

To enable quantitative validation by means of empiric data, the constructed set of hypotheses is transferred to the graphical and mathematical structure of a comprehensive structural equation model.[96] The **total UGB effectiveness model** includes two independent variables: attitude toward the sponsored UGB programme and attitude toward the ad. It is assumed that these two factors are the cause[97] responsible for bringing about change in the outcome variables,[98] i.e. consumer-brand relationship, attitudinal effects and behavioural effects. Since a direct influence of UGB attitude on the named dependent variables is hypothesized, the constructs are directly connected by corresponding paths (H_{13} to H_{15}). To capture the hypothesized mediating effects, consumer-brand relationship, attitudinal effects and behavioural effects are interlinked (H_{14a}, H_{15a}). Since attitude toward the sponsored UGB programme and attitude toward the ad are both considered as independent variables, their impact on the outcome variables can be directly compared (H_{16} to H_{18}).

In order to measure **UGB effectiveness among different user groups**, only the UGB driven paths of the total model are considered. This partial model is run for UGB participation (H_{19}) and brand usage (H_{20}) related sub populations. The objective is to compare UGB effectiveness among active and passive UGB participants and actual and potential customers respectively.

In order to detect **interaction effects**, the moderating impact of several variables on the relation between UGB attitude and the consumer-brand relationship – the main

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[95] See WENSKE (2008a), pp. 230 et seqq.
[96] For an in-depth consideration of structural equation models see chapter E 2.2.1.
[97] Also known as independent, latent exogenous or change variable (see amongst others KUMAR (2005), p. 60; MCDAVID/HAWTHORN (2006), p. 452).
[98] Also known as dependent or latent endogenous variables (see amongst others KUMAR (2005), p. 60; MCDAVID/HAWTHORN (2006), p. 452).

path of the core model – is examined. The interaction model suggests that the impact of UGB attitude is moderated by the level of assumed programme related factors, i.e. UGB-brand fit and attitude toward stimulated UGC (H_{21}, H_{22}) and user related factors, i.e. Web2.0 experience and innovativeness (H_{24}, H_{25}). In terms of product category involvement and opinion leadership interaction effects are compared with main effects (H_{26}, H_{27}). Main effects are also considered regarding the UGC attitude variable (H_{23}). Figure 35 depicts all partial models of the UGB effectiveness model including corresponding hypotheses.

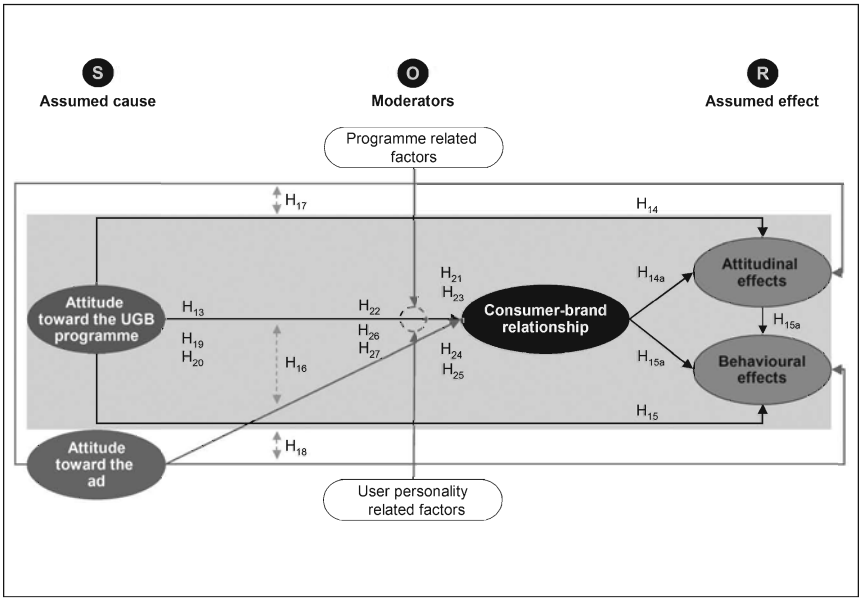

Figure 35 Conceptual model of UGB effectiveness
Source: Own illustration

3.4 Extra: UGB effectiveness model for the internal target group

Based on the developed UGB effectiveness model for the external target group, a similar model shall be designed in order to detect the impact of UGB attitude on the relationship, attitude and behaviour of employees toward the brand. To measure the relatedness of an employee to the brand, the **brand commitment** construct is ap-

plied. Brand commitment is defined as "*...extent of psychological attachment of employees to the brand, which influences their willingness to exert extra efforts toward reaching the brand goals...*"[99] That is, unlike the consumer-brand relationship which refers to "*...the degree of the subjectively perceived cognitive and affective relatedness of a consumer to a brand*"[100], brand commitment additionally implies an action component. In this sense, brand commitment cannot be treated as internal equivalent of the consumer-brand relationship. However, it still serves – simplified – as a relationship indicator. Therefore, it is proposed to integrate brand commitment into the internal UGB effectiveness model, taking on the 'role' of the consumer-brand relationship.

This positioning is backed by identified determinants and effects of the brand commitment construct which suit the structure of the (external) UGB effectiveness model. On the one hand, internal brand communication is proven to be a determinant of brand commitment.[101] ZEPLIN provided evidence that the perception of brand related central, line, lateral and external communication has a substantive positive influence on brand commitment. Although internal brand communication was measured by means of multi dimensions within that study (e.g. brand relevance transfer, brand identity operationalisation) and thus did not refer to a single communication programme, the results imply that an internal sponsored UGB programme might also determine brand commitment.

H_{28}	Attitude toward the sponsored UGB programme has a positive influence on the brand commitment.

With respect to the effects perspective, ZEPLIN proved a positive influence of brand commitment on **brand citizenship behaviour** (BCB) defined as "*...the intention of each employee to voluntarily exhibit certain generic (brand- and sector-independent) behavioural characteristics outside of the formally defined role expectation system, which strengthen the identity of the brand*"[102] Brand citizenship thereby comprises three dimensions: willingness to help, brand enthusiasm and willingness to develop the brand and oneself.[103] Although this construct is not identical with attitude and be-

[99] BURMANN/ZEPLIN (2005a), p. 284, also see BURMANN/MEFFERT/KOERS (2005), p. 10; BURMANN/ZEPLIN/RILEY (2008), p. 3 and chapter B 2.2.
[100] MEFFERT/BURMANN/KIRCHGEORG (2008), p. 367 with reference to BURMANN/MEFFERT (2005b), p. 101 (translated from German).
[101] See also in the following ZEPLIN (2006), pp. 213 et seqq.
[102] BURMANN/ZEPLIN/RILEY (2008), p. 3.
[103] See ZEPLIN (2006), pp. 198 et seqq.

haviour toward the brand within the external UGB effectiveness model, it shall be taken as basis for detecting the impact of the attitude toward an internal UGB programme on employee attitudes and work behaviour in accordance with the brand identity. Similar to the external UGB effectiveness model, it is hypothesized that the liking of a sponsored (internal) UGB programme might directly exert a positive influence on the brand citizenship behaviour, i.e. strengthen the intention of an employee to voluntarily act in favour of the brand beyond formal expectations. Simultaneously, a mediating role of brand commitment regarding the UGB-BCB relationship is assumed, taking the findings of ZEPLIN and – in the broader sense – the learning from consumer-brand relationship studies into account.

H_{29}	Attitude toward the sponsored UGB programme has a positive influence on the brand citizenship behaviour.	
	H_{29a}	Brand citizenship behaviour effects are, however, mediated by the brand commitment.

From the theoretical considerations follows a structural model comprising UGB attitude as independent variable and brand commitment (BC) and brand citizenship behaviour (BCB) as dependent variables ($H_{28;}$ H_{29}) (Figure 36). Since brand citizenship behaviour consists of the three dimensions willingness to help, brand enthusiasm and willingness to develop, direct paths are assumed to all of these variables. Besides, the hypothesized mediating effect of brand commitment is taken into account by linking BC with all BCB dimensions (H_{29a}).

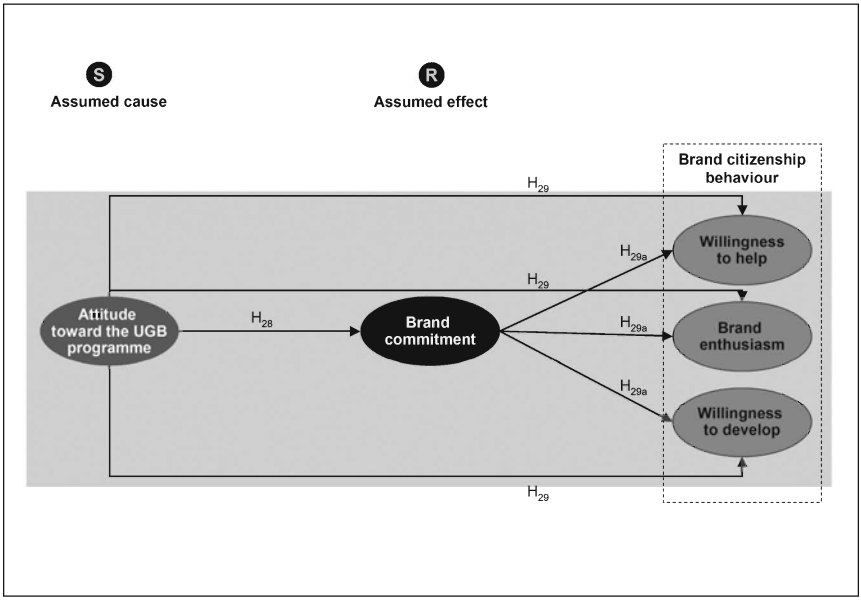

Figure 36 Conceptual model of UGB effectiveness for the internal target group
Source: Own illustration.

Basically, the interaction model and cause model developed for the external target group could also be integrated into the UGB effectiveness model for the internal target group. However, since this study focuses on the external target group and the UGB analysis among employees is rather understood as an extra, only the core UGB effectiveness model shall be estimated.

4 Summary of hypotheses and overall UGB model

In the following, the 32 hypotheses (29 main and three sub hypotheses) derived from the literature review in the previous chapters are displayed in summary. The first set comprises 12 hypotheses regarding **determinants of UGB attitude** split into six sub groups: usage, demographics, UGB programme, category, user personality and power of impact. The second set of hypotheses refers to the **impact of UGB attitude** – the main research problem of this study. Those 20 hypotheses consider 'pure' UGB effectiveness, UGB effectiveness compared to advertising, multi group comparisons, programme and user personality related moderators of UGB effectiveness as well as UGB effectiveness regarding the internal target group (see Table 6).

Determinants of UGB attitude	
Usage	
H_1	Attitude toward the sponsored UGB programme is the stronger… …the more active the user's participation in the UGB programme.
H_2	…the heavier the brand usage.
Demographics	
H_3	Attitude toward the sponsored UGB programme is the stronger… …the younger the user.
H_4	…the more educated the user.
H_5	Attitude toward the sponsored UGB programme is not determined by gender.
UGB programme	
H_6	Attitude toward the sponsored UGB programme is the stronger… …the stronger the attitude toward stimulated UGC within the UGB programme.
H_7	…the better the perceived fit between the UGB programme and the brand.
Category	
H_8	Attitude toward the sponsored UGB programme is the stronger… …the stronger the product category involvement.
User personality	
H_9	Attitude toward the sponsored UGB programme is the stronger… …the higher the user's innovativeness.
H_{10}	…the stronger the user's opinion leadership.
H_{11}	…the higher the user's Web2.0 experience.
Power of impact	
H_{12}	UGB programme related factors and participation have a stronger substantive influence on the attitude toward the sponsored UGB programme than user related factors.

To be continued

Impact of UGB attitude		
UGB effectiveness		
H_{13}	Attitude toward the sponsored UGB programme has a substantive direct positive influence on the consumer-brand relationship.	
H_{14}	Attitude toward the sponsored UGB programme has a substantive direct positive influence on attitudinal effects toward the brand.	
	H_{14a}	Attitudinal effects are, however, mediated by the consumer-brand relationship.
H_{15}	Attitude toward the sponsored UGB programme has a substantive direct positive influence on behavioural effects toward the brand.	
	H_{15a}	Behavioural effects are, however, mediated by the consumer-brand relationship and attitudinal effects.
UGB effectiveness compared to advertising		
H_{16}	Attitude toward the sponsored UGB programme exerts a stronger substantive direct positive influence on the consumer-brand relationship than attitude toward the ad.	
H_{17}	Attitude toward the sponsored UGB programme exerts a stronger substantive direct positive influence on attitudinal effects than attitude toward the ad.	
H_{18}	Attitude toward the sponsored UGB programme exerts a weaker substantive direct positive influence on behavioural effects than attitude toward the ad.	
Multi group comparison		
H_{19}	UGB effectiveness is greater with active UGB participants (branticipants) than passive participants (lurkers).	
H_{20}	UGB effectiveness is greater with actual customers than potential customers.	
Moderators of UGB effectiveness		
Programme related factors		
H_{21}	The impact of the attitude toward the sponsored UGB programme on the consumer-brand relationship is the stronger... ...the better the perceived fit between the UGB programme and the brand.	
H_{22}	...the stronger the attitude toward stimulated UGC within the UGB programme.	
H_{23}	Attitude toward the sponsored UGB programme has a stronger influence on the consumer-brand relationship than attitude toward stimulated UGC.	
User personality related factors		
H_{24}	The impact of the attitude toward the sponsored UGB programme on the consumer-brand relationship is the stronger... ...the higher the user's Web2.0 experience.	
H_{25}	...the higher the user's innovativeness.	
H_{26}	Product category involvement has a rather direct than moderating influence on the consumer-brand relationship.	
H_{27}	Opinion leadership has a rather direct than moderating influence on the consumer-brand relationship.	
Extra: Internal UGB effectiveness		
H_{28}	Attitude toward the sponsored UGB programme has a substantive direct positive influence on the brand commitment.	
H_{29}	Attitude toward the sponsored UGB programme has a substantive direct positive influence on the brand citizenship behaviour.	
	H_{29a}	Brand citizenship behaviour effects are, however, mediated by the brand commitment.

Table 6 **Overview of research hypotheses**
Source: Own illustration.

The majority of the constructed hypotheses are classified as **hypotheses of difference**, stipulating that there will be a difference between two situations, outcomes, etc. but not specifying its magnitude.[104] The hypotheses regarding moderators can also be considered as hypotheses of association since the extent of a relationship in terms of the effect of different treatment groups on the dependent variable is stipulated.[105] Although "real" hypothesis testing demands specific assumptions with respect to the strength of an assumed relationship between constructs, the validation of the assumed signs of relations is mostly considered sufficient for hypothesis testing in the broader sense.[106]

To enable quantitative validation by means of empiric data, the constructed hypotheses are transferred to the structure of path models (see Figure 37).[107] In the **UGB effectiveness model**, attitude toward the sponsored UGB programme constitutes an independent variable, serving as an explanatory concept. While it is not explained itself in the effect model, it is characterised by the **antecedent cause model**, suggesting five groups of determinants.[108]

In the effect model, attitude toward the ad is included as a second independent variable so that UGB effectiveness can be directly compared to ad effectiveness. Consumer-brand relationship, attitudinal and behavioural effects are regarded dependent variables which are explained by causal relationships inherent to the model. Both direct and indirect influences exerted by UGB attitude and ad attitude respectively on each dependent variable are considered. In the case of indirect influence, the consumer-brand relationship and also attitudinal effects are assumed to take on a mediator role. Possible programme and user personality related moderators overshadowing the key relation between UGB attitude and consumer-brand relationship are detected by means of an interaction model.

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[104] See amongst others KUMAR (2005), p. 77. In contrast, a hypothesis of point-prevalence stipulates almost the exact prevalence of a situation or outcome of a treatment programme in quantitative units.

[105] See amongst others ibid., p. 77.

[106] See BACKHAUS/ERICHSON/PLINKE et al. (2003), p. 353.

[107] For mathematical basics of a structural equation model see chapter E 2.2.1; for the measurement models of the inherent latent variables see chapter E 3.

[108] For the conceptual model of UGB determinants see chapter D 2.3.

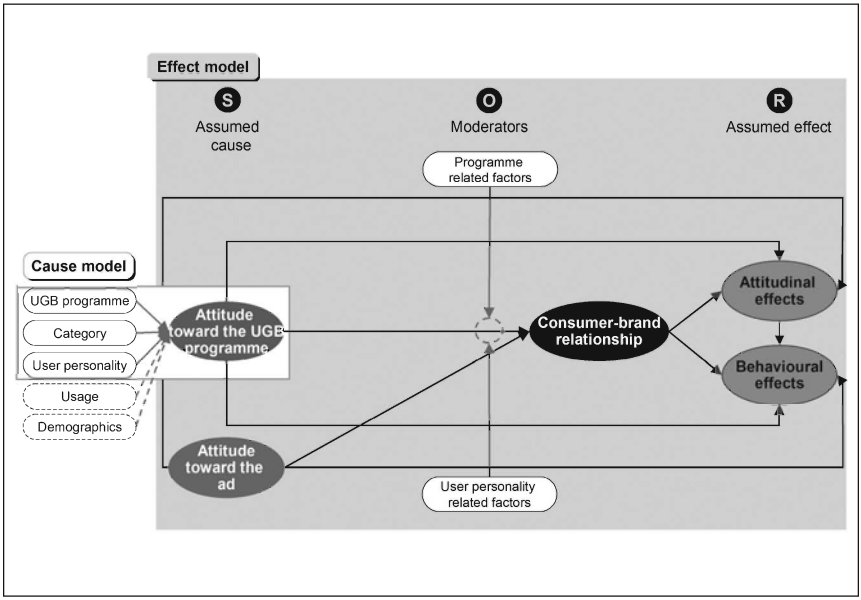

Figure 37 Integrated conceptual UGB model
Source: Own illustration.

As an extra, a UGB effectiveness model for the **internal target group** is developed. This model explains the direct and indirect impact of UGB attitude on the brand commitment and the dimensions of brand citizenship behaviour.[109]

The magnitude or strength of the described cause-and-effect relationships is likely to be affected by further extraneous variables.[110] It is to be noted that in any study attempting to establish a causal relationship, chance or random variables[111] may occur next to independent and extraneous variables, too.

[109] For a detailed description of the internal UGB effectiveness model see chapter D 3.43.4.
[110] Extraneous variables are several other factors in a real life situation that may affect changes in the dependent variable but are not measured within the study (see amongst others KUMAR (2005), pp. 105 et seq.).
[111] Chance or random variables cause change in the dependent variable because of the respondent's state of mood or ambiguity in the research instrument (see amongst others ibid., pp. 86 et seq.).

E Empiric model validation and hypothesis testing

The conceptual framework elaborated in section D establishes the basis of the empiric analysis. The constructed hypotheses are now tested by applying the specified model for UGB determinants and notably UGB effectiveness to an empiric data set. First, the research design and statistics are introduced which shall be applied for hypothesis testing. Then the measurement models are validated. Based on that, descriptive and inferential analyses are conducted, resulting in the concluding verification of the constructed hypotheses.

U. Arnhold, *User Generated Branding*, DOI 10.1007/978-3-8349-8857-7_5,

1 Research design

A research design[1] can be classified from three perspectives: the nature of investigation, the number of contacts with the study population, and the reference period.[2] With regard to the nature of investigation, the study is classified as **non-experimental**.[3] That is, unlike experimental designs[4] the assumed cause-and-effect relationship is not studied by introducing an intervention as cause of change, but the cause is linked to the outcome retrospectively.

With regard to the number of contacts with the study population, a **cross-sectional study design**[5] is selected. In general, longitudinal designs[6] or before-and-after study designs[7] are considered more appropriate for measuring the impact or effectiveness of a programme in relation to time. These approaches, however, bear disadvantages such as higher cost and effort to collect two data points and difficulties in implementation due to possible attrition in the study population.[8] Besides, a reactive effect might occur if the research instrument itself educated the study population and thus affected the dependent variable. The mere expression of an attitude in response to a research instrument might also cause a possible shift of attitude between the two contacts, known as regression effect. Thus, with regard to the purpose and limited resources of this study, a cross-sectional study design comprising various study objects is considered more efficient. Such an approach of evaluating a programme that is already implemented is regarded a typical scenario in marketing research.[9]

To find out first-hand the effectiveness of sponsored UGB programmes, the study

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1 A research design is a plan, structure and strategy for data collection and analysis aiming at obtaining valid, objective and accurate answers to the research questions with economy in procedure (see amongst others McDAVID/HAWTHORN (2006), p. 449; KERLINGER (1986), pp. 279 et seq.; SELLTIZ/JAHODA/DEUTSCH et al. (1962), p. 50).

2 See KUMAR (2005), p. 93.

3 A non-experimental design studies relationships by attempting to determine the cause by observing the effects (see ibid., p. 100).

4 An experimental design studies relationships by starting from the cause to establish the effects. For a detailed definition of experiments see ibid., pp. 101 et seqq.; BEREKOVEN/ECKERT/ELLENRIEDER (2004), p. 156.

5 Cross-sectional study designs measure a phenomenon by taking a cross-section of the study at one time. Given only one contact with the study population, they cannot measure change (see BABBIE (1989), p. 89).

6 Within a longitudinal study design, the study population is visited a number of times at regular intervals over a longer period In order to measure the extent of change.For details on longitudinal studies see KUMAR (2005), pp. 97 et seq.

7 Before-and-after study designs allow gaining baseline date to construct before-and-after comparisons (see ibid., pp. 96 et seq.).

8 See also in the following ibid., pp. 96 et seq.; 103

9 See also in the following McDAVID/HAWTHORN (2006), p. 3.

aims at collecting data from **primary sources**[10]. In the following the study objects, sampling procedure and the methods of data collection, processing and editing are introduced. The chapter closes by providing a description of the obtained sample.

1.1 Study objects

In order to verify the theoretical hypotheses a research design with **three separate samples** is chosen. Study objects are 'real life' UGB applications of strong German brands, namely FRoSTA Blog, Beck's Festival Video Challenge and a car brand community[11]. That is, three different brands (FRoSTA, Beck's, car brand) which sponsor three different UGB applications (blog, video challenge, community) in three different industries (food, liquor, automotive) are analysed, enabling comprehensive model testing.

1.1.1 FRoSTA Blog

The first study refers to the German food brand FRoSTA which is one of the largest frozen food producers in Europe. According to company information, FRoSTA is the market leader for frozen ready meals in Germany and frozen fish products in Poland and is represented in various other Central and Eastern European markets.[12] In 2008, FRoSTA Inc made a worldwide turnover of €392M (+12% compared to 2007) and a profit from operations (EBIT) of €18M and employed 1,539 people.[13]

In 2005, the company launched the FRoSTA Blog (see Figure 38) which happens to be the first of its kind for a food brand in Germany.[14] Due to early mover advantage and the strong commitment of the company owner and CEO Felix Ahlers who regularly contributes entries to the web diary, the FRoSTA Blog is considered a prime example for corporate blogging in Germany.[15]

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[10] Primary sources refer to first-hand data while secondary sources refer to existing data that is extracted for the purpose of the study (see amongst others KUMAR (2005), p. 118).
[11] Due to a signed confidentiality declaration the name of the brand is not disclosed.
[12] Markets include Austria, Switzerland, Italy, Hungary, Romania, Czech Republic, Slovakia, and Russia. For further company information see FROSTA (2009c).
[13] See FROSTA (2009b).
[14] For the FRoSTA Blog see FROSTA (2009a).
[15] See IMMARKETINGFORUM (2006).

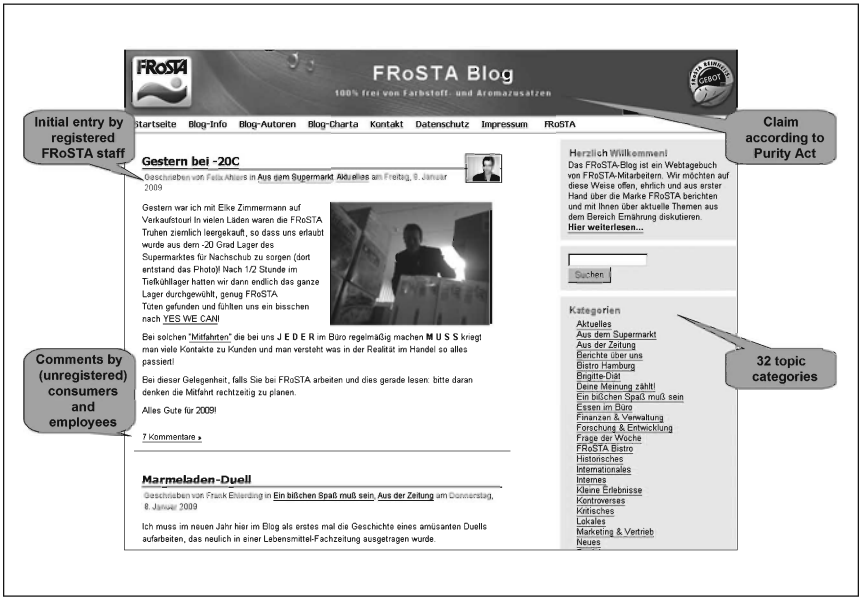

Figure 38 Introduction of the FRoSTA Blog
Source: Adapted from AHLERS (2009b) (screenshot).

Remarkable is the positioning of the FRoSTA Blog within the corporate brand philosophy of transparency and sustainability. In 2003, the company implemented the so-called **Purity Act** which signifies the complete abandonment of the use of additives such as taste enhancers and stabilizers.[16] Thus, claiming "100% free of colouring and aroma additives", the FRoSTA Blog is regarded as an application of the Purity Act in brand communication.[17] That is, the blog entries contributed by both FRoSTA employees and consumers are published immediately without censorship and filtering, allowing an authentic and dynamic online discussion.

Another particularity is that the FRoSTA Blog addresses to **both internal** (notably employees) **and external target groups** (notably brand fans). The initial blog entries are written by registered FRoSTA employees.[18] All articles can be commented on by

[16] For details on the Purity Act see FROSTA (2009c).
[17] See also in the following AHLERS (2009a); IMMARKETINGFORUM (2006).
[18] By June 2009, 32 FRoSTA employees were registered as initial blog authors (see FROSTA (2009a)).

other employees and consumers. Prior registration is not required; comments are published immediately after submitting.

To sum up, the FRoSTA Blog is chosen as a study object to exemplify a corporate blog application. With regard to the integration of UGB applications into the value chain, it can be primarily allocated to the research & development phase, aiming at **idea soliciting**. Since it is addressed to both internal and external target groups, it can also be classified as a tool to strengthen employee and customer retention.

1.1.2 Beck's Festival Video Challenge

The second study refers to the German beer brand Beck's which belongs to the leading global brewer Anheuser–Busch InBev.[19] According to company information, Beck's is Germany's number one export beer, present in more than 100 countries worldwide. Beck's is thereby positioned as one of Anheuser–Busch InBev's global flagship brands. The consolidated group revenue in 2008 amounted to €16B (+5.2% compared to 2007) resulting in a profit from operations (EBIT) of €3.6B.[20] Anheuser–Busch InBev employs about 120.000 people.

Despite a rich heritage of more than 125 years the Beck's brand has been constantly revitalized by packaging and flavour innovations as well as **participatory brand communication**. The study object Beck's Festival Video Challenge is part of a series of programmes launched under the claim "The Beck's Experience".[21] Ongoing initiatives such as the band challenge "Beck's On Stage Experience" for young musicians and the support programme "Beck's Fashion Experience" for young designers make the target group join in. In particular, the "Beck's it! Design Challenge" in 2006 attracted the researcher's interest since consumers were invited to submit design proposals for self-created bottle labels and packaging.

Against this background, the new initiative "Beck's Festival Video Challenge" was chosen as study object to exemplify a **temporary video challenge** (see Figure 39). From February through March 2009, Beck's asked consumers via the Beck's web site to contribute a self-produced video which should show how they prepared for the music open air festival season. That is, the challenge topic is not directly linked to core brand attributes but the brand's sponsoring activities. The best entries were preselected by a jury and then published at the challenge web site for public voting. The three winners got cash and material prizes.

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[19] For further company information see ABInBev (2009).
[20] See ABInBev (2008).
[21] See also in the following Beck's (2009b).

Since the Beck's challenge is primarily understood as competition for prizes and no further usage of the user generated videos for official brand communication is intended, the initiative is rather classified as **customer acquisition and retention tool** than crowd sourcing. Due to the format and topic choice, not only brand fans but also video and music enthusiasts were addressed. However, the Beck's challenge was not supported by extensive ATL communication.

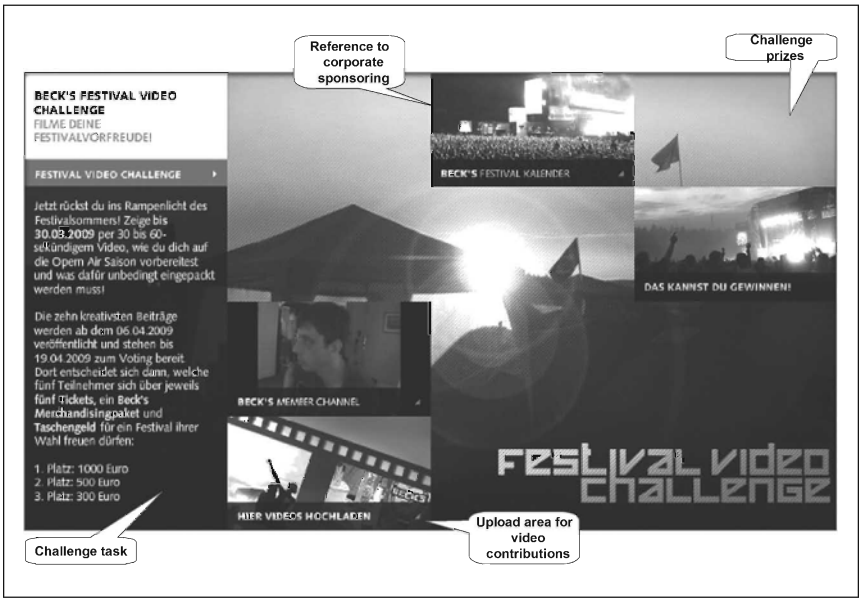

Figure 39 Introduction of the Beck's Festival Video Challenge
Source: Adapted from BECK'S (2009a) (screenshot).

1.1.3 UGC based car brand community

The third study refers to a German volume car brand of worldwide presence and revenues amounting to several billion Euros.[22] Within its comprehensive brand communication mix, the examined car brand has recently launched **participatory programmes** for both external and internal target groups. Following these initiatives, the studied community was launched in December 2008 based on a UGB initiative.

[22] Due to a signed confidentiality declaration of the author against the examined brand the results of this study are presented in a sanitized way.

As a study object, the chosen car brand community is of interest for various reasons: First, this community was built by a **call for content**. Consumers were invited to send in stories about their personal brand experience in past and present.[23] As an incentive, a prize was drawn and the text, photo and/or video contributions were published on the community web site. Second, the call was not only supported by the community web site but also accompanied by an extensive TV and print ad campaign. Thus, **cross media activation** was intended. Third, it was announced that the user contributions might be also used for official brand communication such as advertising. Hence, the community also incorporates the **crowd sourcing** idea in the sense of user generated advertising. Fourth, the community was embedded into an **image campaign**, highlighting the car brand's strong presence in German families over decades. Thus, the modern web-based community format is combined with a nostalgic theme, addressing **all generations** instead of primarily 'digital natives'.

To sum up, the UGC based car brand community is explored within this study with respect to both customer retention and crowd sourcing. Its cross-media set up allows further analysis regarding actual and potential customers and passive and active programme participants. Figure 40 provides a final overview of the three study objects.

[23] By mid June 2009, almost 3,000 stories were contributed to the community.

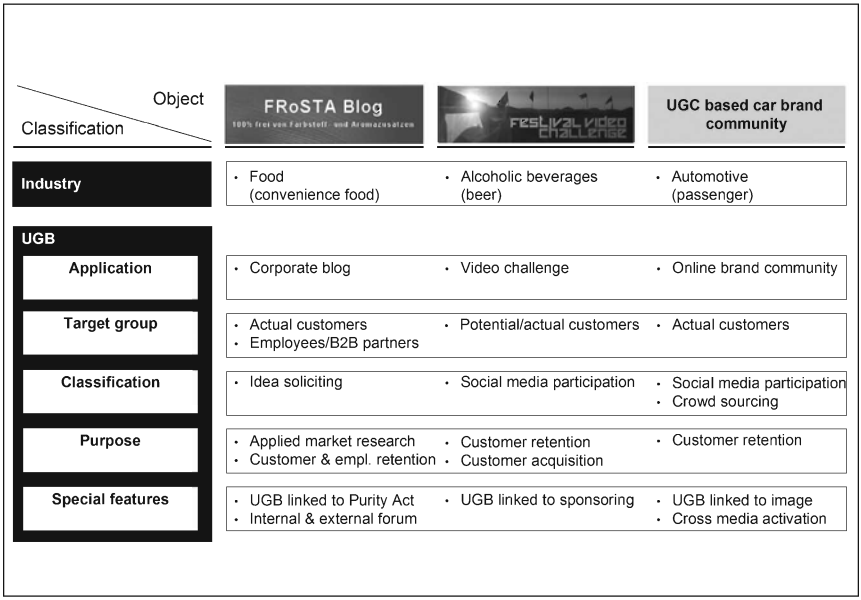

Figure 40 Overview of study objects
Source: Own illustration.

1.2 Sampling and data collection

In order to generate a subset of the study population for statistical analysis, sampling methods[24] within the scope of the cross-sectional study design are applied. In the following, the selected multi-channel approach and questionnaire design is introduced. Furthermore, adaptations resulting from the pre-test are discussed.

1.2.1 Multi-channel design

This study refers to a very large population comprising both actual and potential customers of the three analysed brands FRoSTA, Beck's and the car brand. Not only participants of the respective UGB programmes are thereby addressed but also consumers which were not aware of the programme. The objective is to avoid the phe-

[24] Sampling means in short selecting a few units from the study population to become the basis for predicting the prevalence of the outcome regarding the whole group. For a detailed definition see amongst others KUMAR (2005), p. 164; SCHNELL/HILL/ESSER (2005), p. 284.

nomenon of **self-fulfilling prophecy**.[25] That is, if surveying exclusively active participants of the UGB programme, the prediction of UGB as an effective brand communication tool would cause itself to become true, by the very terms of the prophecy itself, due to the positive feedback between belief and behaviour. Such specious validity would have perpetuated a reign of error. Thus, a **multi-channel design** including anonymous online and offline surveys is applied.

First, participants were recruited via the **online panel**[26] 'Sozioland'.[27] The 'Sozioland' online access pool comprises about 60.000 users who voluntarily registered on the web site and basically agreed to participate in incentivized online surveys. With respect to this study, potential participants out of this pool were selected according to age quota and availability.[28] 8000 users were then invited via email to complete the survey.[29] The online questionnaire comprised all three studied brands; the respondents could choose whether to complete it for all three or just one individual brand. The gross sample understood as number of survey pop-up call-ups includes 2,248 cases. The response rate was 78.20%, resulting in a net participation of N=1,758 including both completed and interrupted interviews. Thereof, 1,129 questionnaires were completely finished, representing a satisfying completion rate of 50.22%. The interruption rate is 35.78% what is regarded typical for online surveys.[30] It is to be noted that a high share of respondents (about 40% of net participation) decided to complete the questionnaire for all three brands. Adding this share to the single-brand interviews, 652 completed questionnaires were recorded for FRoSTA, 633 for Beck's and 610 for the car brand.

From a methodological perspective, recruiting survey participants via a pre-recruited panel of internet users having regard to certain quota is considered a **probability-**

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[25] For a definition of self-fulfilling prophecy see amongst others MERTON (1968), pp. 477 et seqq.

[26] The term online panel is widely used but actually misleading. It is true that panel members participate repeatedly in surveys, but concerning different topics. Thus, in the narrower sense, online panels rather refer to a series of cross-sectional studies than a longitudinal study (see LÜTTERS (2009), p. 52).

[27] For an introduction to 'Sozioland' see SOZIOLAND (2009).

[28] Due to age limits regarding the studied alcoholic beverage and car brands, only adults were targeted according to the following quota: 18-29 years—30%, 30-39 years—30%, 40-49 years—30%, 50-59 years—10%. Since various projects were started at the same time, the selection process also considered the availability of potential participants. In general, registered users are invited bi-weekly.

[29] The invitations were sent on April 21, 2009. The survey was activated from April 21 through 30, 2009.

[30] For further explanation of survey statistics see GLOBALPARK (2007), pp. 452 et seqq.

based method according to COUPER.[31] Still it does not meet the criteria of a probability sample[32] in the narrower sense since the pre-recruiting is based on self-selection.

Second, survey participants were recruited via announcements at **university homepages**[33] in order to target students as a potential customer group of the studied FRoSTA and Beck's brand. Since these members of the population are chosen based on their relative ease of access, this non-probability sampling method is known as convenience sample.[34]

Third, in order to address the group of UGB programme participants, the survey was advertised and linked directly on the **programme websites**, i.e. as a FRoSTA Blog article and as a button on the Beck's Festival Video Challenge page.[35] Regarding the brand-specific FRoSTA questionnaire,[36] a gross sample of N=786 and a net participation of N=498 were recorded, resulting in 264 fully completed questionnaires due to a completion rate of 33.6%. Regarding Beck's[37], a gross sample of N=801 and a net participation of N=551 resulted in 302 fully completed questionnaires due to a completion rate of 37.7%. Compared to the online panel, the interruption rates of those brand-specific surveys are higher (FRoSTA: 47.0%; Beck's: 45.2%) which may be explained by the open access pool: While the online panel is based on users which are willing and experienced in completing surveys, the individual web surveys addressed users who are interested in the topic, but not familiar with surveys.

In terms of methodology, the brand-specific web surveys follow the approach of **recruiting via a social network**.[38] That is, the potential participants are confronted with the online survey during their visit to the respective site and they decide themselves whether they want to participate in. This is also referred to as **self-recruiting**. Since people with a higher interest in the topic or in the incentive[39] are more likely to volunteer for the survey than others, self-recruiting methods are not considered probability samples.

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[31] See COUPER (2000), pp. 477 et seqq.

[32] Within a probability or random sampling design, each element of the population has an equal and independent chance of selection in the sample so that it represents the total sampling population (see amongst others KUMAR (2005), pp. 169 et seq.).

[33] For instance, the survey was posted at the marketing department homepage of Bremen University where the author is affiliated to.

[34] It is also referred to as haphazard, accidental, grab or opportunity sampling.

[35] Regarding the car brand community study, programme participants were not addressed directly via the community website since marketing initiatives were not desired by the sponsoring brand.

[36] The FRoSTA specific questionnaire was activated from January 19 through April 30, 2009.

[37] The Beck's specific questionnaire was activated from February 6 through April 30, 2009.

[38] See also in the following LÜTTERS (2009), pp. 51 et seqq.

[39] As incentive to complete the FRoSTA and Beck's survey, food packages and mechandising products of the respective brands were drawn.

Fourth, **offline surveys** applying traditional paper-and pencil questionnaires were conducted. The objective was to specifically address actual customers at the point of sale beyond the internet environment. Thus, FRoSTA customers were interviewed at the FRoSTA Bistro and at the supermarket during a FRoSTA promotion.[40] This offline surveys resulted in 107 fully completed paper-and pencil questionnaire (Bistro: N=53, supermarket: N=54). In the case of Beck's, actual customers were targeted at a Beck's pub,[41] resulting in 100 completely finished paper-and pencil questionnaires. Again, since members of the population are chosen based on their relative ease of access (customers at a single supermarket, pub, etc.), the approach is referred to as non-random convenience sampling.

Apart from the described consumer surveys, further data has been collected regarding the car brand. On the one hand, an **ad diagnostic study** in terms of the TV commercial which announces the car brand community has been conducted among car drivers.[42] This TV ad post test is based on web interviews and resulted in 261 valid cases. On the other hand, community contributions (e.g. submitted copies, photos, videos) were analyzed according to fixed criteria. This qualitative **content analysis** comprised 348 stories. Although the data of these two studies cannot be used directly for effects model testing, it contains valuable insights which help to interpret the model results and discuss the findings regarding the research problem of identifying drivers of UGB liking.

Figure 41 provides a summary of the described multi-channel research design including sample sizes per channel. A 'gross' sample size of N=3,277 has been accomplished, resulting in a 'net' sample size of N=~2,668 after excluding the additional car brand studies. The 'net' sample size thereby reflects the number of completely finished questionnaires before data cleansing. That is, this number is not identical with the sample size finally applied for hypothesis testing (see chapter E 1.3).

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[40] The FRoSTA Bistro survey was conducted among restaurant guests during lunch time from January 28 through February 3, 2009 in Hamburg. The supermarket survey was conducted during a food promotion on Febuary 5, 2009, in Posthausen near Bremen.

[41] The Beck's pub survey was conducted among pub guests on May 19, 2009 in Bremen.

[42] See MILLWARDBROWN (2009), pp. 64 et seqq. The computer assisted web interviews were conducted from February 23 through March 22, 2009 by the market research agency Millward Brown within the scope of a standardized monthly ad tracking, taking additional questions relevant to this study into account.

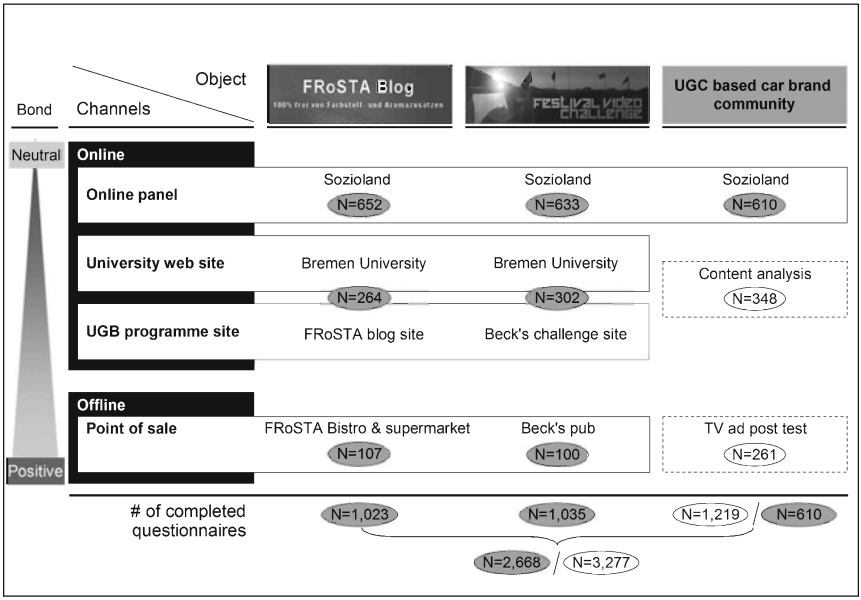

Figure 41 Multi-channel design for data collection
Source: Own illustration.

Although this study is focused on the external target group, data was also collected for the **internal target group** with regard to the FRoSTA Blog. The posted questionnaire at the corporate blog website included a version for employees, resulting in 46 valid questionnaires (net participation: N=61).Since the number of German speaking white-collar employees is limited and only 32 internal blog authors are registered, this sample size is regarded sufficiently representative numberwise. Apart from the questionnaire for employees and consumers, a third version was designed for intermediaries such as suppliers and other business partners. Since the participation was too low (net participation: N=12), however, this group could not be analysed.

As mentioned above, this study is primarily based on **non-probability sampling**.[43] This method was chosen due to the undefined nature of the sampling frame reflecting actual and potential customers of the three studied brands which are – by definition – not registered. Thus, not every single element of the frame could be individu-

[43] Within a nonprobability or non-random sampling design, the selection of elements does not follow the theory of probability but depends on other considerations such as ease of access and expert knowledge (see amongst others KUMAR (2005), pp. 177 et seqq.).

ally identified. Besides, cost and operational concerns were traded off against accuracy requirements and analysis expectations.[44] Regarding the point of sales surveys, for instance, the applied method of convenience sampling is an established method for pilot testing. Arguments for its usage within this study include that the research question could be adequately answered by the particular convenience sample and that there were no reasons to believe that it would behave differently than a random sample from the population.

However, the results of non-probability sampling are to be used with caution. Strictly speaking, it cannot be applied to scientifically infer from the sample to the general population. Since the sample is rather self-selected than random, the so-called **self-selection error**[45] may be introduced, making an accurate representation of the broader population uncertain due to distortions regarding availability and submissiveness. Basically, non-probability sampling does not allow the estimation of sampling errors.[46] That is, the probabilistic estimates of the likely size of the sampling error – often expressed in terms of the standard error – can only be accurately provided for observations collected from a random sample.

Within those limitations of non-probability sampling, this study aims at accomplishing the highest possible representativeness of results by applying a multi-channel design as introduced above. A further plus factor is the large sample size of about 3,000 cases in total. As a general rule, the larger the sample size, the more accurate the findings will be.[47]

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[44] According to sampling theory, the selection of the sample shall be guided by the principles of avoidance of bias and attainment of maximum precision within the limitation of available resources (see amongst others ibid., pp. 165 et seq.).

[45] It is to be noted that self-selecting bias is a major problem of mailed questionnaires in general due to a lower response rate compared to collectively or publicly administered questionnaires (see ibid., p. 130).

[46] Sampling error—also known as estimation error—is the error caused by observing a sample instead of the whole population. In most cases, there will be a difference between the sample statistics and the true population mean which is attributable to the selection of the sample units (see ibid., pp. 166 et seq.).

[47] See amongst others ibid., pp. 165 et seq. The degree of certainty is also influenced by the extent of variation in the sampling population.

1.2.2 *Questionnaire design*

As mentioned in the chapter above, the data is collected primarily by means of **questionnaires**[48] as the interview tool.[49] This approach is preferred to an interview schedule[50] since it offers greater anonymity and enables to reach a higher number of respondents at lower time and by means of less financial and human resources.[51] With regard to the nature of the investigation and the literacy of the study population, the usage of questionnaires is regarded appropriate. General disadvantages of questionnaires such as the lacking opportunity to clarify issues and supplement with further information, the influence of the knowledge of other questions on the response behaviour and the limitation of spontaneous answers as well as the opportunity to consult others before responding were taken into account.[52]

While traditional paper and pencil questionnaires were used at the point of sales, the majority of the consumer interviews were conducted by means of **online questionnaires**. The questionnaires were thereby transmitted electronically so that the probands were exposed to it in front of their own computers. By now, the online method has evolved to the second most frequent applied market research method after telephone survey.[53] LIEBIG/MÜLLER proved that there is no divergence between electronic questionnaires and paper and pencil questionnaires with regard to the response behaviour of the probands and the overall empiric results.[54] It is to be noted that some older studies had dissenting findings[55]; however, they referred to outdated electronic interview techniques. Overall, electronic questionnaires are considered easier to handle than paper based versions:[56] On the one hand, they facilitate the use of item branching and accelerate the completion of the form and thus increase the response rate. On the other hand, a higher efficiency and effectiveness with regard to data

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[48] A questionnaire is a written list of questions to which the answers are recorded by the respondents themselves (see ibid., p. 126).

[49] For details on interviewing see amongst others ibid., pp. 123 et seqq.

[50] In the case of an interview schedule the interviewer asks the questions and records the answers of the respondents (see ibid., p. 126).

[51] See ibid., p. 130.

[52] For more details about disadvantages of questionnaires see ibid., pp. 130 et seq.

[53] In Germany, 27% of interviews by market and social research institutes were conducted online (see ADM (2008), p.12).

[54] See LIEBIG/MÜLLER (2005).

[55] Some studies found that electronic questionnaires evoked less bias towards socially desired responses and a more open response behaviour compared to paper based questionnaires (DAVIS/COWLES (1989); LAUTENSCHLAGER/FLAHERTY (1990)). Other studies showed contrasting outcomes (see KIESLER/SPROULL (1986); MARTIN/NAGAO (1989)).

[56] For a comparison between electronic and paper and pencil questionnaires see also in the following LIEBIG/MÜLLER/BUNGARD (2004).

processing and analysis is observed since no data transmission is needed and thus transcription errors are avoided.

The **questionnaire design** is based on the recommendations in the academic literature[57] and the experiences at the Chair of Innovative Brand Management (LiM) at the University of Bremen.[58] With regard to the desired completeness of answers and data analysis facilitation mostly **closed-ended questions** are used.[59] The disadvantages of those 'ready made' categories, including the lack of depth and variety, the greater possibility of investigator bias and the conditioning of the respondent's thinking are taken into account. When formulating the questions a simple and everyday language was applied based on the principles of EDWARDS.[60] Notably, ambiguous, leading or judgemental and double-barrelled[61] questions were avoided.

In order to measure the intensity of respondents' attitudes towards UGB and other issues, **attitudinal scales**[62] are used. To enable multivariate analysis, a summated rating scale – commonly known as the **Likert scale**[63] – is selected. As common in social science research, this rating scale is treated as interval scale[64], assuming the scale levels represent intervals with equal distance.[65] Strictly speaking, however, rating scales are to be allocated to ordinal scales[66] since the assumption of scale equi-

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57 See amongst others SCHNELL/HILL/ESSER (2005), pp. 319 et seqq.; HOMBURG/KROHMER (2003), pp. 231 et seqq.

58 See amongst others BLINDA (2006), pp. 215 et seqq.

59 In a closed-ended question the possible answers (categories) are set out in the questionnaire. Open-ended questions are only used twice within the questionnaire: first, to allow customers to provide individual feedback regarding their attitude toward the respective UGB application and second, to collect email addresses of respondents willing to take part in the drawing of the incentives. For details on closed- and open-ended questions see amongst others KUMAR (2005), pp. 132 et seq.

60 According to EDWARDS statements in a questionnaire shall be written in a simple, precise, short and direct manner containing only one thought each (see EDWARDS (1957)).

61 A double-barrelled question is a question within a question so that the respondent does not know which part to answer (see amongst others KUMAR (2005), pp. 136 et seq.).

62 Attitudinal scales provide techniques to combine the attitudes towards different aspects into one overall indicator. Attitudinal scale types include the Likert, Thurstone and Guttman scale (see amongst others ibid., pp. 145 et seqq.).

63 In a summated rating or Likert scale, each statement on the scale has equal importance, weight or 'attitudinal value' so that the intensity of an attitude in relation to another person can be measured (ibid., pp. 145 et seqq.).

64 An interval scale uses equally spaced intervals as units of measurement with an arbitrary starting and terminating point (see amongst others STEVENS (1946), pp. 677 et seqq.).

65 See also in the following BACKHAUS/ERICHSON/PLINKE et al. (2005), p. 5; BORTZ (2005), pp. 18 et seqq.

66 An ordinal or ranking scale ranks the subcategories in an ascending or descending order according to the magnitude of variation in the variable. In theory, the distance between the subcategories is not equal and does not correspond to a quantitative unit of measurement (see STEVENS (1946), pp. 677 et seqq.).

distance is not confirmed. Apart from rating scales, nominal dichotomous scales[67] are applied to measure UGB and advertising awareness.

Within the questionnaire, **5-unit scales** are used to evaluate the values of an item. In academic literature, there is no consensus about the optimum number of scale units.[68] Proponents of the identity-based brand management approach mostly applied scales with five units in previous studies.[69] Compared to 3-unit scales, it allows more differentiation but does not exceed the discrimination ability of probands as 7-unit scales might do.[70] In contrast to even-numbered scales, the chosen 5-unit scale also allows a neutral evaluation between extreme values. The nomenclature ranging from "*I totally disagree*" at the negative pole to "*I totally agree*" at the positive pole[71] corresponds with the numbering of the scale from -2 to +2[72] underlining the evaluative nature of the questionnaire. In addition to the five response units, a "*Don't know*" unit was offered in order to reduce the risk of wrong answers and strengthen the validity of the questionnaire. However, the number of missing values is thereby increased. This scale with consistent item batteries is kept throughout the questionnaire in order to reduce the complexity for the probands and facilitate the analysis since the responses may be put into reference to each other.

The questionnaire is structured into seven **sections** reflecting the research hypotheses. The order of the sections follows a logical progression[73] gradually leading the respondents into the study by starting with simple themes like brand awareness and usage (section I). In the main part, data concerning the evaluation and effects of the UGB programme (II) and the ad (III) as well as regarding the consumer-brand relationship (IV) is collected, reflecting the core latent exogenous and endogenous variables. Filter questions are thereby used to customize the questionnaires according to the given answers (e.g. customer-specific questions) and deepen certain aspects (e.g. specific questions re UGB programme awareness). In the following sections,

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[67] A nominal or classificatory scale enables the classification of individuals, objects or responses on a shared property or characteristic; there is no relationship between the chosen subcategories. If the variable has two categories, it is called dichotomous (see amongst others ibid., pp. 677 et seqq.; KUMAR (2005), pp. 64 et seqq.).

[68] See also in the following STIER (1999), pp. 66 et seqq. The choice of the number of scale units basically depended on the discrimination ability of the probands, the sophistication of the topic, and the data collection method.

[69] See BLINDA (2007).

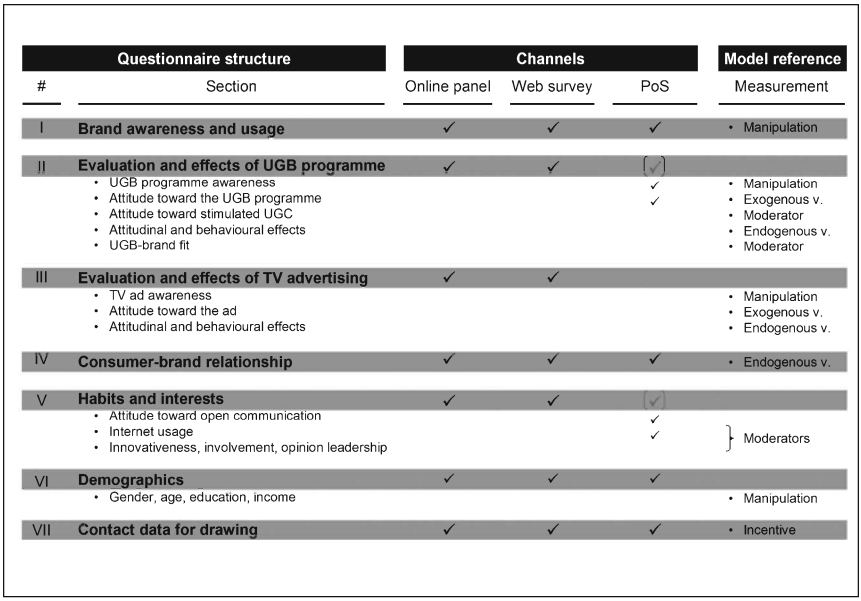
[70] The problem that 7-unit scales might exceed the discrimination ability of probands was observed amongst others by BLINDA (see ibid., p. 212).

[71] The nomenclature follows ROHRMANN who suggests "*Trifft gar nicht zu*" (German for "*I totally disagree*") and "*Trifft völlig zu*" (German for "*I totally agree*") (see ROHRMANN (1978), pp. 222 et seqq.).

[72] See STIER (1999), pp. 79 et seqq.

[73] For details on questionnaire structures see SCHNELL/HILL/ESSER (2005), pp. 319 et seqq.

user related moderators (V) and demographics (VI) are covered. Demographic questions are placed at the end to stimulated response behaviour due to a higher perceived anonymity. In the last section, an email address can be left in order to be considered for the drawing (see Figure 42).



Questionnaire structure		Channels			Model reference
#	Section	Online panel	Web survey	PoS	Measurement
I	**Brand awareness and usage**	✓	✓	✓	• Manipulation
II	**Evaluation and effects of UGB programme**	✓	✓	(✓)	
	• UGB programme awareness			✓	• Manipulation
	• Attitude toward the UGB programme			✓	• Exogenous v.
	• Attitude toward stimulated UGC				• Moderator
	• Attitudinal and behavioural effects				• Endogenous v.
	• UGB-brand fit				• Moderator
III	**Evaluation and effects of TV advertising**	✓	✓		
	• TV ad awareness				• Manipulation
	• Attitude toward the ad				• Exogenous v.
	• Attitudinal and behavioural effects				• Endogenous v.
IV	**Consumer-brand relationship**	✓	✓	✓	• Endogenous v.
V	**Habits and interests**	✓	✓	(✓)	
	• Attitude toward open communication			✓	
	• Internet usage			✓	} Moderators
	• Innovativeness, involvement, opinion leadership				
VI	**Demographics**	✓	✓	✓	
	• Gender, age, education, income				• Manipulation
VII	**Contact data for drawing**	✓	✓	✓	• Incentive

Figure 42 **Structure of the questionnaire according to channels**
Source: Own illustration.

The comprehensive questionnaire including all seven sections is only used online. Due to time restrictions at the point of sale, the paper and pencil version focuses on the key variables attitude toward the UGB programme and consumer-brand relationship plus manipulation factors such as brand und UGB usage and demographics. To exemplify, the paper and pencil questionnaire as applied within the Beck's pub survey is depicted in Appendix XXV. An extract of the questionnaire used in the online panel survey can be found in Appendix XXVI.

1.2.3 Pre-test

Pre-testing, also known as field testing, is regarded an integral part of instrument construction.[74] The pre-test was conducted in two steps:[75] First, the questionnaire was examined by ten **topic experts**, including academic employees of the Chair of Innovative Brand Management at the University of Bremen as well as representatives of the partnering companies FRoSTA, Beck's and the car producer.[76] The objective was to examine the selection of suitable questions and scales to ensure that the proposed questionnaire is an appropriate research tool to test the developed hypotheses. As result of this first pre-test, the measurement scales (see chapter 3) of three constructs (attitudinal effects, behavioural effects, UGB-brand fit) were optimized. The newly developed item batteries for the variables attitude toward the UGB programme and attitude toward stimulated UGC, however, were confirmed. Besides, at the request of the FRoSTA representative, two more questions beyond the core model aspects were added to the brand-specific questionnaire covering the reasons behind the FRoSTA Blog usage and consumer brand touch points.

Second, the elaborated questionnaire was tested among **potential FRoSTA customers**. Since the pre-test shall not be carried out on the sample of the actual study,[77] consumers were accessed in a working environment, resulting in a convenience sample of N=35.[78] The emphasis of this second pre-test was on the overall appeal of the questionnaire, comprehensibility of the questions, the completion time, and the usability of the answers. Overall, the questionnaire was well received. Both questions and figures, notably screenshots, were understood. In particular, the answers regarding the newly developed UGB and UGC variable were found to be usable (see chapter E 3).

However, this pre-test level evoked some changes with respect to the wording of the questions and item batteries (e.g. regarding the consumer-brand relationship variable and UGB-brand fit variable). Major learning was the need for a *"Don't know"* category which was introduced as described above. It was observed that the response time varied widely between 11 and 25 minutes due to differences in the respondents' prior brand and UGB programme awareness as well as their preciseness in reading and completing the questionnaire. From this it was concluded that especially the paper

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[74] See amongst others KUMAR (2005), p. 22.
[75] See SCHNELL/HILL/ESSER (2005), pp. 324 et seqq.
[76] These expert interviews were conducted from January through February 2009.
[77] See KUMAR (2005), p. 22.
[78] The second pretest was conducted on January 16, 2009 among consulting and support staff of a business consultancy in Berlin.

based version of the questionnaire needed to be shortened to meet the fast-moving setting of a point of sale survey. As mentioned in the chapter above, a comprehensive online version and a focused paper version was finally applied.

1.3 Data processing and editing

Steps in processing the raw data are referred to as editing[79] and coding.[80] Since the majority of the data is obtained by electronic questionnaires powered by Unipark EFS survey software,[81] the **code book** was already developed when designing the questionnaire. The 5-item scale was thereby coded from 1 referring to the nomenclature *"I totally disagree"* to 5 referring to *"I totally agree"*.[82] *"Don't know"* was coded 999. The coding of the paper and pencil questionnaires followed this electronic code book.

The coded data was then verified by means of PASW Statistics software:[83] **Possible errors** in the raw data set include values beyond the valid or realistic range, invalid missing values and inconsistencies within the questionnaire notably due to inconsistent filter application.[84] Since closed-ended questions were used within this study, values beyond the realistic range did not occur. Filter errors were prevented by applying comprehensive filter tests within the electronic questionnaire. In order to test whether the values are within the valid range and thus identify possible data input errors, frequency distributions[85] including minimum and maximum analysis were generated. Furthermore, plausibility and consistency checks were conducted through intense data viewing and listing defective cases. For instance, errors due to misapprehension as expressed by ignorance of reverse-coded items were identified and corrected. However, error types such as intentionally false answers, counterfeit, and reactivity cannot be totally excluded.

Within this study, special attention is turned to the handling of system- and user-**missing values**. Missing values occur if certain variable values remain unknown and

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[79] Editing in this context means scrutinising the research instrument to identify and minimise errors, incompleteness, misclassification and information gaps obtained (see amongst others RAITHEL (2006), p. 93).

[80] For details on code book development see amongst others ibid., pp. 83 et seqq.

[81] For software information see UNIPARK (2009).

[82] In terms of usage frequencies (e.g. brand usage, internet usage), code 1 refers to the nomenclature expressing the least frequent usage (e.g. *"Never"*) and 5 to the most frequent usage category (e.g. *"Daily"*). In terms of awareness (e.g. UGB awareness) *"Yes"* and *"No"* were coded 1 and 2 respectively.

[83] For software information see SPSS (2009).

[84] See amongst others RAITHEL (2006), pp. 93 et seqq.

[85] By means of frequency distributions respondents are grouped into the subcategories into which a variable can be divided (see amongst others KUMAR (2005), p. 242).

may cause a non-response bias.[86] When responding to missing values, the trade-off is between keeping as many cases as possible and risking a distortion of the study results.[87]

With respect to the applied research design, **system-missing values** occurred on the one hand due to the application of FRoSTA and Beck's specific paper and pencil questionnaires which represent only an extraction of the comprehensive online version. Although the cases obtained by those questionnaires can be used for descriptive analysis, they are to be eliminated from the sample to be applied for hypothesis testing since not all major constructs of the structural equation model (e.g. attitudinal and behavioural effects, attitude toward the ad) are covered. About 10% of the total number of completed questionnaires for FRoSTA and Beck's are affected. On the other hand, system-missing values also occurred with respect to FRoSTA and Beck's specific questionnaires within the web survey. Initially, the question of attitudinal and behavioural effects was only posed to respondents who were aware of the respective UGB programme. After learning that the UGB programme awareness is generally low, also unaware users were interrogated. A similar adjustment was made in terms of TV ad awareness. Hence, another 9% of the total number of completed questionnaires was eliminated, thereof mainly FRoSTA questionnaires due to survey chronology.

With regard to **user-missing values**, there are three sources of missing value occurrence: first, unfinished questionnaires, second, skipped questions, and third, *"Don't know"* responses. Unfinished electronic questionnaires are generally excluded from this study since only completed questionnaires were downloaded from the online survey programme.[88] The problem of skipped questions generally only occurred in the case of less important questions such as demographics and some moderators. For all major variables, the corresponding question in the online questionnaire was marked as compulsory so that it could not be skipped. Additionally, automatic completeness checks were applied to ensure that every item of a measurement scale contained a value. Thus, only in single cases – if values for few constructs within a nearly complete data set were unknown – missing values had to be handled. For this

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[86] For details see amongst others HOMBURG/KROHMER (2003), pp. 227 et seq.; COHEN (2005), pp. 101 et seqq.

[87] General options in handling missing values include the (pairwise or listwise) exclusion or replacement of those unknown values. Replacement methods include replacement by total mean, mean or median of neighbouring points, linear interpolation, linear trend at point, and imputation. For details on missing value handling see ALTOBELLI (2006), p. 216; BROSIUS (2004), pp. 281.

[88] With regard to the internal web survey, the data was kept despite (late) interruption in single cases if values for all exageneous and endogenous variables for the main model were included.

purpose, the method of mean replacement was applied,[89] that is, a missing value was replaced by the mean of all valid values of the total of cases for the respective item. Thus, overall parameters were hardly distorted although the response behaviour of the individual interviewee cannot be correctly restored.

With respect to *"Don't know"* responses, every latent variable and every case was treated separately. For instance, if a latent variable was measured by means of an 8-item scale and values for some items – but not more than half of them – were unknown, missing values for single items were replaced by the mean of the valid values for the other items of this latent variable for the individual case. This procedure is considered the most precise adaptation of the mean replacement approach since the response behaviour of the respective individual is considered.

If the described missing value replacement could not be applied due to a lack of reference data, the respective cases were deleted. Overall, about 3% of cases were eliminated due to user-missing values with regard to the core model constructs, which is regarded noncritical.[90] Taking user- and system-missing values into account and considering only questionnaires related to model testing (i.e. excluding content analysis and TV ad post test), the research sample size was adjusted as follows (see Table 7): Regarding FRoSTA, N=718 cases were analysed within the structural equation model, regarding Beck's N=869 and regarding the car brand N=594, resulting in an adjusted total sample of **N=2,181**.

In addition to the described manual handling of missing values, the missing value algorithm "casewise replacement" was activated during data analysis. Descriptive and factor analysis is conducted by means of the statistical software programme PASW Statistics 17.0.[91] For parameter estimation of the structural equation model, the software programme SmartPLS 2.0[92] was applied.

[89] See BROSIUS (2004), p. 284.
[90] See ALTOBELLI (2006), p. 216.
[91] See SPSS (2009).
[92] See RINGLE/WENDE/WILL (2005).

Sample adjustment		FRoSTA	Beck's	Car brand
		N	N	N
# completed questionnaires		1,023	1,035	1,219
Thereof cases re additional analyses	Content analysis			-348
	TV ad post test			-261
# of relevant questionnaires		1,023	1,035	610
Thereof cases re missing values	System-missing PoS	-107	-100	
	System-missing web	-143	-48	
	User-missing	-55	-18	-16
Adjusted sample		**718**	**869**	**594**
	Total	**2,181**		
	Apps share	**32.9%**	**39.9%**	**27.2%**

Table 7 **Sample adjustment in the course of data editing**
Source: Own illustration.

1.4 Sample statistics

In the following, the adjusted research samples as the base data for parameter estimation within this study are briefly characterised according to demographics, brand usage and UGB programme awareness. The objective is to point out differences among the samples of the three study objects which could help to interpret later results of cause-and-effect modelling. Furthermore, a brief inter-channel comparison is conducted, aiming at comparing the statistics of the adjusted research sample with the results of the point of sales surveys in the case of FRoSTA and Beck's as well as with further target group studies regarding the car brand.

1.4.1 Characterisation of the adjusted research sample

As presented in Table 7, the adjusted research sample contains N=2,181 cases comprising three UGB applications. The Beck's sample accounts for the biggest part (40%); followed by the FRoSTA sample (33%) and the car brand sample (27%).

Exploring the **socio-demographic characteristics**, a slight bias toward women is observed in the total sample (see Figure 43). This is mainly due to the FRoSTA sample which is dominated by women (58%). In contrast, the Beck's sample includes more men (53%), while the car brand sample is balanced. In terms of age, the middle age group (27-40 years) holds the lion's share (46%). It is noteworthy that the Beck's sample has a much higher share of the young age group between 18 and 26 years

(31%) than the FRoSTA and car brand samples (15% each). With respect to education the Beck's sample, again, distinguishes itself from the other two samples by the high share of academics (45% versus 36% each). In the total sample, there is a 40-30-30 split among college, A-levels and 9th/10th grade.

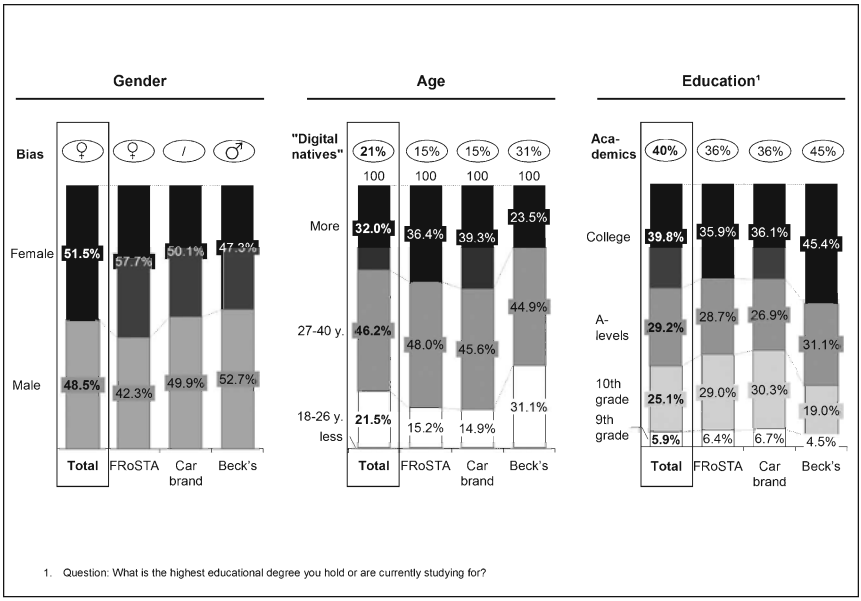

Figure 43 Socio-demographic sample statistics
Source: Own illustration.

As confirmed by the representatives of the cooperation partners FRoSTA, Beck's and the car brand, the respective sample reflects the target group of **potential customers**. Although none of the brands applies formal customer segmentation according to demographics only,[93] the provided sample statistics in terms of gender, age, and education were accepted as true by the brand representatives. This is backed by the high share of **actual customers** within the samples (see Figure 44). In terms of the Beck's and FRoSTA samples, 86% and 89% of respondents have bought products of the respective brand before. Since the car brand by definition does not equally off

[93] A common method is customer segmentation according to so-called sinus milieus including socio-economics (education, income, and profession), basic beliefs (tradition vs. modernism) and life style (mainstream vs. hedonism). For details see SOCIOVISION (2007).

fast-moving small ticket items, the share of actual customers is lower (52%) regarding this sample, resulting in an overall customer share of 78% in the total sample. Across all samples, high aided brand awareness is observed (99% and 100% respectively). The consumer-brand relationship, however, is rather weak, reaching a mean of 2.7 on a scale from 1 to 5.[94] This implies that the samples reflect brand users, but not brand fans in the narrower sense.

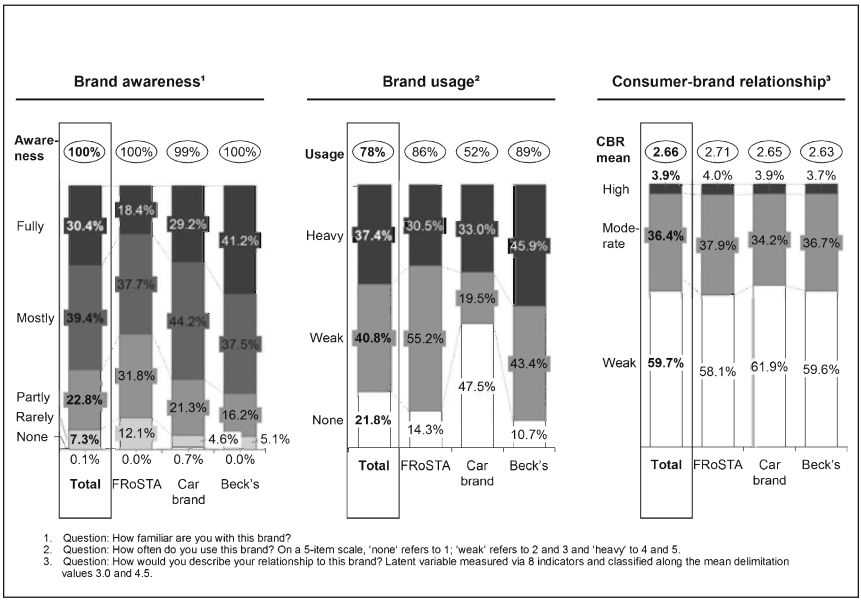

Figure 44 Brand related sample statistics
Source: Own illustration.

Finally, sample statistics are provided regarding the **awareness of the respective UGB programmes and TV commercials**, constituting the independent variables of the effects model. It is observed that the aided UGB programme awareness is much lower than the aided advertising awareness (overall 67% vs. 15%) (see Figure 45).[95] The particularly high ad awareness regarding Beck's (91%) and FRoSTA (65%) can

[94] For the operationalisation and classification of the consumer-brand relationship variable see chapter E 3.2.

[95] Both the UGB programmes and the TV spots were on air shortly before or during the time of the survey. Aided awareness means that the respective UGB programme and TV spot were named and visually introduced by logos and screenshots within the survey.

be explained by the recurrent application of brand-related ad icons in their TV commercials for years. That is, Beck's TV ads can be recognized by a prestigious sailing ship and the "Sail away" song; FRoSTA spots always feature "Peter from FRoSTA" as testimonial as well as split screen visuals. On the contrary, the car brand has marketed a variety of alternating product brand and corporate image related TV commercials with different topics and icons. Thus, the awareness of the specific TV spot explored within this study is lower (34%) compared to the other "flagship" spots.

The awareness of the individual UGB programmes ranges from 21% regarding FRoSTA to 13% and 12% regarding Beck's and the car brand respectively. The differences may be partly explained by data collection channels: While the car brand sample is exclusively derived from the "neutral" online panel, the FRoSTA and Beck's samples consist of cases obtained by web surveys which were advertised at the respective UGB programme web sites. The FRoSTA and Beck's applications, however, differ in terms of the "programme life cycle": While the FRoSTA Blog is a long-term corporate initiative which was established in 2005 and received a lot of publicity over the years, the Beck's Festival Video Challenge is a short-term initiative which was not supported by extensive marketing efforts. The car brand community, in contrast, was announced within a corporate image campaign based on TV and print advertising.

Given the overall low UGB programme awareness rates, active **UGB participation** among respondents is also low (overall 4%). While 10% of the FRoSTA sample has blogged, only 1% of the car brand respondents have contributed a story and 0.3% of the Beck's respondents have uploaded a video. Thus, the UGB programmes have been used rather passively by the aware respondents, i.e. visiting the programme web sites and reading the content. As the TV ad post test in terms of the car brand revealed, there is a general gap between learning about the UGB programme and actually participating in it.[96] Although 43% of the ad tracking sample respondents recognized the TV commercial which announced the UGB programme, only 6% visited the programme web site and only 2% handed in a story.

[96] See also in the following MILLWARDBROWN (2009), pp. 68 et seq.

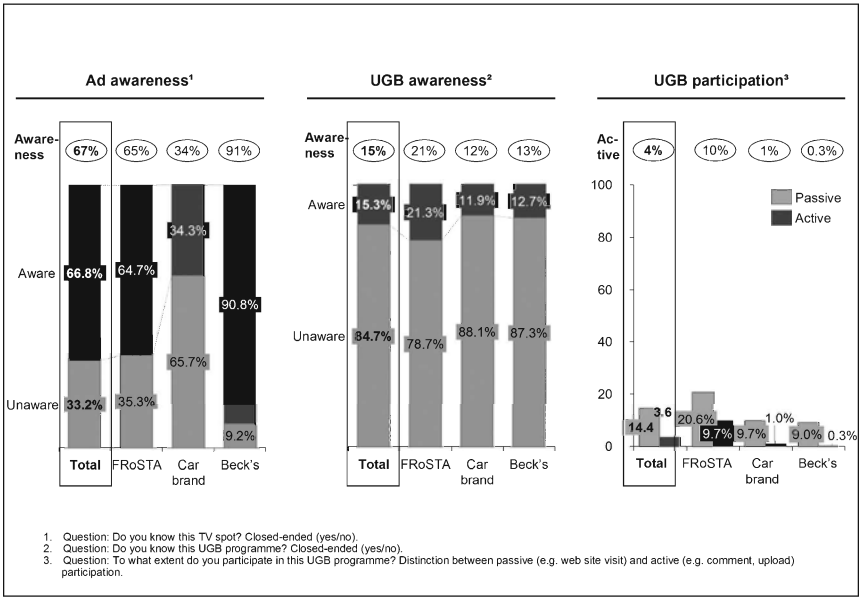

Figure 45 Programme awareness related sample statistics
Source: Own illustration.

1.4.2 Inter-channel comparison

Comparing the web-based adjusted research sample with the samples of the point of sales survey, the **demographic** sample structure is similar by tendency. In the Beck's offline sample, an even stronger bias toward men (56% in offline sample vs. 53% in adjusted research sample), young people below 40 years (91% vs. 76%) and academics (54% vs. 45%) is observed. With respect to FRoSTA, an even stronger tendency toward women (69% at supermarket / 54% at Bistro vs. 58% in adjusted research sample), consumers above 40 years (72% / 58% vs. 36%) and lower educated people (58% / 38% vs. 35%) is measured at the point of sale.

With respect to the two brands, the **brand awareness and usage** is even higher regarding the point of sales samples. For instance, 82% of the Beck's pub survey participants are heavy users compared to 45% in the adjusted research sample. Regarding FRoSTA, 53% of respondents at the Bistro use FRoSTA products at least monthly; this is only true for 31% of the online respondents. This implies that the offline samples – as expected – are more representative for actual brand customers. However, the sample structure of the adjusted research samples corresponds to

those offline samples by tendency. Thus, it can be concluded that the adjusted research samples reflect the target groups of the respective brand appropriately.

Regarding the car brand, the degree of reflecting the brand's target group can be confirmed by contrasting the research sample with samples officially used by the car brand for brand communication analysis. A comparison between this study's research sample and a sample of car drivers used for TV ad post tests reveals that women are overrepresented within this study (50% vs. 36%). Agewise, the research sample overrepresents young people. While only 40% of respondents are more than 41 years old within this sample, the comparative sample includes 57% of respondents above 45 years. Since the car brand targets the mass sector, it can be concluded that the car brand research sample represents potential customers in the broader sense, but not typical customers in the narrower sense.

Furthermore, it is observed that the respective **UGB programmes** are hardly known at the point of sales. Only 4% of the respondents at the FRoSTA Bistro and at the supermarket each have heard of the FRoSTA Blog before, compared to 21% in the web-based research sample. In the case of Beck's, only 1% of the offline respondents were aware of the Beck's Festival Video Challenge, compared to 13% in the web-based environment. By comparison, the adjusted research samples overrepresent UGB programme aware consumers, although their share is low, too.

2 Applied statistics for hypothesis testing

The following chapter provides an overview of the statistical methodology which is applied in order to test the hypotheses within this study. First, methods of bivariate analysis are described which will be used to explore determinants of UGB attitude. Second, multivariate analysis techniques are introduced with respect to structural equation models (SEM). Such path modelling is applied within this study in particular for parameter estimation within the UGB effectiveness model. The objective of this chapter is to explain the suitability of the respective statistical methodology to the purpose of this study and introduce quality criteria which are used for model evaluation. For details on methodological considerations, reference to the relevant literature is provided.

2.1 Descriptive statistics

Descriptive statistics aim at describing the information inherent to the analysed data set.[97] While univariate analysis explores frequencies and statistical measures (e.g. mean, standard deviation) in terms of a single variable, bivariate analysis examines the correlation between two variables in terms of strength and mode of statistical coherence. Thus, it provides a basis for inferential statistics which then draws conclusions from the sample to the population.

The most common methods to analyse correlations between two variables include cross-tabulations,[98] bivariate regression and mean comparison. Prerequisite for the application of specific statistical tests is **normal distribution** or Gaussian distribution, meaning that the data clusters around a mean or average.[99] Normal distribution can be examined visually by histograms including a normal distribution curve and arithmetically by skewness and kurtosis as indications for a distribution's symmetry and "peakedness" as well as the **Kolmogorov-Smirnov test**.[100] The normality tests for the study inherent variables are displayed in the Appendices XXVII – XXXII. Since

[97] See also in the following amongst others RAITHEL (2006), pp. 118 et seqq.
[98] Cross-tabulations determine if there is a relationship between independent and dependent variable (see amongst others KUMAR (2005), pp. 242 et seq.).
[99] For normal distribution see amongst others BÜHL/ZÖFEL (2005), pp. 111 et seq.
[100] See amongst others SMIRNOV (1948); CORDER/FOREMAN (2009), pp. 12 et seqq.; BÜHL/ZÖFEL (2005), pp. 312 et seq.

the analysed variables do not all meet the criteria of normal distribution and are based on ordinal scales, **non-parametric tests**[101] are to be applied.

A major objective is to determine whether a detected correlation between two variables occurs by chance or is **statistically significant.**[102] Following convention, statements are considered slightly significant (*) regarding a probability error of $p \leq 0.05$ (5%) when accepting the alternative hypothesis of systematic correlation. A level of significance of $p \leq 0.01$ (1%) means significant (**), $p \leq 0.001$ (0.1%) highly significant (***). If the level of significance is close to 5% ($0.05 < p \sim< 0.07$) it is called a correlation by trend.[103] In order to test whether linear correlation between two variables exists, **Pearson correlation** is applied.

Within this study, observed differences in the attitude toward the sponsored UGB programme regarding UGB programme and participation, brand and category involvement as well as user personality and demographic factors shall be tested for significance within the scope of **multi group analysis**. The groups are either derived from pre-defined questionnaire scales (e.g. age groups) or generated ex post by means of (visual) binning according to the level of the characteristic value (e.g. strength of consumer-brand relationship). Thus, the analysis refers to independent samples since – unlike within longitudinal studies – a data point in the one sample cannot be clearly allocated to a corresponding data point in the other sample.[104]

When comparing two independent samples (e.g. male vs. female), the best-known non-parametric significance test is the **Mann-Whitney U test.**[105] Within the U test, ranks are allocated to the data of both groups so that the smallest value obtains rank 1. Comparing the mean ranks between two groups, the group with higher mean ranks shows stronger characteristic value. When comparing more than two unrelated samples (e.g. age groups), the **Kruskal-Wallis H test** as an extension of the Mann-

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[101] Non-parametric methods make no assumptions about the probability distributions of the variables being assessed. They are used when data has a ranking but no clear numerical interpretation as in the case of data on an ordinal scale. Compared to parametric methods, non-parametric methods are regarded easier to use and more robust due to the reliance on fewer assumptions. For an in-depth consideration of non-parametric statistics see CORDER/FOREMAN (2009); BÜHL/ZÖFEL (2005), pp. 293 et seqq.

[102] The null hypothesis states that there is no correlation between the variables. In case of a statistically significant correlation, the null hypothesis is rejected and the alternative hypothesis of an existing correlation is accepted.

[103] See RAITHEL (2006), p. 123.

[104] For sample dependency and independency see amongst others BÜHL/ZÖFEL (2005), p. 111.

[105] For method description and calculations see amongst others MANN/WHITNEY (1947), pp. 50 et seqq.; CORDER/FOREMAN (2009), pp. 57 et seqq.; BÜHL/ZÖFEL (2005), pp. 294 et seqq. The test is also referred to as Mann–Whitney–Wilcoxon (MWW), Wilcoxon rank-sum test, or Wilcoxon–Mann–Whitney test. Further tests for comparison between two unrelated groups include the Moses test, Kolmogorov-Smirnov test and Wald-Wolfowitz test.

Whitney U test is recommended.[106] This test is also based on the ranking of values of all samples so that small ranks symbolize small values. The described significance tests are applied within the context of both research problems: determining drivers of UGB liking and testing paths within the UGB effectiveness model (see chapter 2.2.5).

2.2 Inferential statistics

Inferential statistics aims at drawing conclusions from the sample to the population based on probability calculation.[107] Unlike structure-exploring methods, this study applies a deductive, structure-testing approach of confirmative character. By means of a structural equation model (SEM), theoretically derived hypotheses are to be tested within causal analysis. For SEM measurement with empirical data, two different statistical methodologies can be applied alternatively: covariance fitting approaches and variance-based Partial Least Squares (PLS).[108] This chapter gives reasons for the application of PLS within the scope of this study and provides quality criteria for model evaluation.

2.2.1 Characteristics of structural equation models

Structural equation models are a practice of causal analysis which aims at validating causal relationships between concepts[109] based on intense prior considerations and assumptions.[110] Structural equation models include two major hypotheses categories:[111] On the one hand, the **structural model** represents the theoretically derived hypotheses regarding relations among latent variables. Latent independent or exogenous variables are symbolized as ξ (xi); latent dependent or endogenous variables are illustrated as η (eta). The relations between the latent variables within a structural model are computed according to the regression analysis approach.[112] If B

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[106] For method descriptions and calculations see amongst others KRUSKAL/WALLIS (1952); CORDER/FOREMAN (2009), pp. 99 et seqq.; BÜHL/ZÖFEL (2005), pp. 304 et seqq. A less recommended test to compare more than two unrelated samples is the median test.

[107] See amongst others RAITHEL (2006), pp. 118 et seq.

[108] The PLS approach provides a general model which comprises, among other techniques, canonical correlation, redundancy analysis, multiple regression, multivariate analysis of variance, and principle components. For further explanation see CHIN/MARCOLIN/NEWSTED (1996), pp. 39 et seq. PLS analysis can be exemplified by software such as SmartPLS, and PLS Graph.

[109] A concept is an abstract image or subjective perception of the nature of a phenomenon whose meaning varies from individual to individual. As such it cannot be measured but it can be converted into measurable variables (see KUMAR (2005), p. 56; BAGOZZI/FORNELL (1982), p. 24).

[110] See also in the following BACKHAUS/ERICHSON/PLINKE et al. (2003), pp. 334 et seqq. and explanations in chapter D 1.

[111] See also in the following ibid., pp. 336 et seqq.; BOLLEN (1989).

[112] See also in the following BACKHAUS/ERICHSON/PLINKE et al. (2003), pp. 344 et seqq.

(beta) symbolizes the standardized path coefficients – i.e. effects – in-between latent endogenous variables (η) and Γ (gamma) the effects between latent exogenous (ξ) and endogenous (η) variables and the measuring error ζ (zeta) with respect to the latent endogenous variable is taken into account, then the latent endogenous variable may be expressed by the following equation:

$$\eta = B \times \eta + \Gamma \times \xi + \zeta$$

On the other hand, a **measurement model** reflects hypotheses for the latent variables and their relations to empirically measured indicator variables. Hence, in order to validate assumed causal relationships, latent variables need to be operationalised in practical, observable and measurable terms.[113] Thus, both latent exogenous and endogenous variables are determined by specific indicator variables X and Y respectively.[114] With regard to the relationship between a latent variable and its indicator variables two types of measurement models can be distinguished: the reflective and formative measurement model.[115] Within the **reflective measurement model** the indicators represent single partial values of the latent variable which are caused by the variable and thus strongly correlate with each other.[116] The measurement is considered defective since the real state of the concept cannot be examined exactly.[117] Within a formative measurement model, on the contrary, the latent variable is constituted by indicators which are understood as – partly independent – components of the concept.[118] In this research study, only reflective measurement models are considered.

The relations between latent variables and their indicators are computed according to the confirmatory factor analysis approach.[119] If X symbolizes the indicator variable for a latent exogenous variable ξ, Λ_x (lambda x) represents the factor loading of a latent exogenous variable to its indicator variable and δ (delta) stands for the measuring error with respect to the latent exogenous variable, X may be expressed by the following equation:

$$X = \lambda_x \times \xi + \delta$$

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[113] Operationalisation is understood as the allocation of empiric indicators to theoretical concepts and thus the determination of the measurement mode (see ATTESLANDER (2003), p. 50; HOMBURG/HILDEBRANDT (1998), p. 114).

[114] In most cases, one indicator is not sufficient to define a variable; thus multiple indicators are used (see SCHNELL/HILL/ESSER (2005), pp. 146).

[115] See amongst others EDWARDS/BAGOZZI (2000), pp. 161 et seq.

[116] See amongst others EBERL (2004), p. 3.

[117] See amongst others SCHNELL/HILL/ESSER (2005), p. 143.

[118] See amongst others EDWARDS/BAGOZZI (2000), p. 162.

[119] See also in the following BACKHAUS/ERICHSON/PLINKE et al. (2003), pp. 346 et seqq.

Similar to X, the indicator variable Y for a latent endogenous variable η – taking into account the factor loading Λ_y (lambda y) and the measuring error ε (epsilon) with respect to the latent endogenous variable – may be expressed as follows:

$$Y = \lambda_y \times \eta + \varepsilon$$

Basically, the parameters of structural equation models are not computed directly from raw data but estimated based on correlations between the respective indicators.[120] From this it follows that the analysis is conducted on an aggregated data level, validating the assumed set of hypotheses for both the relations between latent variables and their indicator variables and the relations between latent exogenous and endogenous variables. Figure 46 depicts an exemplary path diagram of a comprehensive structural equation model reflecting both the structural model and (reflective) measurement models of the latent exogenous and endogenous variables.

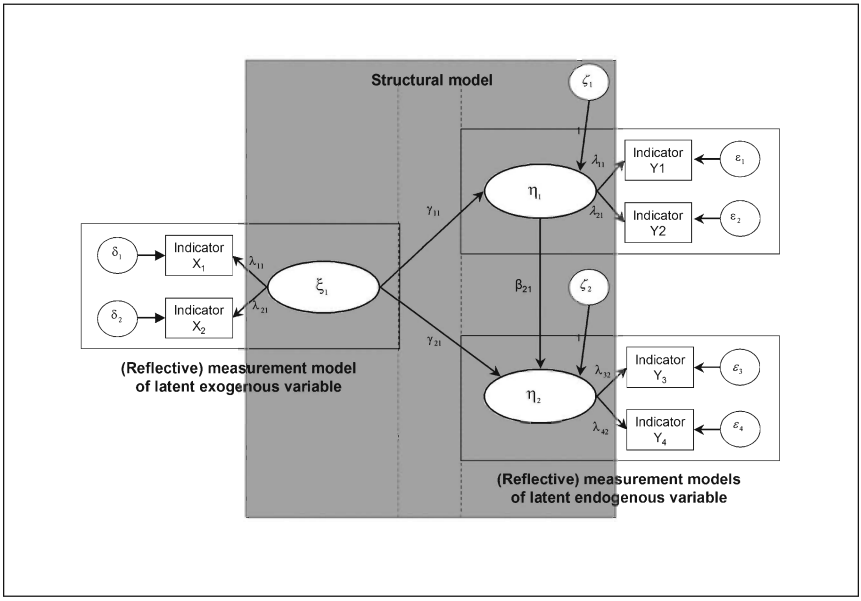

Figure 46 Exemplary path diagram of a structural equation model
Source: Adapted from BACKHAUS et al. (2003), p. 350.

[120] See also in the following ibid., pp. 337 et seq.; 351

2.2.2 *Suitability of Partial Least Squares (PLS) approach*

Although covariance-based methods such as Maximum Likelihood (ML) and Generalized Least Squares (GLS)[121] are better known for model estimation, the Partial Least Squares (PLS) approach is argued as complementary in nature. The choice between the covariance approach and the PLS approach depends on the researcher's objectives and epistemic view of data to theory, property of the data at hand, and/or level of theoretical knowledge and measurement development.[122]

First, the philosophical distinction is of relevance. It is to be considered whether to use structural equation modelling for theory testing and development or for **application and prediction**.[123] While covariance based full information estimation methods (i.e. ML, GLS) are more appropriate where prior theory is strong, PLS is primarily intended for causal-predictive analysis in situations of low theoretical information. Since the purpose of this study is to newly develop a UGB effectiveness model, PLS seems to be appropriate from a philosophical point of view.

Differences in the estimation mechanism between the covariance and PLS approach are to be considered: Under the PLS approach, it is assumed that all the measured variance is useful variance to be explained. PLS estimates the latent variables as exact linear combinations of the observed measures, providing an exact definition of component scores. Thus, the problem of indeterminacy of factor score estimations which occurs to covariance fitting approaches is avoided.[124]

Second, the PLS approach uses an iterative algorithm consisting of a series of ordinary least squares. Hence, identification is not a problem for recursive models (i.e. one way path) and **no distributional form** for measured variables is presumed. As depicted in the Appendices XXVII – XXXII, the criteria of normal distribution are not met by all study inherent variables.

Furthermore, **sample size can be smaller** than with covariance fitting approaches. According to CHIN/MARCOLIN/NEWSTED PLS estimation tends towards the true population parameter as the number of indicators and sample size increase.[125] A standard rule of thumbs suggests that it be equal to the larger of ten times the largest number

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[121] For an explanation of these estimation methods see ibid., p. 362. Covariance structure analysis can be exemplified by software such as LISREL, AMOS, EQS, COSAN, RAMONA and SEPATH.
[122] For a comparison of both statistical methodologies see FORNELL/BOOKSTEIN (1982), pp. 440 et seqq.; JÖRESKOG/WOLD (1982); CHIN (1998), pp. 295 et seqq.
[123] See ANDERSON/GERBING (1988), pp. 411 et seqq.
[124] See FORNELL/BOOKSTEIN (1982), pp. 440 et seqq.
[125] See CHIN/MARCOLIN/NEWSTED (1996), p. 31.

of structural paths directed at a particular construct in the structural model.[126] Accounting to 2,181 cases, the overall sample size used within this study meets the requirements. By splitting the data set into multiple groups, however, sub sample sizes as in the case of active UGB programme participants are much smaller. Thanks to the low sample size barriers within PLS, model estimation is possible for those sub populations, too.

Third, PLS is considered better suited for explaining **complex relationships**, taking packages of variables and aggregate parameters into account.[127] Covariance based procedures, in contrast, are likely to produce estimation difficulties in larger structural equation models, in particular when estimating interaction effects.[128] Furthermore, second order factors can be easily estimated by the standard PLS algorithm by applying WOLD's hierarchical component model.[129] Given the fact that the UGB effectiveness model reflects complex relationships and that interaction effects shall be detected within this study, PLS is considered a suitable approach.

Another often cited benefit of PLS is the allowance of formative measurement models. However, this advantage over the conventional covariance structural approach is not applicable to this study since only reflective measurement models are used. By applying the PLS algorithm under a reflective mode for all constructs, concerns of **collinearity** within blocks of variables used to represent underlying constructs are **eliminated.**[130] This is considered an advantage.

The downside of the PLS approach becomes evident in case the joint condition of a sufficient sample size and a sufficient number of indicators per latent variable is not met.[131] Under those circumstances, construct to loadings tend to be overestimated and the structural path among constructs tend to be underestimated. With regard to this study, however, all conditions are met to avoid the incidence of bias and inconsistency. On the one hand, the PLS estimates of the total model are based on 2,181

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[126] A weaker rule, similar to the heuristic for multiple regression, is to use the multiplier of five instead of ten (see TABACHNICK/FIDELL (1989), p.129). According to RAITHEL a minimum size of N=60 is recommended for measurement model validity evaluation (see RAITHEL (2006), p. 109). WOLD even analyzed 27 variables using two latent variables with a dataset of 10 cases only (see WOLD (1989)). With respect to formative measuring models, a rule of thumb is than the sample size be ten times the scales with the largest number of formative indicators.

[127] See WOLD (1985), pp. 589 et seq.; FORNELL/BOOKSTEIN (1982), pp. 440 et seqq.

[128] See PING (1996)

[129] This approach suggests that a second order factor is directly measured by observed variables for all the first order factors, repeating the number of manifest variables used (see LOHMÖLLER (1989), pp. 130 et seqq.).

[130] See CHIN/MARCOLIN/NEWSTED (1996), p. 40.

[131] See also in the following ibid., pp. 27; 39.

cases, exceeding the minimum criteria by far.[132] On the other hand, the key constructs of this study – attitude toward the UGB programme, attitude toward the ad and consumer-brand relationship – are operationalised via five to eight indicators.[133] Indeed, other latent variables (e.g. attitudinal and behavioural effects) are measured by three indicators only. However, bias may only occur if both number of indicators and sample size fail. Thus, the potential shortcoming in case of three-item variables is overcome by the large sample size.

To sum up, PLS is considered a powerful method of analysis for the purpose of this study which first and foremost intends to predict UGB effectiveness in a situation of low theoretical information. PLS is regarded suitable since it allows the estimation of complex relationships (e.g. interaction effects) under less limiting premises, i.e. minimal demands on measurement scales and residual distributions.

2.2.3 Evaluation of reflective measurement models within PLS

Having demonstrated the basic algorithm and general suitability of the PLS approach to this study, the following subchapters are dedicated to the specific methods and criteria which are applied in order to evaluate the assumed structural equation model within PLS. Since PLS makes no distributional assumptions, traditional parametric based techniques for evaluation and significance testing are not regarded appropriate.[134] Instead, nonparametric prediction oriented measures are applied. As usual in quantitative, positivist research, the critical first step is the evaluation of the instrumentation or measurement model. In order to establish the quality of the research results validity[135] and reliability[136] of the measurement model need to be ensured.[137] Validity and reliability criteria for formative and reflective measurement models dif-

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[132] As mentioned above, a standard rule of thumbs suggests that the sample size be equal to the larger of ten times the largest number of structural paths directed at a particular construct in the structural model.

[133] For details on the corresponding measurement models see chapter E 3.1 and 3.2.

[134] See CHIN (1998), p. 316.

[135] The concept of validity focuses on the question whether the research investigation is actually providing answers to the research questions by using appropriate methods and procedures. For further consideration see amongst others BABBIE (1990), p. 133; MCDAVID / HAWTHORN (2006), p. 452.

[136] The concept of reliability refers to the consistency, stability, accuracy and precision of a research instrument so that repeat measurements made under the same or similar conditions provide comparable results. For further consideration see amongst others MOSER/KALTON (1989), p. 353.

[137] See CHIN/TODD (1995),p. 237; HULLAND (1999), p. 198.

fer.[138] Since this study only applies **reflective measurement models**, the following paragraphs focus on the evaluation of reflective measurement models only.[139]

There are four types of scientific validity with respect to instrumentation in order to provide hard evidence of the quality of reflective measurement models on the item and construct level. First, **content and convergent validity** is determined by whether each item on the measurement scale has a logical link with the latent variable so that the chosen indicators cover the full range of the construct.[140] Convergent validity can be tested by means of **factor and principal component analysis** both aiming at dimension reduction.[141] Within this study, principal component analysis is used to test the suitability of the adapted measurement models and – if necessary – optimize the measure by item selection. For reflective measurement models it is assumed that only one factor (dimension) is extracted from the allocated item set.[142] This one-dimensionality is tested by means of the **Kaiser Criterion** based on the eigenvalue measure.[143] To meet the Kaiser Criterion, a first eigenvalue greater than 1 and a second eigenvalue smaller than 1 are required.[144]

Second, **item reliability** indicates the proportion of variance in an observed item that is explained by its factor.[145] It is expressed by the **factor loading** of the latent variable to an item.[146] Generally, the factor loading shall be greater than 0.7 for main effects so that the common variance between latent variable and item is larger than the variance of the measurement error.[147] In the case of newly developed measurement

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[138] See GÖTZ/LIEHR-GOBBERS (2004), p. 715.

[139] For evaluation criteria of formative measurement models see RINGLE (2004), pp. 21 et seq.; KRAFFT/GÖTZ/LIEHR-GOBBERS (2005), pp. 76 et seqq.; GÖTZ/LIEHR-GOBBERS (2004), pp. 728 et seqq.

[140] See HILDEBRANDT (1998), p. 90; HOMBURG/GIERING (1998), p. 111.

[141] Factor analysis aims at explaining the pattern of correlations inbetween items "causally", while principal component analysis strives for item aggregation keeping as much information from the raw data set as possible. For an in depth consideration of factor and principal component analysis see RAITHEL (2006)107 et seqq.; BROSIUS (2004), pp. 775 et seqq.

[142] Basically, at least three items shall be allocated to a factor. A minimum sample size of N=60 is recommended—the bigger the sample size the stronger the factor stability (see BÜHNER (2004), pp. 156 et seq.; TENENHAUS/ESPOSITO VINZI/CHATELIN et al. (2005), p. 163.

[143] The calculation is supported by the factor analysis function (extraction: principal components, rotation: Varimax) within the statistical software program PASW Statistics 17.0 (see SPSS (2009)).

[144] See BACKHAUS/ERICHSON/PLINKE et al. (2003), p. 295.

[145] See KRAFFT/GÖTZ/LIEHR-GOBBERS (2005), p. 73.

[146] The calculation is supported by the PLS Algorithm (displayed as 'Outer Loadings') within the statistical software program SmartPLS 2.0 (see RINGLE/WENDE/WILL (2005)).

[147] See RINGLE/SPREEN (2007), p. 212; CHIN/MARCOLIN/NEWSTED (1996), p. 31. The loadings for the interaction construct should be estimated at the value of 0.49.

scales a minimum factor loading of 0.4 is regarded acceptable – items with lower loadings are to be deleted from the reflective measurement model.[148]

Third, **construct reliability** refers to internal consistency by demanding a strong correlation of the items inherent to a latent variable.[149] In order to evaluate how well a latent variable is expressed by its allocated items, **composite reliability** can be calculated.[150] In comparison to the internal consistency measure Cronbach's alpha, composite reliability does not assume tau equivalency among the measures with the assumption that all indicators are equally weighted.[151] According to NUNNALLY the minimum level of composite reliability shall be 0.7[152]. Other authors including BAGOZZI already regard a minimum value of 0.6 acceptable.[153]

Fourth, **discriminant validity** describes the degree to which the operationalisation of a latent variable diverges from other operationalisations. It can be tested by the **Fornell/Larcker Criterion** requiring that the **average variance extracted (AVE)** of the latent variables shall be greater than the square of the correlations among the latent variables which indicates that more variance is shared between the latent variable components and its set of indicators than with another component representing a different item set.[154] It is recommended that the minimum value for AVE shall be 0.5[155], meaning that 50% or more variance of the indicators should be accounted for by the measurement model.[156]

Finally, the quality evaluation of reflective measurement models within PLS is completed by **significance tests**.[157] Significance levels of items may be calculated by means of resampling procedures such as **Bootstrapping** .[158] Bootstrap samples are

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[148] See HULLAND (1999), p. 198. For details on elimination of items within reflective measurement models see BOLLEN/LENNOX (1991), p. 308.
[149] See GÖTZ/LIEHR-GOBBERS (2004), p. 727.
[150] The calculation is supported by the PLS Algorithm (displayed as 'Composite Reliability') within the statistical software program SmartPLS 2.0 (see RINGLE/WENDE/WILL (2005)).
[151] See CHIN (1998), p. 320.
[152] See NUNNALY (1978), p.245.
[153] See BAGOZZI/YI (1988), p. 82; HOMBURG/BAUMGARTNER (1998), p. 361; RINGLE/SPREEN (2007), p. 212.
[154] See CHIN (1998), p. 321.
[155] The calculation is supported by the PLS Algorithm (displayed as 'AVE') within the statistical software program SmartPLS 2.0 (see RINGLE/WENDE/WILL (2005)).
[156] See CHIN (1998), p. 321; HOMBURG/GIERING (1998), p. 130; RINGLE/SPREEN (2007), p. 212.
[157] A result is statistically significant if it is unlikely to have occurred by chance.
[158] The bootstrap is a data-based simulation method for statistical inference. Bootstrapping is preferred to the alternative resampling procedure Jackknifing due to higher efficiency. Jackknifing can be considered as an approximation to the bootstrap. For details on Bootstrapping and Jackknifing see CHIN (1998), p. 320; RINGLE (2004), p. 18; KRAFFT/GÖTZ/LIEHR-GOBBERS (2005), p. 83; for an introduction to bootstrapping see EFRON/TIBSHIRANI (1993).

built by sampling with replacement from the original data set.[159] There is consensus in social science that the items of a measurement model have to meet a significance level of 5% ($p \leq 0.05$) which corresponds to a minimum **t-value**[160] of 1.960 for a two-tailed test.[161] If obtained t is equal to or greater than 2.576, it is significant at a level of 1% ($p \leq 0.01$) and at a critical value of 3.922 significant at a level of 0.1% ($p \leq 0.001$) respectively. Table 8 provides an overview of the mentioned quality criteria of reflective measurement models.

Quality	Measure	Minimum level
Convergent validity	Eigenvalue (EV)	Kaiser Criterion ($EV_1 > 1$; $EV_2 < 1$)
Item reliability	Factor loading (λ)	$\lambda > 0.7$ (if $\lambda < 0.4$, item eliminated)
Construct reliability	Composite Reliability (CR)	CR > 0.7
Discriminant validity	Average variance extracted (AVE)	Fornell/Larcker Criterion (AVE > squared correlations of construct with other constructs)
Final evaluation	t-value	Significance of 5%: t >1.960 (1%: t > 2.576; 0.1%: t > 3.922)

Table 8 **Evaluation criteria for reflective measurement models**
Source: Adapted from KRAFFT/GÖTZ/LIEHR-GOBBERS (2005), p. 75.

2.2.4 Evaluation of structural models within PLS

In case the (outer) measurement models of the constructs have met the minimum evaluation levels, the quality of the (inner) structural model can be examined in the next step. Within PLS, non-parametric tests are used to assess predictive capability and resampling procedures are used to examine the stability of the estimates.[162]

A central criterion for evaluating the structural model is the coefficient of determination $\mathbf{R^2}$ which is derived from regression analysis.[163] Considering the latent endoge-

[159] The calculation is supported by the Bootstrapping function (displayed as 'T Statistics (|O/STERR|)') within the statistical software program SmartPLS (see RINGLE/WENDE/WILL (2005)). The number of cases used corresponds to the sample sizes. 200 samples were built since very seldom more than B=200 bootstrap replications were needed for estimating a standard error (see EFRON/TIBSHIRANI (1993), pp. 52 et seq.). A comparison of bootstrap replication results (B=200/500/1,000/1,500) is displayed in Appendix XLIX.

[160] That is, t-value refers to the signifiancy that the causality differs from 0.

[161] See also in the following HOMBURG/GIERING (1998), p. 125.

[162] See also in the following CHIN (1998), pp. 316 et seqq.

[163] See BACKHAUS/ERICHSON/PLINKE et al. (2003), p. 63; BÜHL/ZÖFEL (2005), pp. 111 et seq., pp. 335 et seqq.

nous variable as dependent variable and the latent exogenous variable as independent variable in a multiple linear regression model, the R-square of the latent endogenous variable reflects the proportion of variance of the latent endogenous variable success explained by the latent exogenous variable(s).[164] Recommendations in academic literature for R-square minimum levels differ: CHIN regards R-square values of 0.67 as "substantial", 0.33 as "moderate" and 0.19 as "weak".[165] In a review of PLS publications, RINGLE found that R-squares amounting to 0.4 were generally accepted in the research community, although most papers presented R-square values of 0.6.[166]

In the case of this study, a lower R-square is expected, given the fact that the structural equation model reflects only two latent exogenous variables (attitude toward the UGB programme; attitude toward the ad) which are assumed to define changes in the complex latent endogenous variables (consumer-brand relationship, attitudinal and behavioural outcome). With respect to variance explained COHEN argued that compared to physical sciences "*...the state of development of much of behavioural science is such that not very much variance in the dependent variable is predictable*".[167]

Beside R-square, the sign and significance of the regression coefficients (**path coefficients**) are used to evaluate the structural PLS model. Similar to the significance test of items within the measurement model the reliability of path coefficients may be tested by the **bootstrapping** resampling method.[168] If the paths are not significant or show a sign contrary to the hypothesis, the hypothesis needs to be rejected. In addition to t-statistics the size of the path coefficient is also to be taken into account: CHIN regarded path coefficients equal to or greater than 0.2 significant[169] while LOHMÖLLER also accepted path coefficients of 0.1 for PLS inner models.[170] There is consensus about the fact that PLS tends to underestimate the structural paths of the inner model while it tends to overestimate the measurement paths of the outer model.[171]

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[164] The calculation is supported by the PLS algorithm (displayed as 'R Square') within the statistical software program SmartPLS. For software information see RINGLE/WENDE/WILL (2005).
[165] See CHIN (1998), p. 323.
[166] See RINGLE (2004), p. 15.
[167] See COHEN (1977), p. 78.
[168] See RINGLE/SPREEN (2007), p. 214.
[169] See CHIN (1998), pp. 324 et seq.
[170] See LOHMÖLLER (1989), pp. 60 et seq.
[171] See CHIN (1995), p. 315 et seqq.

Furthermore, the change in R-squares can be explored to see whether a latent exogenous variable exerts a substantial influence on a latent endogenous variable.[172] The so-called **effect size (f^2)** of the exogenous variables for the rate of reliability R^2 of the endogenous variable is determined by considering the R-squares provided on the latent endogenous variable when the latent exogenous variable is used ($R^2_{included}$) or omitted ($R^2_{excluded}$) in the structural equation respectively.[173]

$$f^2 = \frac{R^2_{included} - R^2_{excluded}}{1 - R^2_{included}}$$ [174]

Similar to COHEN's operational definitions for multiple regressions,[175] f^2 values of 0.02, 0.15 and 0.35 can be viewed as a gauge for whether a latent exogenous variable has a weak, medium and large effect respectively on the latent endogenous variable at the structural level.[176]

Furthermore, the capacity of the structural model to predict observables or potential observables related to latent endogenous variables is to be measured by a predictive sample reuse technique developed by STONE and GEISSER.[177] The PLS adaptation of this approach follows a **blindfolding procedure** that omits a part of the data for a particular block of indicators during parameter estimation and then attempts to estimate the omitted part using the estimated parameters.[178] If D symbolizes the omission distance, E the sum of squares of prediction errors and O the sum of squares of observations, the blindfolding procedure is continued until D sets of Es and Os are obtained. The so-called Stone Geisser Test Criteria for **predictive relevance (Q^2)** becomes:

$$Q^2 = 1 - \frac{\sum_D E_D}{\sum_D O_D}$$

Thus, Q^2 represents a measure of how well-observed values are reconstructed by the model and its parameter estimates.[179] Q^2-values above zero imply that the model has predictive relevance, whereas Q^2-values below zero indicate a lack of predictive

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[172] See COHEN (1977), p. 83.
[173] See CHIN (1998), p. 316.
[174] The calculation is supported by the PLS algorithm (R^2 if selected exogenous variable is included versus R^2 if selected exogenous variable is excluded) within the statistical software program SmartPLS. For software information see RINGLE/WENDE/WILL (2005).
[175] See COHEN (1988), pp. 412 et seqq.
[176] See CHIN (1998), p. 316.
[177] See STONE (1975); GEISSER (1975).
[178] In the Blindfolding approach proposed by WOLD the data matrix is divided into G groups (G=7). For details see FORNELL/CHA (1994), pp. 71 et seq.; CHIN (1998), p. 317.
[179] See STONE (1975), p. 133 et seqq.; GEISSER (1975), p. 320 et seqq.

relevance.[180] If prediction is made by those latent variables that predict the block in question, cross-validated redundancy is obtained which is used to examine the predictive relevance of the structural model.[181] In correspondence to f^2, the relative impact of the structural model on the observed measures can be assessed by considering changes in Q^2. That is, predictive relevance (q^2) is assessed for each latent exogenous variable based on the following equation:

$$q^2 = \frac{Q^2_{included} - Q^2_{excluded}}{1 - Q^2_{included}}$$

Table 9 provides a summary of PLS evaluation criteria of structural models.

Quality	Measure and equation	Minimum level
Variance explained	Coefficient of determination (R^2)	$R^2 > 0.19$ (moderate: > 0.33; substantial: > 0.67)
Substantial influence	Effect size (f^2)	$f^2 > 0.02$ (medium: 0.15; large: 0.30)
Estimates for path relationships	Path coefficient (γ)	γ > 0.1 (Postulated sign and significance within t-statistics)
Predictive relevance	Stone Geisser Test Criteria (Q^2), q^2	$Q^2 > 0$

Table 9 **Evaluation criteria for structural models**
Source: Adapted KRAFFT/GÖTZ/LIEHR-GOBBERS (2005), p. 85 based on CHIN (1998).

2.2.5 Multi group comparison within PLS

With regard to this study, the same model shall be assessed for different subpopulations. Observations are a priori grouped into segments according to specific predetermined characteristics (e.g. brand usage, UGB awareness). The objective is to determine differences among the local models. Reviewing the literature, it is observed that often only the size of the path coefficients is discussed for multi group comparison without any statistical significance test.[182] Since estimated models assess the relation structures in different proportions, however, the residual component

[180] See CHIN (1998), p. 318.
[181] The calculation is supported by the Blindfolding function displaying as 'Construct Crossvalidated Redundancy (1-SSE/SSO) within the statistical software program SmartPLS. For software information see RINGLE/WENDE/WILL (2005).
[182] See amongst others THOMPSON/HIGGINS/HOWELL (1994), pp. 181 et seq.

may vary among the various models[183] so that statistical testing is necessary.

While such multi group comparison is established within covariance-based analysis[184], it is still considered unsophisticated within the PLS approach.[185] In fact, it is often referred to the Finite Mixture PLS approach (abbr.: FIMIX) within this context. However, this approach does not serve multi group comparison but group building.[186] In case significance tests are conducted, they are mostly based on t-tests including resampling data, provided that normal distribution exists.[187] Since this is not the case for all constructs within this study (see Appendices XXVII – XXXII), **nonparametric tests** have to be applied.

As nonparametric method of multi group analysis, CHIN introduced the so-called approximate randomization test.[188] However, this evolving approach requires high processing power and has not been incorporated into standard PLS software applications so far. Thus, its application exceeds the resources of this study. FIEDLER alternatively suggests transferring the resampling data sets from PLS software to statistical analysis software and using the local nonparametric tests.[189] That is, the **Mann Whitney U test** for two independent groups and the Kruskal Wallis H test for more than two unrelated groups may be applied to examine the means of the path coefficients based on resampling data. If the test results are significant, the null hypothesis[190] can be rejected that the means of the paths are identical among all groups and the alternative hypothesis of group differences is approved.

In terms of result interpretation, HENSLER/FASSOTT consider the model comparison problem as a special case of **moderating effects**.[191] In particular if the moderating variable is categorical, it equals a grouping variable involving group comparison.

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[183] See ROMANO/PALUMBO (2006), p. 1.
[184] See amongst others ARBUCKLE/WOTHKE (1999), pp. 209; 251.
[185] See CHIN (2003), p. 33; ROMANO/PALUMBO (2006), p. 10.
[186] See HAHN./JOHNSON/HERRMANN et al. (2002), pp. 247 et seqq. Within this study, groups are self-selected by a priori segmentation based on the level of brand usage and UGB awareness.
[187] For instance, CHIN suggests the Smith-Satterthwait test for significance testing.
[188] This test is a type of permutation test in which a reference distribution is obtained by calculating all possible values of the test statistic under rearrangements of the labels on the observed data points. For a definition see CHIN (2003), p. 33.
[189] See FIEDLER (2007) p. 239. Within this study, resampling data is transferred from the "Bootstrapping" report provided by SmartPLS to PASW software. For each group, 200 samples are generated.
[190] A null hypothesis stipulates that there is no difference between two situations, groups, outcomes, etc. (see KUMAR (2005), p. 77).
[191] See HENSELER/FASSOTT/ALUJA et al. (2005), pp. 311 et seqq.

2.2.6 *Evaluation of interaction effects within PLS*

The relation between an independent (predictor) and dependent (criterion) variable may be affected by a **moderator.**[192] A moderator influences the strength and/or direction of a relation between variables and thus provides information about the conditions in which this relation exists. The evaluation of interaction effects within PLS is based on the analysis of the influence of a moderating variable on the direction and strengths of the relationship between the latent exogenous and endogenous variable.[193] In order to measure interaction effects, the so-called **product indicator approach** according to CHIN/MARCOLIN/NEWSTED is applied within PLS analysis.[194] In contrast to the traditional approach for interaction effect detection – ANOVA – the product indicator approach may provide more accurate estimates of the effect size of an interaction effect by accounting for the measurement error in measures.[195]

Within the product indicator approach, the predictor and moderator are viewed as latent variables for which multiple indicators need to be obtained by building products from the two indicator sets (see Figure 47). All indicators are thereby modelled as being influenced by both the underlying latent variable and error and shall be standardized.[196] The PLS procedure is then used to estimate the latent variables as a linear combination of its indicators aiming at maximizing the explained variance for the indicators and latent variables.[197]

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[192] See also in the following CHIN/MARCOLIN/NEWSTED (1996), pp. 21 et seq. In literature, moderators are also couched under terms such as interaction effects, multiplicative terms and contingency terms.

[193] See GÖTZ/LIEHR-GOBBERS (2004), p. 724.

[194] For a detailed description, validation and discussion of the PLS product indicator approach see also in the following CHIN/MARCOLIN/NEWSTED (1996), pp. 25 et seqq.

[195] Under the traditional regression based approach, a single product term is used to examine an interaction effect under the assumption that each measure is error free. To account for the condition of measurement error, the product indicator approach entails the use of multiple indicators. For a comparison between product indicator approach and traditional approaches such as ANOVA see ibid., pp. 22 et seqq.

[196] Standardizing all indicators to a mean of 0 and a variance of 1 is regarded reasonable for Likert scaled attitude items as applied within this study. It helps avoid computationnal effects by lowering the correlations between the product indicators and their individual components and allows an easier interpretation of the results. For details on standardisation see AIKEN/WEST (1991); SMITH/SASAKI (1979).

[197] This approach of detecting interaction effects is supported by SmartPLS software which is applied within this study.

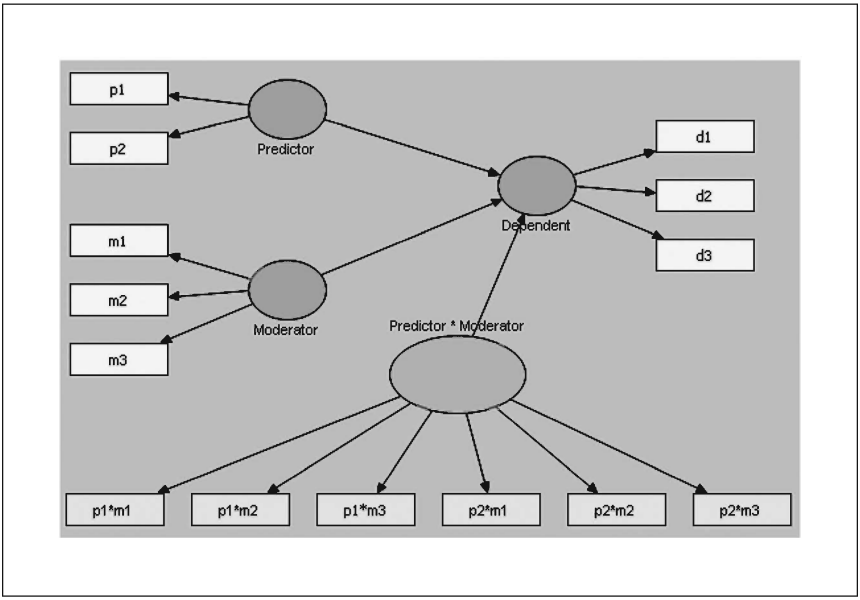

Figure 47 Model of PLS product indicator approach
Source: Adapted from SMARTPLS (2006).

With regard to the quality evaluation of the interaction model, two criteria are of relevance to examine the interaction effect:[198] First, the **path coefficient for the interaction term** is determined. This estimate provides information as to how much a unit change in the moderator variable would change the regression relationship of the predictor and the criterion. To assess whether the interaction effect is significant, a bootstrap resampling procedure shall be performed. The minimum criterion corresponds to the delimitation value within the structural model evaluation (see Table 9), demanding a standardized path coefficient above 0.1 at a significance level of 5% or less. Second, the **additional variance explained** as observed in change in R-square is determined. This estimate is assessed by the increase in R-square when the interaction term is included in the main effects regression model, i.e., by subtracting the R-square for the two-variable main effects model from the R-square for the three-

[198] For an in-depth explanation of interaction effect evaluation see also in the following CHIN/MARCOLIN/NEWSTED (1996), pp. 25 et seqq.

variable interaction model. The effect size (f^2) of interaction effects is calculated as follows:

$$f^2 = \frac{R^2_{interaction} - R^2_{main}}{R^2_{interaction}}$$

Besides, CHIN/MARCOLIN/NEWSTED suggest calculating the **composite reliabilities** of the latent variables in order to assess how accurate the path estimates are to the "true" effect.[199] The estimates of the structural paths tend to be more accurate as the reliability of the estimated construct score increase. Similar to the presented evaluation of reflective measurement models, the composite reliability value shall go beyond the minimum criteria of 0.7 (see Table 8).

This study meets all requirements for applying the product indicator approach for detecting an interaction effect:[200] First, the three analysed data samples exceed the minimum sample size of 100 cases by six to eight times each.[201] Second, the set is large enough to represent ordinal variables. In this case, the indicators need not be interval level in the narrower sense. Third, all interaction-model inherent indicators for the predictor and moderator are viewed as reflective measures. Fourth, the number of indicators for the variables to be analysed within this study ranges between three and eight indicators. Although six to eight indicators per construct are recommended to obtain structural path estimates within ten percent of the true effects, a literature review indicated an average number of indicators at 3.4. Besides, it is regarded possible to relax the need of six to eight-item variables with a big sample.

RINGLE suggests not estimating interaction effects in a comprehensive model.[202] Thus, the assumed moderator variables are singled out and analyzed separately according to the basic PLS product indicator approach model depicted in Figure 47.

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[199] See ibid., pp. 33 et seqq.

[200] See also in the following ibid., pp. 31; 35.

[201] The analysed FRoSTA sample includes 696 valid cases, the car brand sample 556 and the Beck's sample 822.These sample sizes applied to interaction effects analysis are slightly smaller than the total sample sizes since cases with missing values regarding the model-inherent constructs were removed in order to avoid distortion by automatic missing value replacement.

[202] See RINGLE (2006). RINGLE is the developer of SmartPLS software which was used to estimate the model parameters.

3 Validation of inherent measurement models

The operationalisation of the latent variables of this study's structural equation model is based on the designs by WENSKE[203] and STICHNOTH[204] who similarly examined the influence of brand communication instruments – ad liking and community liking respectively – on the consumer-brand relationship under further consideration of attitudinal and behavioural effects within the identity-based brand management approach. That is, this study's latent variables are operationalised by **reflective measurement models**. They mostly rely on established scales for marketing and consumer behaviour research.[205] Furthermore, they were validated in previous studies within the identity-based brand management approach.

However, since this study focuses on the emerging phenomenon of sponsored user generated branding, some adaptations and increments have been made. In the following the applied measurement scales for study-inherent latent variables are introduced and tested for validity and reliability according to the quality criteria described in chapter E 2.2.3. The underlying marketing scales as well as a sample specific quality evaluation in terms of the FRoSTA, Beck's and car brand samples are depicted in the appendix for further reference.

3.1 Attitude toward the ad and attitude toward the UGB programme

The operationalisation of the latent variables attitude toward the ad and attitude toward the UGB programme is based on measurement models for the evaluation of corporate communication. While established scales for the attitude toward the ad variable exist, a measurement model for the attitude toward the UGB programme variable is to be newly developed.

To operationalise the **attitude toward the ad** variable (abbr.: ad variable – Ad) this study adopts the established measurement scale by **LEE/MASON**[206] (see Appendix XXXIII). This scale was confirmed by WENSKE in a model set up similar to this study, i.e. measuring the influence of attitude toward the ad on the customer-brand relationship. Table 10 summarizes the applied measurement model for the ad variable.

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[203] See WENSKE (2008a), pp. 207 et seqq.
[204] See STICHNOTH (2008), pp. 63 et seqq.
[205] For instance, scales for known constructs such as opinion leadership and product category involvement are taken from the "Handbook of Marketing Scales" (see BEARDEN/NETEMEYER (1999)).
[206] See LEE/MASON (1999), p. 160. Attitude to the ad scales developed by other researchers are found to be similar. For example, BRUNER II/KUMAR used the following scale: 1. good/bad, 2. like/dislike, 3. irritating/not irritating, 4. interesting/uninteresting (see BRUNER II/KUMAR (2000), p. 41).

Item	Attitude toward the ad (Ad)	Reference	Original source
Q: How do you like the (brand's) TV spot?			
Ad_1	The TV spot is interesting to me.	WENSKE (2008)	LEE/MASON (1999)
Ad_2	The topic of the TV spot is appealing to me.	WENSKE (2008)	LEE/MASON (1999)
Ad_3	The TV spot is attractive to me.	WENSKE (2008)	LEE/MASON (1999)
Ad_4r	I think the TV spot is poorly done/in need of improvement.	WENSKE (2008)	LEE/MASON (1999)
Ad_5r	I dislike the TV spot.	WENSKE (2008)	LEE/MASON (1999)

Table 10 **Operationalisation of ad attitude variable**
Source: Own illustration.

In the following, the measurement model for the ad variable is validated from a construct and item perspective. With regard to convergent validity, the applied factor analysis results in the extraction of one factor displaying a first eigenvalue of 3.7 and a second eigenvalue of 0.7 regarding the total sample. Similar results are obtained for the sample specific factor analyses (see Table 11). Thus, the Kaiser Criterion is met and one-dimensionality of the construct can be concluded.

Furthermore, the analysis of factor loadings provides evidence of item reliability. Within the total sample, all five indicators show factor loadings above the recommended level of $\Lambda > 0.7$.[207] Thus, no item has to be removed from the scale. As the high t-values show, all indicators are highly significant at 0.1% level.[208] Besides, high composite reliability values of above 0.9 across all sub samples provide evidence of construct reliability meaning that the attitude toward the ad variable is well expressed by its allocated items. The assumption of internal consistency is backed by Cronbach's alpha values amounting to 0.918 (FRoSTA), 0.917 (car brand) and 0.896 (Beck's). Moreover, discriminant validity is assured since the average variance extracted (AVE) of the ad variable is greater than each squared correlation of the construct with another construct in the model[209], i.e. the Fornell/Larcker Criterion is met. An overall AVE value above 0.73 indicates that 73% of the construct variance is explained by the measurement model.

[207] Within the sub samples, factor loadings exceed $\Lambda = 0.7$ apart from the reverse-coded item Ad_4r in the Beck's sample. The minimum requirement of $\Lambda = 0.4$, however, is met.
[208] The bootstrap procedure for estimating a standard error is run with 200 replications. As shown in Appendix XLIX, additional runs with 500, 1000 and 1500 replications result in comparable results.
[209] The quality evaluation of the attitude toward the ad variable was conducted for the partial model of ad effectiveness including the consumer-brand relationship, attitudinal and behavioural effects constructs.

Attitude toward the ad (Ad)		Total	FRoSTA	Car brand	Beck's
Item level					
Factor loading $\Lambda > 0.7$ ($\Lambda > 0.4$)	Ad_1	**0.905**	0.931	0.904	0.883
	Ad_2	**0.903**	0.901	0.920	0.898
	Ad_3	**0.927**	0.935	0.913	0.914
	Ad_4r	**0.714**	0.730	0.767	0.680
	Ad_5r	**0.807**	0.814	0.809	0.788
t-value > 3.922***	Ad_1	**197.935*** **	159.518***	92.655***	77.853***
	Ad_2	**175.233*** **	87.859***	114.855***	84.333***
	Ad_3	**278.530*** **	177.619***	94.511***	121.436***
	Ad_4r	**36.747*** **	24.527***	22.857***	14.404***
	Ad_5r	**57.625*** **	38.644***	26.666***	24.948***
Construct level					
Kaiser Criterion $EV_1 > 1$; $EV_2 < 1$	EV_1	**3.703**	3.774	3.719	3.545
	EV_2	**0.732**	0.746	0.772	0.746
AVE > 0.5		**0.731**	0.749	0.748	0.701
Com. Reliability > 0.7		**0.931**	0.937	0.937	0.921
Fornell/Larcker		✓	✓	✓	✓

Table 11 **Quality evaluation for ad attitude measurement model**
Source: Own illustration.

Attitude toward the sponsored UGB programme constitutes a new construct (abbr.: UGB variable – UGB) and has not been measured before. However, since it is a matter of evaluation of a corporate brand communication instrument, indicator variables can be adopted from existing measurement models for communication related latent variables.[210] Such a related variable is **attitude toward a brand community** (abbr.: community variable). Since (online) brand communities are considered a medium for UGB in general and a specific application of sponsored UGB programmes in particular, there are a lot of parallels between the UGB and community variable with regard to the aspects of interactivity and user participation.

[210] For example, the emerging latent variables attitude toward a brand community and attitude toward a web site were operationalised in previous studies by using indicators of measurement scales which were originally developed to measure attitude towards the ad (see STICHNOTH (2008), p.92; BRUNER II/KUMAR (2000), p. 41; CHEN/WELLS (1999), p.28).

Hence, the UGB variable was operationalised according to a community variable measurement model developed by **STICHNOTH**[211]. STICHNOTH's original 12-item scale (see Appendix XXXIV)[212] contains indicators expressing brand community appeal, quality, identification, trust, and affiliation. The integration of affiliation items into the UGB variable measurement model is not regarded adequate since this study targets not only affiliated respondents – i.e. "branticipants" who contribute to the sponsored UGB programme – but also respondents who have not heard of the programme before. The other aspects – appeal, quality, identification and trust – are taken into account. Appeal is thereby measured according to LEE/MASON's scale for the ad variable as introduced above. The identification indicator also corresponds to the respective indicator of the ad variable. Trust is covered by two indicators developed by LYNCH/KENT/SRINIVASAN within the context of online shopping site evaluation.[213] From this it follows an eight-item measurement model for the UGB variable (see Table 12).[214] Thereof six items correspond to the ad variable measurement scale. Thus, recurrence of scales is assured as far as possible to avoid unnecessary distractions for respondents and thus facilitate the completion of the questionnaire.

[211] See also in the following STICHNOTH (2008), p. 84.
[212] STICHNOTH differs between ten indicators measuring "community liking" and two reverse coded indicators for "community evaluation". For the purpose of this study it is referred to as one scale.
[213] See LYNCH/KENT/SRINIVASAN (2001), p. 19.
[214] Indicators with similar meaning were not taken over from the original scale.

Item	Attitude toward the UGB programme (UGB)	Reference	Source
Q: How do you like the (UGB programme)?			
UGB_1	(The UGB programme) is interesting to me.	STICHNOTH (2008)	LEE/MASON (1999)
UGB_2	The topic of (the UGB programme) is appealing to me.	STICHNOTH (2008)	LEE/MASON (1999)
UGB_3	(The UGB programme) is attractive to me.	STICHNOTH (2008)	LEE/MASON (1999)
UGB_4	I can easily identify with (the UGB programme).	STICHNOTH (2008)	LANTZ (1997)
UGB_5	(The UGB programme) has a good reputation.	STICHNOTH (2008)	LYNCH/KENT/SRINIVASAN (2001)
UGB_6	(The UGB programme) will keep its promises and commitments.	STICHNOTH (2008)	LYNCH/KENT/SRINIVASAN (2001)
UGB_7r	I think (the UGB programme) is poorly done/in need of improvement.	STICHNOTH (2008)	LEE/MASON (1999)
UGB_8r	I dislike (the UGB programme).	STICHNOTH (2008)	LEE/MASON (1999)

Table 12 Operationalisation of UGB attitude variable
Source: Own illustration.

Conducting factor and PLS analysis, hard evidence of the quality of the measurement model for the UGB construct is provided. Only one factor is extracted given a first eigenvalue greater than 1 (total sample: 5.757) and a second eigenvalue smaller than 1 (0.689). Thus, the results meet the Kaiser Criterion and one-dimensionality of the UGB construct can be concluded. The factor explains overall 72% of the total variance of the items. Since the factor loadings of all eight items exceed the recommended value of $\Lambda > 0.7$[215], item reliability is assured. The quality of the measurement model is also proven on the construct level: A high composite reliability value above 0.95 indicates that the UGB construct is well expressed by its indicators. Moreover, the Fornell-Larcker criterion is met so that discriminant validity is evidenced (see Table 13).

[215] With respect to the reverse-coded item UL_8 the factor loading in the Beck's sample is slightly below the recommended value of 0.7 but exceeds the minimum criteria of 0.4 by far so that the item is not to be deleted.

Attitude toward the UGB programme (UGB)		Total	FRoSTA	Car brand	Beck's
Item level					
Factor loading $\Lambda > 0.7$ ($\Lambda > 0.4$)	UGB_1	**0.895**	0.893	0.878	0.899
	UGB_2	**0.891**	0.889	0.833	0.894
	UGB_3	**0.884**	0.892	0.831	0.881
	UGB_4	**0.848**	0.847	0.820	0.852
	UGB_5	**0.897**	0.900	0.872	0.893
	UGB_6	**0.887**	0.887	0.836	0.882
	UGB_7	**0.754**	0.757	0.730	0.735
	UGB_8	**0.718**	0.728	0.790	0.678
t-value > 3.922***	UGB_1	**180.505*****	95.015***	83.147***	127.943***
	UGB_2	**179.804*****	89.280***	66.777***	105.167***
	UGB_3	**160.525*****	96.909***	59.607***	104.087***
	UGB_4	**158.527*****	74.715***	69.425***	100.369***
	UGB_5	**181.270*****	100.176***	67.239***	93.530***
	UGB_6	**134.829*****	62.519***	50.536***	88.397***
	UGB_7	**46.316*****	26.717***	24.983***	24.899***
	UGB_8	**44.758*****	24.769***	33.016***	20.863***
Construct level					
Kaiser Criterion $EV_1 > 1$; $EV_2 < 1$	EV_1	**5.757**	5.839	5.444	5.811
	EV_2	**0.689**	0.742	0.713	0.703
AVE > 0.5		**0.721**	0.725	0.680	0.711
Com. Reliability > 0.7		**0.954**	0.955	0.944	0.951
Fornell/Larcker		✓	✓	✓	✓

Table 13 **Quality evaluation for UGB attitude measurement model**
Source: Own illustration.

3.2 Consumer-brand relationship

In most studies, the operationalisation of the consumer-brand relationship variable (abbr.: CBR) is based on the **brand relationship quality (BRQ)** approach by **FOURNIER**.[216] Her original BRQ scale comprises nearly 40 items allocated to seven

[216] For an overview ee WENSKE (2008b), pp. 97 et seqq.

dimensions[217] and was later revised to six dimensions:[218] First, love and passion express the affective relatedness to a brand ranging from warmth to obsessive dependency. Second, self connection reflects the degree to which the brand delivered on identity concerns, expressing an aspect of the consumer's self. Third, interdependence involves frequent brand interactions, increased brand-related activity and growing individual interaction events leading to consumption rituals. Fourth, commitment is understood as supportive behaviour, fostering the brand relationship longevity and could be either emotional or investment-related. Fifth, intimacy referred to knowledge structures around held brands based on beliefs about superior product performance and irreplaceability of the brand. Sixth, brand partner quality reflects the consumer's evaluation of the brand's performance in its partnership role.

FOURNIER's operationalisation is subject to criticism with respect to research practicability. The multi-dimensional BRQ conceptualisation is regarded inappropriate given the fact that the six dimensions are not selective and categorized into determinants and effect values.[219] Moreover, the dimension variety proved to be difficult in operationalisation[220] and could not be empirically validated by related studies.[221] In a 2004 study FOURNIER modified her measurement model using only four dimensions: commitment, intimacy, self connection from the original model and satisfaction as newly added dimension.[222] Furthermore, proponents of the identity-based brand management approach modified the brand relationship quality model.[223] In particular, **WENSKE** facilitated FOURNIER's BRQ approach by validating the consumer-brand relationship variable as **one-dimensional construct** and reducing the number of indicators to eight.[224] WENSKE's operationalisation is regarded state of the art within the identity-based brand management approach and was reconfirmed by STICHNOTH within the

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[217] See FOURNIER (1994), pp. 167; 198 et seq. The BRQ dimensions from 1994 include partner quality, love, intimacy, self-concept connection, nostalgic connection, personal commitment and passionate attachment.

[218] See FOURNIER (1998), p. 366.

[219] See HADWICH (2003), pp. 28 et seq.; WENSKE (2008b), pp. 101 et seqq.

[220] See BRUHN/EICHEN (2007), p. 246.

[221] For an overview of studies based on FOURNIER's measuring scale see WENSKE (2008b), pp. 105 et seqq.

[222] See AAKER/FOURNIER/BRASEL (2004), p. 3. The dimesions are called relationship strenght indicators.

[223] For instance, ZEPLIN condensed the proposed dimensions to affinity (representing self connection), non-replacability (love and passion) and confidence (brand partner quality) (ZEPLIN (2006), p. 25). BURMANN chose the dimensions confidence, sympathy, missing, and involvement (see BURMANN (2005), p. 469).

[224] WENSKE evaluated the allocation of indicators to FOURNIER's dimensions within a pretest by means of the p_{sa} index ('proportion of substantive agreement' index) which measures the congruence between the a priori target indicator allocation by the researcher and the actual allocation. For details about the p_{sa} index see ANDERSON/GERBING (1991).

context of online brand communities.[225] With regard to actual customers, this study follows WENSKE's operationalisation (see Table 14).

Item	Consumer-brand relationship (actual customers, aCBR)	Reference	Source
Q: How would you describe your relationship to (the brand)?			
aCBR_1	(The brand) shows an interest in my well-being.	WENSKE (2008)	FOURNIER (1994)
aCBR_2	I am "loving" (the brand).	WENSKE (2008)	FOURNIER (1994)
aCBR_3	I have fond memories that involve using (the brand).	WENSKE (2008)	FOURNIER (1994)
aCBR_4	I do not want to do without (the brand) in my life.	WENSKE (2008)	FOURNIER (1994)
aCBR_5	I am a loyal customer of (the brand).	WENSKE (2008)	FOURNIER (1994)
aCBR_6	(The brand's) image and my self image are similar in a lot of ways.	WENSKE (2008)	FOURNIER (1994)
aCBR_7	I am totally familiar with (the brand's) characteristics.	WENSKE (2008)	FOURNIER (1994)
aCBR_8	Overall, my relationship to (the brand) is of high quality.	WENSKE (2008)	-

Table 14 **Operationalisation of CBR variable (actual customers)**
Source: Own illustration.

Since this study does not only target actual customers but also potential customers, some adaptations of the scale were necessary. For potential customers or consumers in general, brand usage and brand relationship history cannot be assumed. Thus, the items aCBR_3 and aCBR_5 expressing nostalgic connection and personal commitment are removed from the measure. A similar adaptation procedure was applied by THORBJØRNSEN/SUPPHELLEN/ NYSVEEN et al. when adapting the BRQ scale to meet an experiment with fictious brands (see Appendix XXXVII).[226] Besides, item aCBR_4 is replaced by an item from the scale by THORBJØRNSEN/SUPPHELLEN/ NYSVEEN et al. which expresses FOURNIER's love/passion dimension in more general wording. The other items aCBR_1, aCBR_2; aCBR_7 and aCBR_8 are kept in the measure of consumer-brand relationship for potential customers (see Table 15).

[225] See STICHNOTH (2008), pp. 61 et seqq.
[226] To reflect fictious brands all indicators allocated to FOURNIER's 'behavioral independence' and 'personal commitment' dimension were removed (see THORBJØRNSEN/SUPPHELLEN/NYSVEEN et al. (2002), pp. 26 et seqq.).

Item	Consumer-brand relationship (potential customers, pCBR)	Reference	Source
Q: How would you describe your relationship to (the brand)?			
pCBR_1	(The brand) shows an interest in my well-being.	WENSKE (2008)	FOURNIER (1994)
pCBR_2	I am "loving" (the brand).	WENSKE (2008)	FOURNIER (1994)
pCBR_3	I have feelings for this brand that I don't have for many other brands.	WENSKE (2008)	THORBJØRNSEN/SUPPHELLEN/NYSVEEN et al. (2002)
pCBR_4	(The brand's) image and my self image are similar in a lot of ways.	WENSKE (2008)	FOURNIER (1994)
pCBR_5	I am totally familiar with (the brand's) characteristics.	WENSKE (2008)	FOURNIER (1994)
pCBR_6	Overall, my relationship to (the brand) is of high quality.	WENSKE (2008)	-

Table 15 Operationalisation of CBR variable (potential customers)
Source: Own illustration.

In data collection, the separation of consumer-brand relationship with respect to actual customers (aCBR) and potential customers (pCBR) is necessary due to different brand usage behaviour of the respondents. In data analysis, however, consumer-brand relationship (CBR) as super ordinate concept is of interest. Thus, the measurement model of the aCBR variable is considered standard for the aggregated CBR variable. The indicator variables of the pCBR variable are integrated into the CBR scheme as follows. All six measured pCBR items are taken over and allocated to the corresponding CBR indicator.[227] The missing item CBR_5 ('loyal customer') is coded 1 ('Do not agree') for all cases since the respondents indicated that they have never used the brand before. The missing item CBR_4 is equated with the measured item pCBR_3 since both reflect the love/passion dimension.

The quality of the measurement model is confirmed for both the separated consumer-brand relationship variables for actual (aCBR, see Appendix L) and potential customers (pCBR, see Appendix LI) and the aggregated consumer-brand relationship variable (CBR, see Table 16). With regard to the aggregated CBR variable, one-dimensionality is proven given a first eigenvalue far below 1 (5.152) and second eigenvalues below 1 (0.730). All factor loadings meet the minimum criteria of $\Lambda > 0.4$

[227] pCBR_1 corresponds to CBR_1, pCBR_2 to CBR_2, pCBR_3 to CBR_3, pCBR_4 to CBR_6, pCBR_5 to CBR_7 ad pCBR_6 to CBR_8.

and mostly the recommended value of $\Lambda > 0.7$[228] and are of high significance. Since the Fornell/Larcker Criterion is met and a high composite reliability value above 0.9 is reached, construct reliability and discriminant validity is assured, too.

Consumer-brand relationship (CBR)		Total	FRoSTA	car brand	Beck's
Item level					
Factor loading $\Lambda > 0.7$ ($\Lambda > 0.4$)	CBR_1	**0.747**	0.762	0.732	0.768
	CBR_2	**0.884**	0.897	0.876	0.877
	CBR_3	**0.799**	0.824	0.838	0.856
	CBR_4	**0.886**	0.890	0.883	0.886
	CBR_5	**0.832**	0.824	0.637	0.849
	CBR_6	**0.842**	0.838	0.868	0.843
	CBR_7	**0.663**	0.710	0.611	0.595
	CBR_8	**0.875**	0.869	0.855	0.875
t-value > 3.922***	CBR_1	**83.990*** **	45.816***	35.039***	54.801***
	CBR_2	**163.261*** **	119.779***	79.382***	94.209***
	CBR_3	**83.293*** **	55.654***	60.525***	98.634***
	CBR_4	**148.323*** **	92.822***	86.462***	98.515***
	CBR_5	**97.393*** **	55.050***	18.969***	60.574***
	CBR_6	**128.200*** **	62.043***	71.468***	72.650***
	CBR_7	**40.488*** **	32.313***	20.570***	22.327***
	CBR_8	**140.120*** **	86.909***	69.168***	84.670***
Construct level					
Kaiser Criterion $EV_1 > 1$; $EV_2 < 1$	EV_1	**5.152**	5.499	5.066	5.240
	EV_2	**0.730**	0.670	0.782	0.766
AVE > 0.5		**0.671**	0.687	0.631	0.678
Com. Reliability > 0.7		**0.942**	0.946	0.931	0.943
Fornell/Larcker		✓	✓	✓	✓

Table 16 **Quality evaluation for CBR measurement model**
Source: Own illustration.

With respect to multi group analysis, CBR is split into three groups according to relationship quality: A 'high' relationship quality refers to a total mean equal to or above

[228] Item CBR_7 in the total and two sub samples as well as item CBR_5 in the car brand sub sample exceed the minimum criterion but not the recommended value.

4.5 across all indicators; 'moderate' refers to a mean between 3.0 and 4.5; 'weak' to a mean below 3.0.[229]

3.3 Attitudinal and behavioural effects

The attitudinal effects variable (abbr.: attitude variable – Att) and the behavioural effects variable (abbr.: behaviour variable – Beh) are operationalised according to the brand community effects variable developed by **STICHNOTH**.[230] The scale is applied to assess both the effectiveness of the UGB programme and the ad.

With respect to prior awareness of the respective communication programme, the effects indicators are presented in two versions: Addressing aware respondents, actual effects of the programmes are enquired by using wording in present perfect ("The programme has made me…"). Addressing unaware respondents, attitudinal effects refer to first impressions after the programme introduction by using the present form (The programme makes me…"). With regard to behavioural effects, only intentions are enquired by using the subjunctive form ("The programme could make me…)

The **attitude variable** comprises three items reflecting the aspects of positive image transfer, reliability and relationship building. While the first two indicator variables were created by STICHNOTH, the latter is taken from CHEN/WELLS' scale to assess the general favourability toward a site (see Appendix XXXIX).[231] Table 17 shows the operationalisation of the attitude variable for the target group of programme aware respondents.

Item	Attitudinal effects (Att)	Reference	Source
Q: Has the (UGB programme/the ad) exerted any influence on your relationship to (the brand)?			
Att_1	(The UGB programme/the ad) has made me …look upon (the brand) more favourably than before.	STICHNOTH (2008)	-
Att_2	…consider the brand to be more reliable.	STICHNOTH (2008)	-
Att_3	…build a relationship (to the brand) more easily.	STICHNOTH (2008)	CHEN/WELLS (1999)

Table 17 **Operationalisation of attitudinal effects variable**
Source: Own illustration.

[229] This classification is adapted from WENSKE and STICHNOTH.
[230] STICHNOTH (2008), pp. 88 et seq. Unlike this study, STICHNOTH aggregated attitudinal and behavioural effects to one variable.
[231] See CHEN/WELLS (1999), p. 28.

Attitudinal effects are measured in terms of UGB attitude and ad attitude as exogenous variables. Both variables prove to be strongly correlated at 0.1% significance level.[232] Thus, for the purpose of a combined model of UGB and ad effectiveness, the observed values for UGB and ad-driven attitudinal effects are aggregated.[233] The factor and PLS analysis displayed in Table 18 for the total sample and in Appendix LII and Appendix LIII for the subsamples results in the extraction of one factor in all three cases displaying a first eigenvalue around 2.7 and a second eigenvalue around 0.2. Thus, the Kaiser Criterion is met and the one-dimensionality of the attitude variable proven. It is remarkable that the factor loadings are very high exceeding 0.9 throughout all items. The same is true for AVE and composite reliability values amounting to rounded off 0.9 and 0.96 respectively. This can be explained by the small number of three indicators which is regarded the minimum scale for factor analysis.[234]

Attitudinal effects (Att)		**Combined**	**UGB**	**Ad**
Item level				
Factor loading $\Lambda > 0.7$ ($\Lambda > 0.4$)	Att_1	**0.949**	0.956	0.945
	Att_2	**0.954**	0.960	0.947
	Att_3	**0.944**	0.946	0.937
t-value > 3.922***	Att_1	**286.285*** **	389.162***	261.620***
	Att_2	**348.764*** **	375.681***	258.219***
	Att_3	**285.613*** **	347.271***	257.763***
Construct level				
Kaiser Criterion $EV_1 > 1$; $EV_2 < 1$	EV_1	**2.717**	2.712	2.693
	EV_2	**0.168**	0.177	0.181
AVE > 0.5		**0.901**	0.910	0.889
Com. Reliability > 0.7		**0.965**	0.968	0.960
Fornell/Larcker		✓	✓	✓

Table 18 **Quality evaluation for attitudinal effects measurement model**
Source: Own illustration.

[232] Pearson correlation is 0.660 at p=0.000.
[233] The aggregated attitude (aAtt) variable reflects the statistical mean of the corresponding UGB and ad related indicator variables. Thus, it becomes
$aAtt = mean(mean(Att_{UGB}\_1, Att_{Ad}\_1), mean(Att_{UGB}\_2, Att_{Ad}\_2), mean(Att_{UGB}\_3, Att_{Ad}\_3))$
[234] See RAITHEL (2006), pp. 107 et seqq.

The **behaviour variable** contains indicators reflecting the dimensions recommendation, (re-)purchase and cross-buying behaviour according to STICHNOTH.[235] The behavioural effects dimensions are thereby measured as single-item constructs and treated simplistically as indicator variables for the behaviour construct.[236] Further dimensions such as competitive brand appeal, price premium acceptance, bond and bondage[237] are not included since this study centres on the effectiveness of brand communication programmes and not primarily on the impact of the consumer-brand relationship.

Table 19 displays the three-item scale of the behaviour variable for programme aware respondents as applied for the FRoSTA and Beck's sample. Since consumer behaviour in the automotive industry differs from the fast-moving food and beverage industry, the operationalisation of the behaviour variable is changed for the car brand sample. The (re-)purchase dimension is replaced by the inclusion of the brand into the consideration set[238]; the cross-buying dimension (Beh_3) is removed from the scale.

Item	Behavioural effects (Beh)	Reference	Source
Q: Has the (UGB programme) exerted any influence on your relationship to (the brand)?			
Beh_1	(The UGB programme/the ad) has made me …talk about (the brand) with family and friends more often than before.	STICHNOTH (2008)	FOURNIER (1994)
Beh_2	…(re-)purchase a product of (the brand).	STICHNOTH (2008)	FOURNIER (1994)
Beh_3	…buy other products of the brand as usual.	STICHNOTH (2008)	FOURNIER (1994)

Table 19 Operationalisation of behavioural effects variable
Source: Own illustration.

Similarly to the attitude variable, the behaviour variable is measured in terms of UGB and ad influence and aggregated for the purpose of the combined model given the strong significant correlation between the variables.[239] As shown in Table 20 for the total sample and in Appendix LIV and Appendix LV for the subsamples, the meas-

[235] See STICHNOTH (2008), p. 64; p. 88.
[236] This operationalisation approach is proposed by FOURNIER and WENSKE (see FOURNIER (1994), pp. 318 et seq.; WENSKE (2008a), pp. 216 et seqq.).
[237] See WENSKE (2008a), pp. 216 et seqq.; STICHNOTH (2008), p. 70.
[238] The following wording is used: "The programme has made me short-list the brand when deciding on purchasing a new car."
[239] Pearson correlation is 0.665 at p=0.000. Similarly to the aggregated attitudinal effects variable, the aggregated behavioural effect variable (aBeh) becomes:
$$aBeh = mean\left(mean\left(Beh_{UGB}\_1, Beh_{Ad}\_1\right), mean\left(Beh_{UGB}\_2, Beh_{Ad}\_2\right), mean\left(Beh_{UGB}\_3, Beh_{Ad}\_3\right)\right)$$

urement model of the behaviour variable is of high quality: One-dimensionality is assured by all samples; factor loadings above 0.8 provide evidence of item reliability. As composite reliability values above 0.9 indicate, the behaviour variable is well expressed by its items. Meeting the Fornell/Larcker Criterion testifies to discriminant validity.

Behavioural effects (Att)		**Combined**	**UGB**	**Ad**
Item level				
Factor loading $\Lambda > 0.7$ ($\Lambda > 0.4$)	Beh_1	**0.885**	0.869	0.879
	Beh_2	**0.922**	0.922	0.915
	Beh_3	**0.872**	0.879	0.866
t-value > 3.922***	Beh_1	**168.348*** **	155.040***	139.276***
	Beh_2	**247:418*** **	247.213***	200.650***
	Beh_3	**95.178*** **	100.339***	89.432***
Construct level				
Kaiser Criterion $EV_1 > 1$; $EV_2 < 1$	EV_1	**2.400**	2.369	2.383
	EV_2	**0.368**	0.395	0.368
AVE > 0.5		**0.798**	0.793	0.787
Com. Reliability > 0.7		**0.922**	0.920	0.917
Fornell/Larcker		✓	✓	✓

Table 20 **Quality evaluation for behavioural effects measurement model**
Source: Own illustration.

3.4 Programme related factors

This study includes further latent variables which are assumed to be drivers of UGB attitude and moderators of the relation between UGB attitude and consumer-brand relationship respectively. These constructs comprise user personality related factors and UGB programme related factors. The latter are operationalised in the following.

The operationalisation of the new variable **UGB-brand fit** (abbr.: fit variable – Fit) is based on the established **event-brand fit** variable.[240]. In the centre of this study is

[240] For an overview of previous studies measuring the event-brand fit construct see NITSCHKE (2006), pp.190 et seqq.

the general fit perception known as global analysis.[241] Thus, the global fit between the UGB programme and the brand is measured by a single item according to DRENGNER (see Appendix XLI).[242] With regard to the event-brand fit construct developed by **NITSCHKE** (see Appendix XLII) two more indicators are added:[243] usage fit reflecting the denotative brand image dimension (functional)[244] and target group fit reflecting the connotative dimension of the brand image (symbolic).[245] Within this study, the dimensions are thereby measured as single-item constructs and treated simplistically as indicator variables for the UGB-brand fit construct (see Table 21).[246] As demonstrated by WENSKE in the context of simplification of the customer brand relationship variable, such procedure is legitimate.

Item	UGB-brand fit (Fit)	Reference	Source
Q: How do you evaluate the fit between the (UGB programme) and (the brand)?			
Fit_1	(The UGB programme) fits …to the typical (brand) customers as I picture them.	NITSCHKE (2006)	AAKER (1997)
Fit_2	…to the (product category).	NITSCHKE (2006)	GWINNER (1999)
Fit_3	…to (the brand) overall.	DRENGNER (2003)	MARTIN/ STEWART (2001)

Table 21 **Operationalisation of UGB-brand fit variable**
Source: Own illustration.

Within quality evaluation, one-dimensionality of the UGB-brand fit variable was evidenced regarding the total sample and the three subsamples (see Table 22). The factor analysis displayed a first eigenvalue of 2.416 and a second eigenvalue of 0.377 overall. Item reliability is assured given factor loadings above 0.8. The composite reliability values exceed 0.9 so that content reliability is proven. Since the Fornell/Larcker Criterion is met, too, the overall quality of the measurement model of UGB-brand fit can be stated. For the purpose of multi-group comparison the fit vari-

[241] For a definition and discussion of fit analysis approaches see BAUMGARTH (2000), pp. 48 et seqq.; also see DRENGNER (2003), pp. 166 et seqq.
[242] See DRENGNER (2003), p. 170. Global analysis approaches have been also found in brand extension research. For measures see amongst others MARTIN/STEWART (2001), p. 476 and AAKER/KELLER (1990), p. 31.
[243] See also in the following NITSCHKE (2006), p. 199.
[244] For details on functional fit see amongst others GWINNER (1997), p. 145 et seqq.
[245] The consideration of brand image according to human characteristics is part of the brand personality concept by Aaker (see AAKER (1997), pp. 347 et seqq.
[246] In contrast, NITSCHKE treats target group fit and product category fit as independent sub-fit bases which determine global fit.

able is classified into three groups: weak (mean equal to 3.0 and below), moderate (mean equal to 4.5 and below), strong (mean above 4.5).

UGB-brand fit (Fit)		Total	FRoSTA	Car brand	Beck's
Item level					
Factor loading $\Lambda > 0.7$ ($\Lambda > 0.4$)	Fit_1	**0.887**	0.923	0.829	0.883
	Fit_2	**0.870**	0.847	0.879	0.871
	Fit_3	**0.933**	0.928	0.914	0.942
t-value > 3.922***	Fit_1	**136.697*** **	117.644***	42.312***	66.541***
	Fit_2	**95.565*** **	41.460***	67.521***	61.626***
	Fit_3	**252.304*** **	124.867***	93.647***	163.071***
Construct level					
Kaiser Criterion $EV_1 > 1$; $EV_2 < 1$	EV_1	**2.416**	2.438	2.283	2.425
	EV_2	**0.377**	0.342	0.444	0.397
AVE > 0.5		**0.805**	0.810	0.765	0.808
Com. Reliability > 0.7		**0.925**	0.928	0.907	0.927
Fornell/Larcker		✓	✓	✓	✓

Table 22 **Quality evaluation for UGB-brand fit measurement model**
Source: Own illustration.

The **attitude toward stimulated UGC** variable (abbr.: UGC variable – UGC) is operationalised according to the **UGB variable**, i.e. an eight-item scale including the aspects of appeal, quality, identification and trust (see Table 12 above). The idea is to compare the evaluation of the UGB application in general (UGB variable) and actual content contributions in particular (UGC variable) by using similar indicator variables. Content contributions are thereby represented by the most popular entries of the respective UGB programme, that is, the most commented blog entry in the case of the FRoSTA Blog and the best ranked user story at the time of data collection in the case of the car brand community. Since the submitted videos to the Beck's challenge were not ranked continuously, the UGC variable could not be included into the Beck's questionnaire.

As shown in Table 23, the measurement model of the UGC variable is of good quality. One factor was extracted, displaying a first eigenvalue of 5.645 and a second eigenvalue of 0.886. Factor loadings and composite reliability clearly exceed the minimum level so that item and content reliability of the UGC variable is assured. Meeting

the Fornell/Larcker criteria provides evidence of discriminant validity. Similarly to the fit variable, the values of the UGC variable are classified as 'weak', 'moderate' and 'strong' respectively according to the mean delimitation values 3.0 and 4.5 for the purpose of multi-group comparison.

Attitude toward stimulated UGC (UGC)		**Total**	FRoSTA	Car brand
Item level				
Factor loading $\Lambda > 0.7$ ($\Lambda > 0.4$)	UGC_1	**0.879**	0.884	0.874
	UGC_2	**0.895**	0.899	0.894
	UGC_3	**0.901**	0.904	0.901
	UGC_4	**0.784**	0.854	0.718
	UGC_5	**0.897**	0.921	0.858
	UGC_6	**0.875**	0.892	0.855
	UGC_7r	**0.718**	0.743	0.665
	UGC_8r	**0.742**	0.764	0.698
t-value > 3.922***	UGC_1	**143.751*** **	77.731***	64.417***
	UGC_2	**152.120*** **	97.079***	73.147***
	UGC_3	**207.369*** **	118.657***	96.200***
	UGC_4	**89.600*** **	85.926***	32.479***
	UGC_5	**179.198*** **	113.125***	52.527***
	UGC_6	**117.288*** **	75.520***	49.489***
	UGC_7r	**35.205*** **	26.278***	13.314***
	UGC_8r	**36.824*** **	27.339***	14.611***
Construct level				
Kaiser Criterion $EV_1 > 1$; $EV_2 < 1$	EV_1	**5.645**	5.937	5.360
	EV_2	**0.886**	0.813	0.973
AVE > 0.5		**0.705**	0.740	0.661
Com. Reliability > 0.7		**0.950**	0.958	0.939
Fornell/Larcker		✓	✓	✓

Table 23 **Quality evaluation for UGC attitude measurement model**
Source: Own illustration.

3.5 User personality related factors

Having discussed the operationalisation of UGB programme related factors, the following section is dedicated to the measurement models of user personality related factors. With regard to **Web2.0 experience**, two dominant ways to measure internet

experience in general can be found in academic literature: first, by self-evaluation of the degree of internet experience[247], and second, by the time spent in the internet.[248] This study adopts the more precise **time use** approach applying a scale anchored by "*Never*" and "*Daily*". Since UGB programmes are mediated by Web2.0 platforms, internet experience is narrowed down to the usage of specific Web2.0 applications. Hence, the Web2.0 experience variable (abbr.: Web variable – Web) is operationalised by the question "How often do you use the following Web2.0 applications?" (see Table 24). According to the Web2.0 scale by FISCH/GSCHEIDLE (see Appendix XLIII)[249] six items are included.[250]

Item	Web2.0 experience (Web)	Source
Q: How often do you use the following Web2.0 applications?		
Web_1	Online encyclopaedia (e.g. Wikipedia)	FISCH/ GSCHEIDLE (2008)
Web_2	Social networking sites and communities (e.g. Facebook, XING)	FISCH/ GSCHEIDLE (2008)
Web_3	Video platforms (e.g. YouTube)	FISCH/GSCHEIDLE (2008)
Web_4	Photo platforms (e.g. Flickr)	FISCH/GSCHEIDLE (2008)
Web_5	Blogs	FISCH/GSCHEIDLE (2008)
Web_6	Virtual worlds (e.g. SecondLife)	FISCH/GSCHEIDLE (2008)

Table 24 Operationalisation of Web2.0 experience variable
Source: Own illustration.

As result of factor analysis the proposed measurement model had to be **revised**: For the Beck's sample, two factors were extracted showing a first eigenvalue of 2.509 and a second eigenvalue of 1.107 (see Appendix LVI). Thus, two items with low factor loadings had to be removed from the scale to reach one-dimensionality: first, the online encyclopaedia indicator variable (Web_1) and second, the virtual world indicator variable (Web_6). That is, the Web2.0 applications with the highest (Web_1) and the lowest usage values (Web_6) were deleted.

The resulting **4-item scale** can be regarded valid and reliable regarding the total and

[247] See amongst others (THORBJØRNSEN/SUPPHELLEN/NYSVEEN et al. (2002), p. 26. The following single item was used: "*I feel that I am an experienced user of the Internet.*"

[248] Amongst others, BRUNER II/KUMAR operationalised web experience was operationalised as amount of time respondents reported spending on the web in a typical week (BRUNER II/KUMAR (2000), p. 37). Likewise, NOVAK/HOFFMAN/YUNG used the question "*How much time would you estimate that you personally use the Web?*" (NOVAK/HOFFMAN/YUNG (2000), p. 28).

[249] See FISCH/GSCHEIDLE (2008), p. 358. OPA used a similar scale to measure the usage frequency of web applications (OPA (2007)).

[250] In the questionnaire, further Web1.0 applications (e.g. Email, search engines, online shops) were inquired for descriptive analysis.

all subsamples (see Table 25). The Kaiser Criterion is met given a first eigenvalue of 2.262 and second eigenvalue of 0.802 overall. Item reliability is assured although the item Web_2 does not reach the recommended value of 0.7 in the total and two subsamples. Furthermore, it is to be noted that the AVE value only amounts to the minimum level, that is, only 56% of the construct variance is explained by the set of indicator variables. For the purpose of multi-group comparison, the web variable is split as follows: 'little' experience refers to the usage categories 'never' and 'every few months' (mean delimitation value 2.0), 'moderate' refers to 'monthly' and 'weekly' usage categories (mean delimitation value: 4.0) and 'high' to 'daily' usage (above 4.0).

Web2.0 experience (Web)		**Total**	FRoSTA	Car brand	Beck's
Item level					
Factor loading $\Lambda > 0.7$ ($\Lambda > 0.4$)	Web_1				
	Web_2	**0.646**	0.588	0.677	0.726
	Web_3	**0.724**	0.705	0.726	0.758
	Web_4	**0.796**	0.773	0.841	0.746
	Web_5	**0.815**	0.899	0.782	0.715
	Web_6				
t-value > 3.922***	Web_1				
	Web_2	**20.322*** **	7.939***	9.335***	15.287***
	Web_3	**28.389*** **	12.602***	9.296***	21.819***
	Web_4	**39.300*** **	18.937***	20.195***	18.526***
	Web_5	**39.058*** **	37.020***	14.593***	15.222***
	Web_6				
Construct level					
Kaiser Criterion $EV_1 > 1$; $EV_2 < 1$	EV_1	**2.262**	2.360	2.315	2.501
	EV_2	**0.802**	0.684	0.775	0.904
AVE > 0.5		**0.560**	0.562	0.576	0.542
Com. Reliability > 0.7		**0.835**	0.834	0.844	0.826
Fornell/Larcker		✓	✓	✓	✓

Table 25 **Quality evaluation for Web2.0 experience measurement model**
Source: Own illustration.

The **innovativeness variable** (abbr.: Inno) is operationalised according to the established **Domain-Specific Innovativeness (DSI) measure** developed by GOLD-

SMITH/HOFACKER (see Appendix XLIV).[251] This measure was adopted and validated in previous studies of various industries.[252] The applied 5-item scale includes two reverse scored items (Inno_3; Inno_4) (see Table 26).

Item	Innovativeness (Inno)	Source
Q: How is your attitude toward innovation* in the consumer goods domain? (Including new products, offers and services around a product or brand)		
Inno_1	In general, I am among the first in my circle of friends to buy a new product when it appears.	GOLDSMITH/ HOFACKER (1991)
Inno_2	If I hear that a new product is available in the store, I am interested enough to try it.	GOLDSMITH/ HOFACKER (1991)
Inno_3r	Compared to my family and friends, I use only a few product brands.	GOLDSMITH/ HOFACKER (1991)
Inno_4r	In general, I am the last in my circle of friends to know about new brands and latest product developments.	GOLDSMITH/ HOFACKER (1991)
Inno_5	I like to buy a new product before all other people do.	GOLDSMITH/ HOFACKER (1991)

Table 26 **Operationalisation of innovativeness variable**
Source: Own illustration.

As result of factor analysis, the two reverse scored items had to be removed from the measurement scale: Within the original scale the factor loadings of Inno_3 and Inno_4 fell short on the minimum criteria of $\Lambda > 0.4$ and did not pass the significance test (see Appendix LI). Two factors were extracted for all samples; the AVE value was partly below the minimum criteria of 0.5.

The **revised 3-item scale** with exclusively positive wording meets all requirements for validity and reliability (see Table 27). The Kaiser Criterion is met, assuring content reliability. Factor loadings approximating 0.9 for all remaining indicators provide evidence of item reliability. The item set explains overall 81% of the average variance of the construct which is regarded a good level. The composite reliability value is also very high (above 0.9) so that construct reliability is proven. Moreover, discriminant validity is assured with regard to the Fornell/Larcker Criterion.

[251] See GOLDSMITH/HOFACKER (1991), p. 209.
[252] For example, AGARWAL/PRASAD used the scale to measure personal innovativeness in IT (see AGARWAL/PRASAD (1998), p. 210).

Innovativeness (Inno)		Total	FRoSTA	Car brand	Beck's
Item level					
Factor loading $\Lambda > 0.7$ ($\Lambda > 0.4$)	Inno_1	**0.907**	0.918	0.896	0.900
	Inno_2	**0.903**	0.922	0.899	0.885
	Inno_3r				
	Inno_4r				
	Inno_5	**0.890**	0.896	0.906	0.879
t-value > 3.922***	Inno_1	**168.536*****	120.335***	47.686***	105.732***
	Inno_2	**172.238*****	168.475***	65.709***	88.945***
	Inno_3r				
	Inno_4r				
	Inno_5	**164.881*****	123.173***	74.275***	84.005***
Construct level					
Kaiser Criterion $EV_1 > 1$; $EV_2 < 1$	EV_1	**2.432**	2.496	2.445	2.348
	EV_2	**0.348**	0.306	0.339	0.399
AVE > 0.5		**0.810**	0.832	0.810	0.789
Com. Reliability > 0.7		**0.928**	0.937	0.928	0.918
Fornell/Larcker		✓	✓	✓	✓

Table 27 **Quality evaluation for innovativeness measurement model**
Source: Own illustration.

The operationalisation of the **product category involvement** variable (abbr.: involvement variable – Inv) follows FOURNIER's analysis, measuring product category involvement according to selected items of the **Personal Involvement Inventory (PII) scale** developed by ZAICHKOWSKY[253] (see Appendix XLV). Within the identity-based brand management approach WENSKE[254] and STICHNOTH[255] used and confirmed three out of the 20 items of the PII scale: "*means a lot to me*" – "*means nothing to me*", "*is unimportant to me*" – "*is important to me*", "*is uninteresting to me*" – "*is interesting to me*".

Given the proven validity and reliability of the scale within the context of customer-brand relationships, this study adopts the described 3-item scale. However, instead

[253] See FOURNIER (1994), p. 162; ZAICHKOWSKY (1985), p. 350.
[254] WENSKE selected three items out of ZAICHKOWSKY's 20-item scale with respect to the fit to the examined categories coffee and coffee machines (see WENSKE (2008a), pp. 224 et seq.).
[255] STICHNOTH adopted WENSKE's items (see STICHNOTH (2008), p. 80).

of using semantic differentials as mentioned above, statements including positive wording are presented (see Table 28) in the usual matrix structure. The intention was to apply the same question format throughout the whole questionnaire.

Item	Product category involvement (Inv)	Source
Q: To what degree are you interested in (the product category)?		
Inv_1	(The product category) …is important to me.	ZAICHKOWSKY (1985)
Inv_2	…means a lot to me.	ZAICHKOWSKY (1985)
Inv_3	…is interesting.	ZAICHKOWSKY (1985)

Table 28 **Operationalisation of involvement variable**
Source: Own illustration.

The quality of the product category involvement measurement model was confirmed by the total and all subsamples (see Table 29): High factor loadings around 0.9 provide evidence of high item reliability. On the construct level, an overall composite reliability value of 0.94 indicates high construct reliability. Since the Fornell/Larcker Criteria is met, discriminant validity is proven. With respect to group classifications, 'high' involvement refers to values above or equal to 4.5, 'moderate' to values above or equal to 3 and 'low' to values below.

Product category involvement (Inv)		Total	FRoSTA	Car brand	Beck's
Item level					
Factor loading $\Lambda > 0.7$ ($\Lambda > 0.4$)	Inv_1	**0.920**	0.898	0.909	0.939
	Inv_2	**0.941**	0.933	0.941	0.952
	Inv_3	**0.896**	0.905	0.850	0.905
t-value > 3.922***	Inv_1	**205.175*** **	88.124***	64.703***	157.732
	Inv_2	**323.965*** **	180.173***	128.987***	229.535
	Inv_3	**162:963*** **	114.746***	41.047***	106.837
Construct level					
Kaiser Criterion $EV_1 > 1$; $EV_2 > 1$	EV_1	**2.537**	2.498	2.446	2.606
	EV_2	**0.303**	0.312	0.355	0.278
AVE > 0.5		**0.845**	0.832	0.811	0.869
Com. Reliability > 0.7		**0.943**	0.937	0.928	0.952
Fornell/Larcker		✓	✓	✓	✓

Table 29 **Quality evaluation for involvement measurement model**
Source: Own illustration.

The operationalisation of the **opinion leadership** variable (abbr.: opinion variable – OL) is based on the established scale developed by FLYNN/GOLDSMITH/EASTMAN (see Appendix XLVI).[256] This multiple-item scale is based on self-report what is considered a common method to identify opinion leadership.[257] According to WENSKE and STICHNOTH this study applies only four selected items of the original scale[258] (see Table 30). While the matrix statements refer to opinion leadership regarding general consumer behaviour, the introductory question text particularly refers to opinion leadership within the respective product category.

Item	Opinion leadership (OL)	Source
OP_1r	My opinion on a brand seems not to count with other people.	FLYNN/GOLDSMITH/EASTMAN (1996)
OP_2	Other people often pick a brand based on what I have told them.	FLYNN/GOLDSMITH/EASTMAN (1996)
OP_3	I often persuade others to buy a product of a brand that I like.	FLYNN/GOLDSMITH/EASTMAN (1996)
OP_4r	When choosing (a product category), other people rarely come to me for advice.	FLYNN/GOLDSMITH/EASTMAN (1996)

Table 30 **Operationalisation of opinion leadership variable**
Source: Own illustration based on WENSKE (2008a), p. 226; STICHNOTH (2008), p. 78.

The opinion leadership measurement scale described above was confirmed by the total and all three subsamples of this study (see Table 31). However, it is to be noted that the factor loadings for the reverse scored items OL_1 and OL_2 fall below the recommended value of 0.7 but still meet the minimum requirement of 0.4. On the construct level, an overall sufficient but low AVE value amounting only to 0.566 is observed. Despite these shortcomings which also appeared in previous studies[259], the opinion leadership measurement model meets all minimum requirements for reliability and validity. Similarly to other constructs discussed above, the opinion leadership variable is classified into a 'weak', 'moderate' and 'strong' group respectively according to the mean delimitation values 3.0 and 4.5 at a 1 to 5 scale.

[256] See FLYNN/GOLDSMITH/EASTMAN (1996), pp. 137 et seqq.; the scale development process comprised five separate studies (N=1,128).
[257] See KROEBER-RIEL/WEINBERG (2003), pp. 521 et seq.; TROMMSDORFF (2004), pp. 247 et seqq.
[258] See WENSKE (2008a), p. 226; STICHNOTH (2008), p. 78
[259] See WENSKE (2008a), pp. 226 et seq.

Opinion leadership (OL)		Total	FRoSTA	Car brand	Beck's
Item level					
Factor loading $\Lambda > 0.7$ ($\Lambda > 0.4$)	OL_1	**0.580**	0.607	0.532	0.553
	OL_2	**0.897**	0.911	0.875	0.888
	OL_3	**0.923**	0.936	0.911	0.916
	OL_4	**0.523**	0.427	0.581	0.563
t-value > 3.922***	OL_1	**15.436*** **	7.770***	5.027***	8.816***
	OL_2	**88.903*** **	60.712***	30.834***	54.692***
	OL_3	**103.160*** **	69.543***	35.573***	70.347***
	OL_4	**12.055*** **	4.454***	5.615***	9.392***
Construct level					
Kaiser Criterion $EV_1 > 1$; $EV_2 < 1$	EV_1	**2.329**	2.357	2.351	2.300
	EV_2	**0.831**	0.878	0.808	0.809
AVE > 0.5		**0.566**	0.564	0.554	0.562
Com. Reliability > 0.7		**0.831**	0.826	0.825	0.830
Fornell/Larcker		✓	✓	✓	✓

Table 31 **Quality evaluation for opinion leadership measurement model**
Source: Own illustration.

3.6 Discussion and summary of measurement model results

All in all, the measurement models of the eleven model-inherent constructs proved to be of **good quality**, meeting the validity and reliability criteria for all three samples. Only with respect to two variables – Web2.0 experience and innovativeness – the originally applied scales had to be revised. In these two cases, the reverse scored items had to be deleted.

In particular, the **validation of the UGB, UGC and fit variable** is to be highlighted. Those measurement models were newly developed within this study and proved to be valid and reliable operationalisations ready for use in future research. Besides, evidence is provided that consumer-brand relationship as overall construct may be measured similar to customer-brand relationship, which extends the application of this scale from actual to potential customers. Furthermore, the modified measurement models of the attitude and behaviour variables proved to be of high quality. The other used operationalisations were based on widely established marketing scales. While some of them (i.e. ad, involvement and opinion leadership scales) were previously applied and approved within the context of brand communication effectiveness and identity-based brand management, others (i.e. web and innovativeness scales)

were transferred to this context for the first time. Figure 48 provides an overview of the verified total measurement model. The layout thereby refers to the main UGB effectiveness model.[260]

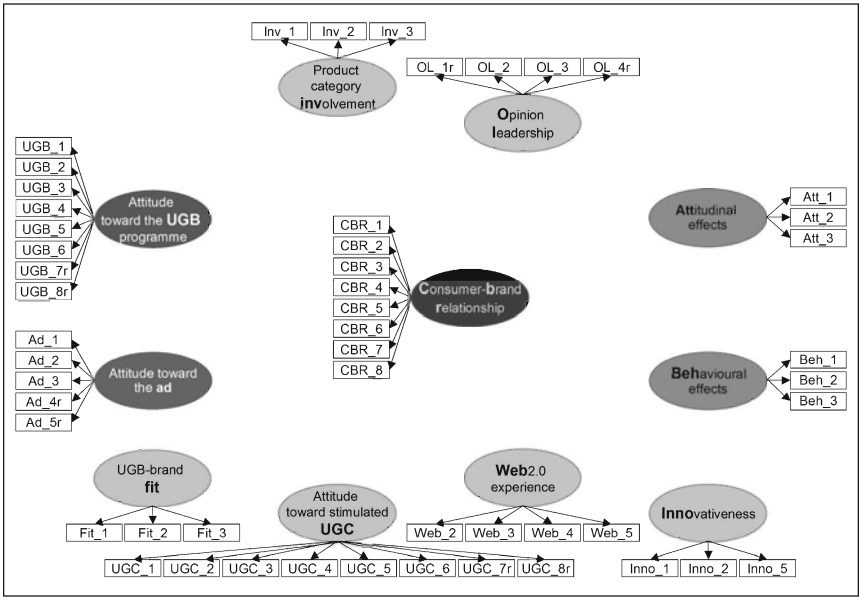

Figure 48 Verified total measurement model
Source: Own illustration.

Discussing the measurement model evaluation with regard to the number of indicators of a latent variable, it is to be noted that the precision of PLS estimation is based on **consistency of large**. This means that the estimation tends toward the true population parameter as the number of indicators increases.[261] Some measurement models go below the recommended size of six to eight items per construct. However, since sample size is a joint condition, the incidence of bias is unlikely even in case of

[260] Within the total UGB effectiveness model, attitude toward the UGB programme and attitude toward the ad represent the latent exogenous variables; consumer-brand relationship, attitudinal and behavioural effects represent the latent endogenous variables and programme and user related factors shall be tested as moderators. With regard to the additional UGB cause model, UGB attitude becomes the latent endogenous variable and assumed moderators of the UGB-CBR relation shall be tested as determinants of UGB attitude.

[261] See Monte Carlo simulation study by CHIN/MARCOLIN/NEWSTED (see CHIN/MARCOLIN/NEWSTED (1996), pp. 27 et seqq. and explanations in chapter E 2.2.2.

the three-item constructs (e.g. the attitude, behaviour, fit, involvement and innovativeness variable). Given an overall sample size of N=2,181, a potential shortcoming due to a small number of indicators is overcome. The same is true for the known bias in PLS for overestimating the measurement loading.[262] Indeed, the weakest factor loading of the opinion leadership variable is close to the minimum value of 0.40, but the big sample size prevents potential bias.

Since evidence of the measurement model quality is provided, the variables may be used in the following as one-dimensional factors within the scope of the UGB cause and effect analysis.

[262] See ibid., p. 34 and and explanations in chapter E 2.2.2.

4 Validation of determinants of UGB attitude

In response to the second research problem, the hypothesized drivers of UGB liking are examined in the following. Before presenting the results of hypothesis testing, UGB attitude as the key construct of this study is characterised by means of univariate analysis. Applying mean comparison, the values of UGB attitude are then analysed according to UGB programme and participation related factors, brand and category involvement as well psychographic and demographic groups. In order to determine the effect sizes of the hypothesized drivers of UGB attitude, multivariate PLS path modelling is applied.

4.1 Results of univariate UGB analysis

The objective of univariate analysis is to describe the general acceptance of UGB programmes across the three samples reflecting different UGB applications and industries. In addition, further descriptive results from quantitative and qualitative analyses regarding the approval of crowd sourcing as well as the attitude toward open communication in general are discussed.

4.1.1 Characterisation of UGB attitude

The results of univariate analysis suggest that the **attitude toward the UGB programme** is overall rather positive. The total mean derived from the FRoSTA, Beck's and car brand sample exceeds the value of 3 indicating at least partial approval (see Figure 49). In other words: More than two thirds of the respondents are rather in favour of the examined UGB programme, thereof 29% mostly or fully agree with the offering. Mean comparison among the three samples reveals that the FRoSTA Blog obtained the best evaluation. 35% of respondents show a positive attitude toward the UGB programme and 41% have a rather positive view, resulting in 76% approval.

The car brand community is approved by 72% of respondents; thereof 29% like it very much. This rather positive UGB evaluation is backed by the ad post test study conducted for the examined car brand. According to that survey, 30% of respondents like the idea very much to tell their own story about the car brand on the community website.[263] Another 45% like it and another 10% somewhat like it, resulting in an overall acceptance of 75% and 85% respectively.

[263] See also in the following MILLWARDBROWN (2009), p. 66.

By comparison, the Beck's Festival Video Challenge is only appreciated among 60% of respondents. An explanation for the weaker UGB attitude regarding the Beck's sample could be the sample composition concerning demographic patterns, UGB awareness and participation as well as brand usage. To what degree UGB attitude is truly driven by the mentioned factors is analysed in chapter E 4.2.1.

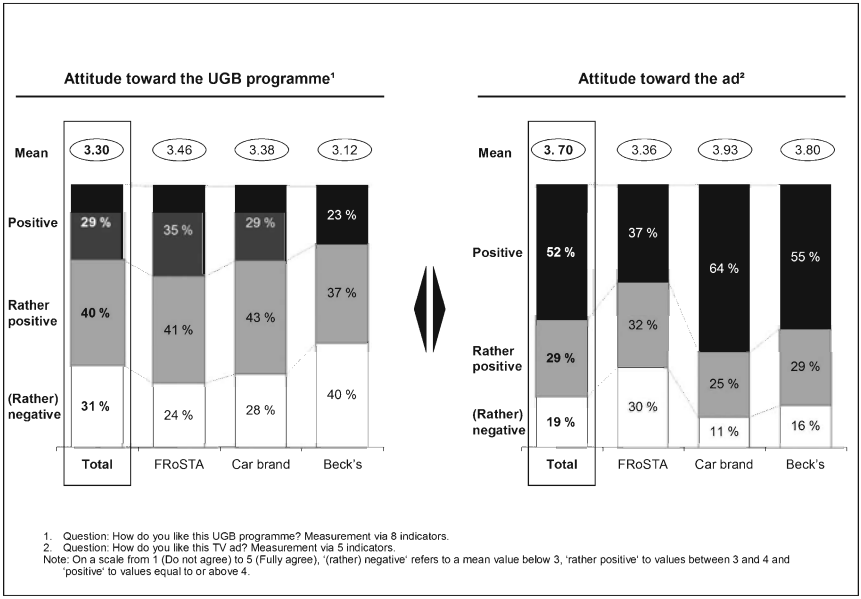

Figure 49 Descriptive analysis of UGB attitude and ad attitude
Source: Own illustration.

Comparing attitude toward the UGB programme with **attitude toward the ad**, an overall higher mean score for ad liking is observed (3.7 v. 3.3). However, the results vary by sample: While the mean of the UGB variable is higher than the ad variable regarding the FRoSTA sample, the UGB scores are lower regarding the car brand and Beck's sample. In the latter cases, more than a half of the respondents is entirely positive about the respective ad. An explanation could be, again, the sample composition and the character of the explored TV commercials. For instance, the car brand commercial was not only best scored within this study but also highly appreciated among respondents of an independent ad diagnostic study, stressing the pleasant

tonality of the spot enabling emotional connection.[264] The Beck's ad relies on icons such as a sailing ship and the catchy "Sail away" song.

4.1.2 Attitude toward crowd sourcing and open communication in general

In addition to the evaluation of individual UGB programmes, the approval of the idea of crowd sourcing[265] and open communication in general was examined within this study. According to the ad diagnostic survey in terms of the car brand, broad acceptance of **crowd sourcing** is observed. 84% of respondents at least somewhat liked the idea to use selected stories from the car brand community website for advertising e.g. by retelling a story in a TV ad.[266] Thereof 25% appreciated crowd sourcing in the case of the car brand very much. The approval of the crowd sourcing idea is thereby, again, significantly higher among women (89% vs. 82%). Moreover, further evidence is provided that not the young generation but the mid generation of 35 to 53 year olds is most in favour of user generated advertising.

Overall, the results provide evidence of a broad acceptance of **open communication** in general. As shown in Figure 50, respondents mostly agree (mean: 4.08) to open brand communication programmes which they can participate in. Compared to classic top-down brand communication such as advertising, respondents appear to regard open communication more customer-friendly, creative, innovative, trustworthy and socially responsible.[267] The majority considers open communication more reliable than advertising. According to the survey results, the bigger part would also rather buy brands which apply open communication.[268] While 53% of respondents are positive about the influence of open communication on their intended purchase decision, 19% stated that open communication had no effect.

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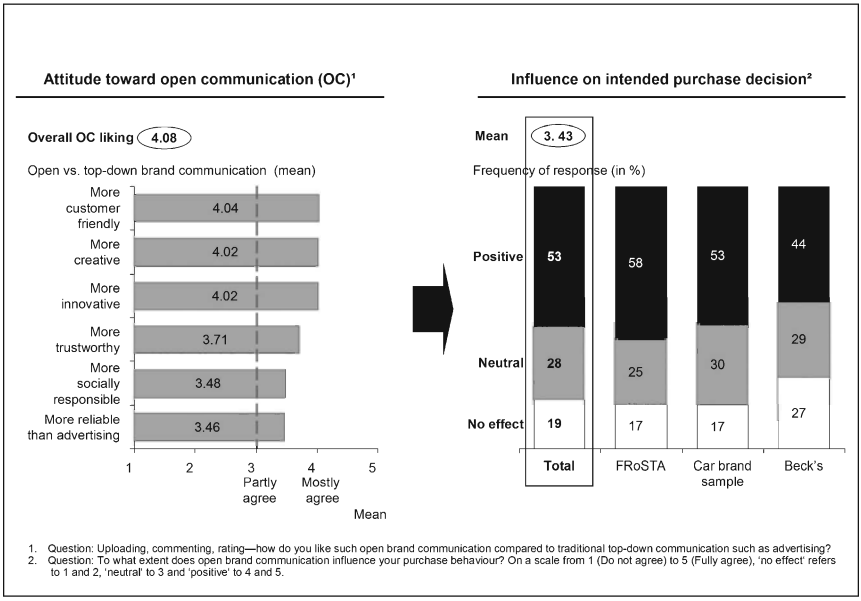
[264] See ibid., p. 4.

[265] Crowd sourcing is understood as delegating traditional in-house tasks such as marketing communication to consumers.

[266] See MILLWARDBROWN (2009), p. 67.

[267] Refers to question: How do you like open communication which you can participate in compared to classic top-down communication (e.g. advertising)? Categories given as indicated, scale: 1—5 (Don't agree—Fully agree).

[268] Refers to question: Would you rather buy brands which allow customers to participate in their brand communication? "Positive" refers to "I mostly agree"/"I fully agree", "Neutral" to "I partly agree", "No effect" to "I rarely agree" and "I don't agree at all".



1. Question: Uploading, commenting, rating—how do you like such open brand communication compared to traditional top-down communication such as advertising?
2. Question: To what extent does open brand communication influence your purchase behaviour? On a scale from 1 (Do not agree) to 5 (Fully agree), 'no effect' refers to 1 and 2, 'neutral' to 3 and 'positive' to 4 and 5.

Figure 50 Descriptive analysis of attitude toward open communication and influence on intended purchase decision
Source: Own illustration.

4.2 Results of bivariate analysis

In the following, the relation between UGB attitude and potential determinants shall be explored by means of bivariate analysis. Insights about existing relations will be gained by mean comparisons, interpreting the values of the UGB attitude variable among different groups. In case of the identified directly measurable 'hard facts' – usage and demographics – the bivariate analysis is taken into account for hypothesis testing. That is, the focus is on detecting individual relations between the classification variables and UGB attitude and testing the relation for significance.[269] With regard to the identified latent variables or 'soft facts' – attitudes and user personality – a more sophisticated multivariate analysis will be applied for hypothesis testing in the following chapter.

[269] For an in-depth consideration of descriptive statistics see chapter E 2.1.

4.2.1 *Evaluation of usage and demographics*

First, it is evaluated to what extent UGB attitude depends on 'hard facts', i.e. whether the user is an active participant in the UGB programme or a customer of the brand. Besides, the impact of age, education and gender is evaluated.

With respect to **UGB programme participation**, the influence of UGB awareness is examined as a first step given the fact that a part of the survey respondents heard of the programme for the first time when completing the questionnaire. Mean comparison reveals that the UGB attitude score of aware respondents is higher than the score of unaware respondents (see Figure 51). As evidenced by the Mann-Whitney-U-Test, the group differences are highly significant at 0.1% level across all samples.

Having a closer look at the UGB aware consumers, the ones who visited and read the homepage of the respective UGB programme (passive participants) and the ones who actually contributed to the programme by writing a blog and uploading a file respectively (active participants) are compared. With respect to **passive UGB programme participation**, a significantly stronger UGB attitude among users who have visited the homepage compared to users who have not is only observed regarding the FRoSTA sample. Regarding the car brand and Beck's sample, the group comparison did not give significant results. The car brand sample even indicates that the UGB attitude of users who just heard about the community is slightly stronger than the UGB attitude of users who actually visited the website without actively contributing. The total sample, however,

With respect to **active UGB programme participation**, only the FRoSTA sample could be examined due to the negligible group size in case of the Beck's and car brand sample.[270] In terms of the FRoSTA sample, it is observed that the attitude toward the FRoSTA blog is stronger among consumers who frequently (i.e. daily or weekly) write or comment on blog entries than among consumers who participate only once a month or less. These results are significant at a 5% level according to the Kruskal-Wallis H test (see Table 33). With regard to this finding, hypothesis H_1 about the influence of active UGB programme participation is confirmed.

H_1	Attitude toward the sponsored UGB programme is the stronger... ...the more active the user's participation in the UGB programme.	✓

[270] These two samples comprise only 3 and 6 actively participating users respectively.

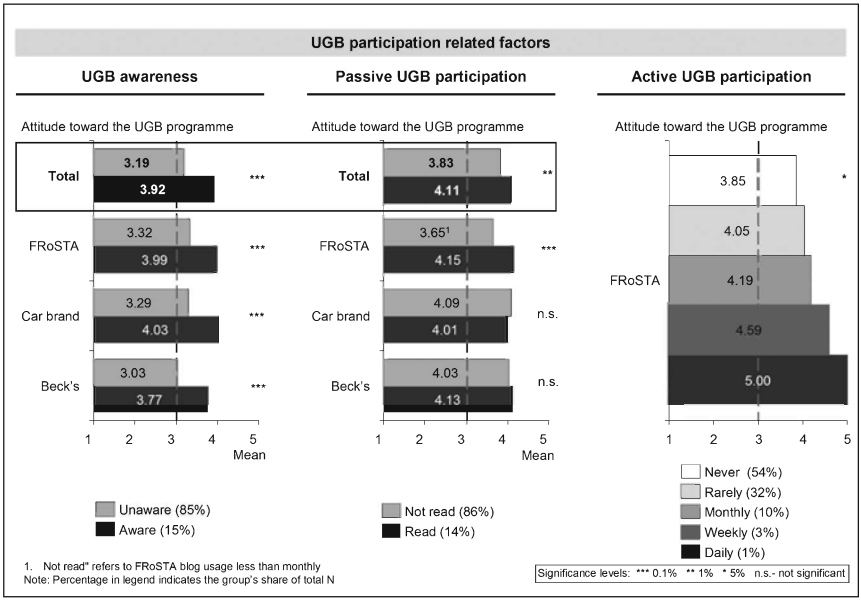


Figure 51 **Mean comparison regarding UGB attitude and UGB participation related factors**
Source: Own illustration.

Total		UGB awareness		Passive UGB participation	
		Unaware	Aware	Not read	Read
Mean Rank	N	1,839	333	48	285
	Mean Rank	1,011	1,501	130	173
Mann-Whitney U		168,054		4,959	
Wilcoxon W		1859,934		6,087	
Z		-13.119		-2.854	
Asymp. Sig.		0.000		0.004	

Note: "Not read" category of analysis re passive UGB participation includes only FRoSTA respondents who have never read the FRoSTA blog.

Table 32 **Multi-group comparison regarding UGB attitude and UGB participation related factors (Mann-Whitney U test)**
Source: Own illustration.

Active UGB participation		FRoSTA				
		Never	Rarely	Monthly	Weekly	Daily
Mean Rank	N	82	49	15	4	2
	Mean Rank	70	78	84	116	146
Chi-Square		10				
df		4				
Asymp. Sig.		0.034				

Table 33 **Multi-group comparison regarding UGB attitude and active UGB participation (Kruskal-Wallis H test)**
Source: Own illustration.

Splitting the data by the level of **brand usage**, a stronger UGB attitude is observed among actual customers than potential customers[271] across all samples (see Figure 52). Evidence is provided that these results are highly significant at a 0.1% level for the total sample (see Table 34) and all UGB application specific sub samples. Regarding the FRoSTA and Beck's samples representing fast-moving consumer goods categories, the UGB attitude is thereby most positive among heavy users. In case of the car brand sample, however, moderate users like the UGB programme slightly better than heavy users. This can be explained by the definition of 'heavy' users with respect to cars as long-life products: Unlike the food and beer sample, not the frequency of usage is measured but the duration of product usage and possession.[272] Thus, with regard to the total sample results, hypothesis H_2 is confirmed.

H_2	Attitude toward the sponsored UGB programme is the stronger... ...the heavier the brand usage.	✓

[271] Actual customers include respondents who have used the brand before; potential customers refer to respondents who have not used it before but belong to the general target group.
[272] With regard to FRoSTA and Beck's, 'heavy users' consume the brand at least monthly. In case of the car brand, 'heavy users' have owned or driven a car of the brand for at least five years.

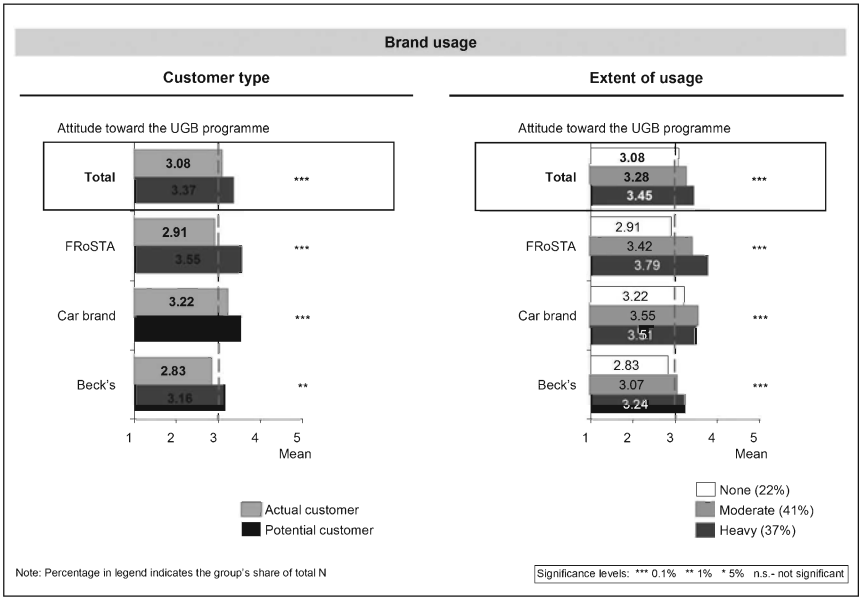


Figure 52 **Mean comparison regarding UGB attitude and brand usage**
Source: Own illustration.

Brand usage		**Total sample**		
Extent of usage		**None**	**Moderate**	**Heavy**
Ranks	N	474	887	811
	Mean rank	944	1,073	1,184
Chi-Square		44		
df		2		
Asymp. Sig.		0.000		

Table 34 **Multi-group comparison regarding UGB attitude and brand usage (Kruskal-Wallis H test)**
Source: Own illustration.

Brand usage	FRoSTA			Car brand			Beck's		
Customer type	Potential		Actual	Potential		Actual	Potential		Actual
Mean rank	249		378	270		323	361		444
Mann-Whitney U	20250			36159			29212		
Wilcoxon W	25606			76062			33583		
Z	-5.864			-3.750			-3.005		
Asymp. Sig. (2-tailed)	0.000			0.000			0.003		
Extent of usage	None	Mod.	Heavy	None	Mod.	Heavy	None	Mod.	Heavy
Mean rank	249	347	435	270	330	318	361	421	465
Chi-Square	59.822			14.372			14.987		
df	2			2			2		
Asymp. Sig.	0.000			0.001			0.001		

Table 35 **Close-up brand usage: UGB application specific multi-group comparison (Mann-Whitney U and Kruskal-Wallis H test)**
Source: Own illustration.

In addition, UGB attitude values are analysed according to socio-demographic factors. With respect to **age**, the results of mean comparison reveal that the attitude toward the UGB programme is not clearly weaker among old people. As depicted in Figure 53, there is only a slight bias toward "digital natives" (18 to 26 years) in UGB approval. While the UGB attitude regarding the Beck's and FRoSTA sample becomes more negative with increasing age, the UGB attitude regarding the car brand sample is more positive among the older age group (41 to 61 years) than the mid age group (27-40 years). An explanation could be the nostalgic topic of the car brand UGB programme, which asked for personal stories about (past) brand experiences. Regarding the car brand and Beck's sample, the Kruskal-Wallis H test (see Table 37) indicates significance at 5% level only. In terms of the FRoSTA and total sample, the results are not significant. Thus, hypothesis H_3 is rejected.

H_3	The attitude toward the sponsored UGB programme is the stronger... ...the younger the user.	x

Concerning **education**, UGB attitude is – other than expected – observed to be stronger at lower educational levels than at higher ones. That is, consumers with an (aspired) university degree are less enthusiastic about a UGB programme than consumers without academic education. According to the Kruskal-Wallis H test those results are overall highly significant at a 0.1% level although significance is not given for the FRoSTA sub sample (see Table 38). From the findings follows that hypothesis

H_{11} is not confirmed. The correlation between UGB attitude and education appears to be reverse.

H_4	The attitude toward the sponsored UGB programme is the stronger... ...the more educated the user.	**x**

Compared to the UGB programme and brand related factors discussed above, demographic factors appear to be less crucial regarding UGB liking. The highest characteristic value regarding age, education and gender evokes only UGB mean scores of 3.5 which is far below the means evoked by strong consumer-brand relationship, UGB participation and stimulated UGC liking.

With respect to **gender**, the empiric results prove to be other than hypothesized, too. As shown in Figure 53, a stronger UGB attitude is observed among women than men in total. The applied Mann-Whitney U test gives highly significant result at a 0.1% level regarding the total sample although the gender differences are not significant regarding the FRoSTA sub sample (see Table 39). Interpreting the overall picture, hypothesis H_5 which suggests gender equality in UGB attitude cannot be confirmed. It is not confirmed due to the women bias.

H_5	The attitude toward the sponsored UGB programme is not determined by gender.	**x**

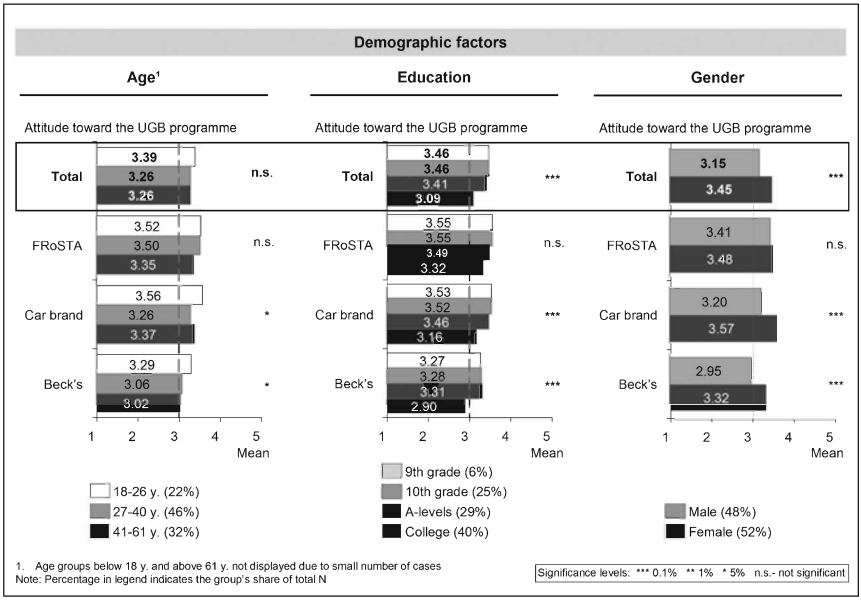


Figure 53 Mean comparison regarding UGB attitude and demographic factors
Source: Own illustration.

Total		Gender		Age			Education			
		Male	Fe-male	18-26	27-40	41-61	9th	10th	A-levels	Col-lege
Ranks	N	1,028	1,099	462	988	684	122	532	623	849
	Mean Rank	974	1,148	1,134	1,055	1,049	1,159	1,157	1,133	940
Mann-Whitney U		472,103		-			-			
Wilcoxon W		1001,009		-			-			
Z		-6,555		-			-			
Chi-Square		-		8			58			
df		-		4			3			
Asymp. Sig.		0.000		0.087			0.000			

Note: Age groups below 18 years and above 61 years not displayed due to small sample size

Table 36 Multi-group comparison regarding UGB attitude and demographic factors (Mann-Whitney U and Kruskal-Wallis H test)
Source: Own illustration.

Age	FRoSTA			Car brand			Beck's		
Years	18-26	27-40	41-61	18-26	27-40	41-61	18-26	27-40	41-61
Mean rank	369	362	331	334	283	296	470	411	403
Chi-Square	6			8			12		
df (see note)	4			3			4		
Asymp. Sig.	0.167			0.047			0.016		

Note: Age groups 'up to 17 y.' and 'more than 62 y.' not displayed due to very few cases (N=1-3)

Table 37 Close-up age: UGB application specific multi-group comparison (Kruskal-Wallis H test)
Source: Own illustration.

Education	FRoSTA				Car brand				Beck's			
Grade	9th	10th	A-level	College	9th	10th	A-level	College	9th	10th	A-level	College
Mean rank	366	369	362	326	325	316	309	253	456	462	473	376
Chi-Square	6				18				30			
df	3				3				3			
Asymp. Sig.	0.097				0.000				0.000			

Table 38 Close-up education: UGB application specific multi-group comparison (Kruskal-Wallis H test)
Source: Own illustration.

Gender	FRoSTA		Car brand		Beck's	
	Male	Fem.	Male	Fem.	Male.	Fem.
Mean rank	343	356	260	329	382	470
Mann-Whitney U	57615		33240		70814	
Wilcoxon W	101571		75435		170495	
Z	-0.825		-4.899		-5.235	
Asymp. Sig. (2-tailed)	0.410		0.000		0.000	

Table 39 Close-up gender: UGB application specific multi-group comparison (Mann-Whitney U test)
Source: Own illustration.

4.2.2 *Evaluation of attitudes and user personality*

First, it shall be explored whether UGB attitude is affected by the perceived fit between the UGB programme and the brand as well as the liking of the user generated content stimulated within the UGB programme.[273] The results of mean comparison depicted in Figure 54 indicate that UGB attitude is the stronger the higher the **attitude toward stimulated UGC**.[274] That is, the better particular user contributions such as blog entries and uploaded videos are liked, the stronger is the attitude toward the UGB programme in general.

The same is true for the perceived **UGB-brand fit**[275]: The better the blog, challenge and community respectively are found to fit to the brand, the more appreciated is the UGB programme. As evidenced by the Kruskal-Wallis H test, the observed group differences are highly significant at 0.1% level for the total sample (see Table 40) and all sub samples (also see Appendix LVIII and Appendix LIX).

[273] The analysis only comprises the FRoSTA and car brand sample since no stimulated UGC was accessible during the survey of the Beck's Festival Video challenge.

[274] The UGC variable was measured on a 5-item scale and classified as 'weak' (mean equal to 3.0 and below), 'moderate' (mean equal to 4.5 and below) and 'strong' (mean above 4.5) (for operationalisation see chapter E 3.4).

[275] Similar to the UGC variable, the fit variable was measured on a 5-item scale and classified as 'low' (mean equal to 3.0 and below), 'moderate' (mean equal to 4.5 and below) and 'high' (mean above 4.5) (for operationalisation see chapter E 3.4).

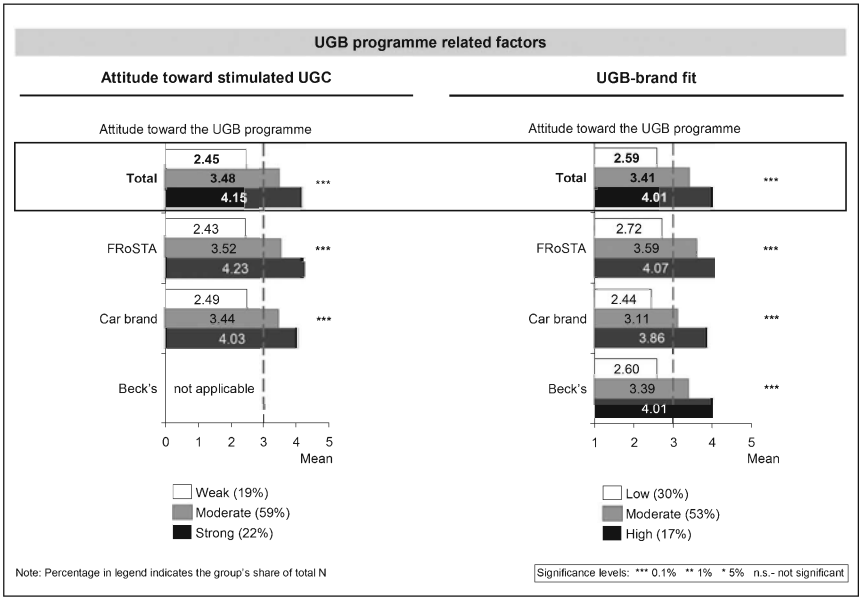


Figure 54 **Mean comparison regarding UGB attitude and UGB programme related factors**
Source: Own Illustration.

Total		Attitude toward stimulated UGC			UGB-brand fit		
		Weak	Moderate	Strong	Low	Moderate	High
Ranks	N	246	764	285	628	1125	363
	Mean Rank	268	655	959	630	1140	1548
Chi-Square		452			561		
df		2			2		
Asymp. Sig.		0.000			0.000		

Note: Analysis re attitude toward stimulated UGC only includes FRoSTA and car brand sample.

Table 40 **Multi-group comparison regarding UGB attitude and UGB programme related factors (Kruskal-Wallis H test)**
Source: Own illustration.

Overall, the results of the bivariate analysis suggest that UGB programme related factors seem to be crucial to achieve a broad approval of a UGB programme. Consumers who perceive a good UGB-brand fit and like the stimulated user generated

content, show a strong attitude toward the UGB programme as expressed by mean scores above 4 meaning "I mostly agree".

Having a closer look at brand and category related factors, mean comparison shows that the attitude toward the UGB programme is stronger among consumers with a high **consumer-brand relationship**[276] than among consumers with a weak bond to the brand. As evidenced by the Kruskal-Wallis H test, these results are highly significant at a 0.1% level regarding the total (see Table 41) and the three sub samples (see Appendix LXIII).

Taking different levels of **product category involvement**[277] into account, a gap in UGB attitude among consumers with low involvement and consumers with moderate or high involvement is found. These results are highly significant at 0.1% regarding the FRoSTA and car brand sample and significant at 1% level regarding the Beck's sample (see Table 42). However, the differences between moderate and high involvement are low. In the case of the Beck's sample, consumers with moderate involvement even appreciate the Beck's Festival Video Challenge more than consumers with strong involvement. On the one hand, this might be explained by the disputable social status of alcoholic beverages so that respondents with actually high category involvement downscale their involvement from high to moderate. On the other hand, the Beck's Festival Video Challenge did not explicitly deal with beer but music festivals what could have been disappointing for 'beer fans'.

Comparing the mean scores of UGB attitude regarding all three analysed factors, a particularly powerful role the consumer-brand relationship is observed. While respondents with a high consumer-brand relationship score the UGB programme above 4 in average, respondents with heavy brand usage and strong product involvement evaluate the programme only with 3.5 in average.

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[276] With respect to multi group comparison, three relationship qualities are distinguished along the 5-item measurement scale: 'weak' CBR (below 3.0), 'moderate' (between 3.0 and 4.5) and 'high' (above 4.5) (for operationalisation see chapter E 3.2).

[277] Similar to the CBR variable, three levels of product category involvement are classified: 'low' (below 3.0), 'moderate' (between 3.0 and 4.5) and 'high' (above 4.5) (for operationalisation see chapter E 3.53.2).

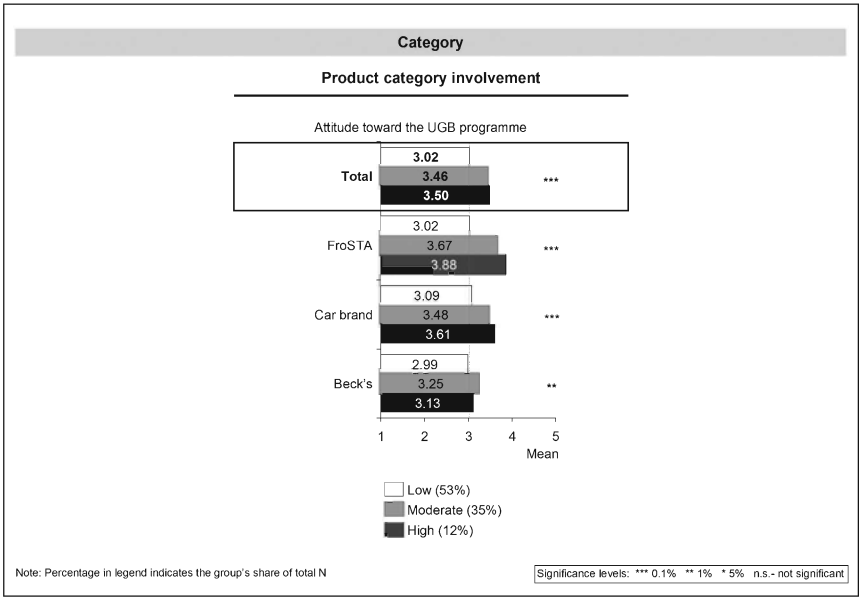

Figure 55 Mean comparison regarding UGB attitude and brand and involvement related factors
Source: Own illustration.

Total		Consumer-brand relationship			Product category involvement		
		Weak	Mod.	High	Low	Mod.	High
Ranks	N	1398	699	70	1,135	760	252
	Mean Rank	918	1,362	1,617	945	1,213	1,235
Chi-Square		287			105		
df		2			2		
Asymp. Sig.		0.000			0.000		

Table 41 Multi-group comparison regarding UGB attitude and brand and involvement related factors (Kruskal-Wallis H test)
Source: Own illustration.

Product category involvement	FRoSTA			Car brand			Beck's		
	Low	Mod.	High	Low	Mod.	High	Low	Mod.	High
Mean rank	261	400	457	242	312	348	394	458	443
Chi-Square	89			30			13		
df	2			2			2		
Asymp. Sig.	0.000			0.000			0.002		

Table 42 **Close-up: UGB application specific multi-group comparison regarding UGB attitude and involvement (Kruskal-Wallis H test)**
Source: Own illustration.

In the following it is examined to what extent the user personality has influence on the attitude toward the UGB programme. As shown in Figure 56, the UGB attitude is stronger among consumers showing a personal **innovativeness**[278] compared to consumers who are less open-minded regarding new products and developments. The Kruskal-Wallis H test indicates a 0.1% significance level for the total (see Table 43) and UGB application specific sub samples (see Appendix LXIV).

With respect to **opinion leadership**[279], the results are less clear. Indeed, there is a gap in UGB attitude between consumers who consider themselves opinion leaders and consumers who consider themselves not. However, the differences in the UGB scores among moderate and strong opinion leaders are negligible. In the case of the Beck's sample, moderate opinion leaders like the Beck's Festival Video Challenge even better than strong opinion leaders.

With respect to a user's **Web2.0 experience**[280], the results of mean comparison suggest an interrelation with UGB attitude. Consumers who frequently use blogs, social networking sites, photo and video platforms, etc. appreciate UGB programmes more than consumers who refrain from Web2.0 applications. These results are highly significant at 0.1% regarding the FRoSTA and Beck's sample and at 5% level regarding the car brand sample.

[278] The innovativeness variable is classified along the delimitation values 3.0 and 4.5, indicating 'weak', 'moderate' and 'high' involvement (for operationalisation see chapter E 3.5).

[279] The opinion leadership variable is classified into 'weak', 'moderate' and 'strong' according to the mean delimitation values 3.0 and 4.5 at a 1 to 5 scale (for operationalisation see chapter E 3.5).

[280] For the purpose of multi group comparison, the Web variable is split as follows: 'little' experience refers to the usage categories 'never' and 'every few months' (mean delimitation value 2.0), 'moderate' refers to 'monthly' and 'weekly' usage (mean delimitation value: 4.0) and 'high' to 'daily' usage (above 4.0) (for operationalisation see chapter E 3.5).

To sum up, the results of mean comparison suggest that UGB attitude is not driven by opinion leadership. Looking at the mean scores of UGB attitude, the influence of a user's innovativeness and Web2.0 experience seems to be rather weak, too. Innovation and Web2.0 loving consumers evaluate UGB programmes not higher than 3.7 in total. The average score of brand fans, by comparison, was above 4.1.

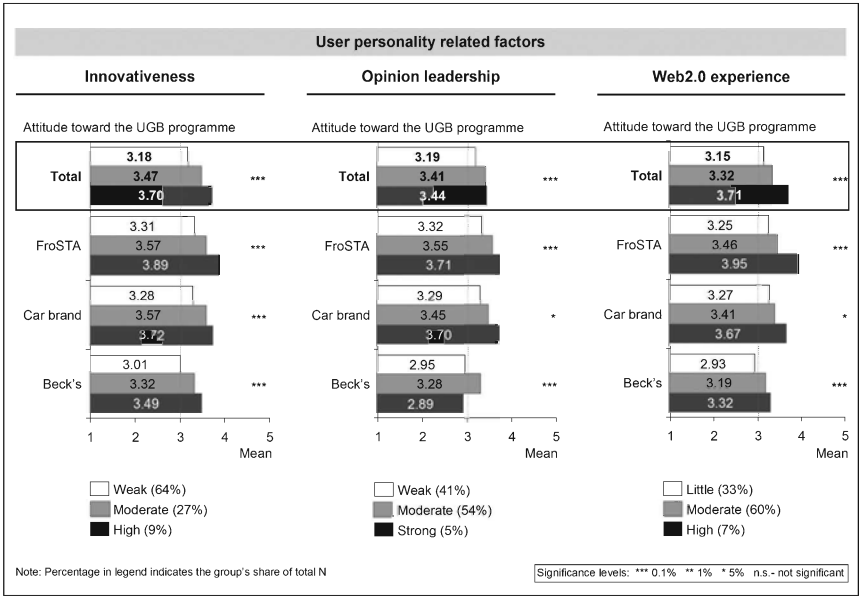

Figure 56 **Mean comparison regarding UGB attitude and user personality related factors**
Source: Own illustration.

Total		Innovativeness			Opinion leadership			Web2.0 experience		
		Weak	Mod.	High	Weak	Mod.	Strong	Little	Mod.	High
Ranks	N	1,378	584	187	872	1,148	104	715	1,296	145
	Mean Rank	990	1,187	1,356	966	1,130	1,125	985	1,100	1,349
Chi-Square		83			36			45		
df		2			2			2		
Asymp. Sig.		0.000			0.000			0.000		

Table 43 **Multi-group comparison regarding UGB attitude and user personality related factors (Kruskal-Wallis H test)**
Source: Own illustration.

4.3 Validation of UGB cause model

Based on the conducted bivariate analysis, the hypothesized influence of the discussed latent variables on the attitude toward the UGB programme shall be estimated by validating the total UGB cause model. This multiple regression model allows a more solid hypothesis testing compared to the mean comparison approach since the correlations between two or more predictors within the total model are taken into account.

As depicted in Figure 57, the selected seven factors have all together a moderate to substantive influence on UGB attitude, explaining 51% of the total variance of UGB attitude. Overall, the model has high predictive relevance (Q^2=0.34). The strongest individual influence on UGB attitude has **attitude toward the stimulated UGC** given a large effect size of 0.24. This strong causal correlation is also evidenced by the high positive standardized path coefficient of 0.48, a high significance level of 0.1% and an individual predictive relevance of 0.12 (see Table 44). Thus, hypothesis H_6 is confirmed.

H_6	Attitude toward the sponsored UGB programme is the stronger... ...the stronger the attitude toward stimulated UGC within the UGB programme.	✓

UGB-brand fit is identified as the second strongest determinant of UGB attitude, confirming the suggestion of the bivariate analysis that consumers who perceive a high fit between the brand and the UGB programme have a stronger UGB attitude. Due to strong cross-loadings with the predominant factor attitude toward the stimulated UGC (r=0.61) (see Table 45), however, the direct impact of UGB-brand fit on UGB attitude only reaches a low to medium level: A standardized path coefficient of 0.24 is measured at a significance level of 0.1%. The effect size amounts to f^2=0.03, the individual predictive relevance to q^2=0.02. Since the minimum level is exceeded, hypothesis H_7 can be confirmed.

H_7	Attitude toward the sponsored UGB programme is the stronger... ...the better the perceived fit between the UGB programme and the brand.	✓

By comparison, the assumed impact of **product category involvement** on UGB attitude is not confirmed within the total model. Standardized path coefficient (γ=0.07) and effect size (f^2=0.01) regarding involvement fall short on the minimum criteria. From this it follows that the relation between involvement and UGB attitude detected

by bivariate analysis resulted from the influence of third exogenous variables.[281] For instance, cross-loadings are measured toward the attitude toward stimulated UGC (r=0.28) and UGB-brand fit (r=0.22). Hence, hypothesis H_8 is rejected.

H_8	Attitude toward the sponsored UGB programme is the stronger... ...the stronger the product category involvement.	x

For user personality related factors, no effects on UGB attitude are evidenced within the UGB cause model. Neither the values for **innovativeness** nor **opinion leadership** and **web2.0 experience** meet the minimum criteria for effect size and standardized path coefficients. As already found by bivariate analysis, the estimates for opinion leadership are the weakest. Given the weak parameter estimates for all three user personality related variables, hypotheses H_9, H_{10} and H_{11} are to be rejected.

H_9	Attitude toward the sponsored UGB programme is the stronger... ...the stronger the user's innovativeness.	x
H_{10}	Attitude toward the sponsored UGB programme is the stronger... ...the stronger the user's opinion leadership.	x
H_{11}	Attitude toward the sponsored UGB programme is the stronger... ...the higher the user's Web2.0 experience.	x

To wrap up, user related factors cannot be confirmed as key determinants of attitude toward the UGB programme. In contrast, UGB attitude is found to be strongly influenced by UGB programme related factors, i.e. the attitude toward stimulated UGC and UGB-brand fit. Besides, bivariate analysis suggests an influence of UGB usage related factors: UGB attitude appears to be stronger among users who actively participate in the programme. Thus, hypothesis H_{12} is confirmed.

H_{12}	UGB programme related factors and participation have a stronger substantive influence on the attitude toward the sponsored UGB programme than user related factors.	✓

[281] For interpretation options of causal correlations see BACKHAUS/ERICHSON/PLINKE et al. (2003), pp. 341 et seq. and explanations in chapter D 1.

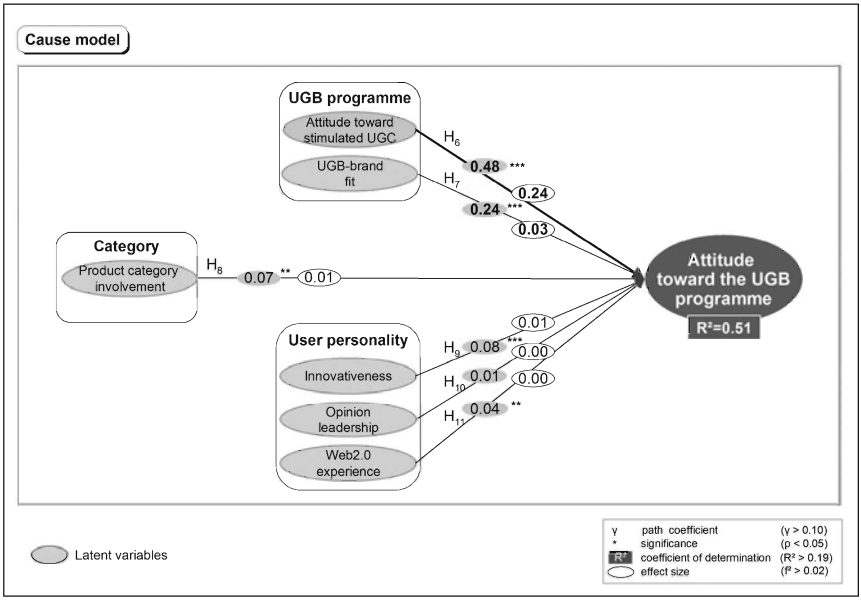

Figure 57 Validation of UGB cause model
Source: Own illustration.

P_0: Determinants of UGB attitude	Fit → UGB	UGC → UGB	Inv → UGB	Inno → UGB	OL → UGB	Web → UGB
Path coefficient > 0.1	0.241	0.476	0.072	0.084	0.012	0.042
t-value >2.576**; > 3.922***	11.286***	22.848***	3.732**	4.068***	0.577	2.597**
Effect size f² >0.02 low; > 0.15 mod	0.029	0.241	0.009	0.012	-0.001	0.003
R^2 0.19 low; > 0.33 mod	0.506					
Q^2 > 0	0.349					
q^2	0.016	0.119	0.006	0.008	-0.001	0.002

Table 44 Quality evaluation for UGB cause model
Source: Own illustration.

P_0: LV correlations	Inno	Inv	OL	UGB	Fit	UGC	Web
Innovativeness (Inno)	1	0	0	0	0	0	0
Involvement (Inv)	0.319	1	0	0	0	0	0
Opinion leader. (OL)	0.564	0.229	1	0	0	0	0
UGB attitude (UGB)	0.250	0.293	0.194	1	0	0	0
UGB-brand fit (Fit)	0.169	0.221	0.134	0.568	1	0	0
UGC attitude (UGC)	0.176	0.279	0.160	0.666	0.609	1	0
Web2.0 exp. (Web)	0.294	0.141	0.234	0.182	0.118	0.156	1

Table 45 **Latent variable correlations within UGB cause model**
Source: Own illustration.

4.4 Discussion and summary of results of UGB determinants analysis

This chapter is dedicated to the characterisation of the new construct attitude toward the sponsored UGB programme. By means of univariate analysis, it is found that the examined UGB programmes are overall liked. It is noteworthy that the rather positive evaluation (total mean: 3.30) is obtained despite low UGB programme awareness and very low programme participation among the respondents. From this it can be concluded that the **general UGB idea** is appealing to consumers. This conclusion is backed by the positive attitude toward open brand communication in general (mean: 4.1). For the majority (53%) such programmes which invite consumers to participate in brand communication might even positively influence the purchase decision.

Those results, however, have to be considered with caution since, first, they refer to intention and second, there is a tendency of general approval of innovative and participatory concepts in marketing studies. The so-called consumer innate innovativeness concept states that there is a predisposition to buy new and different products and brands rather than remain with previous choices and consumer patterns.[282] This phenomenon can be seen as an expression of the need for stimulation, novelty seeking, independence toward other's communicated experience and need for uniqueness.

Comparing open brand communication to advertising, participatory programmes are found more customer-friendly and reliable. When asking about the liking of an individual TV advertising, however, commercials obtained overall better scores (total

[282] For an in-depth consideration of the consumer innate innovativeness concept see ROEHRICH (2004), pp. 671 et seqq.

mean: 3.70) than the UGB programme of the respective brands (total mean: 3.30).[283] In the FRoSTA case, in contrast, the UGB programme is better evaluated than the TV ad. From this it follows that the liking of UGB versus ad programmes in a descriptive sense cannot be generalized but is to be discussed within the scope of the individual application and brand.

In response to the second research problem, UGB programme, brand and usage related factors are found to be **determinants of UGB attitude**. As shown by PLS path modelling, **attitude toward stimulated UGC** and **consumer-brand relationship** are the strongest determinants of UGB attitude given effect sizes of 0.28 and 0.10 respectively and paths at 0.1% significance level. That is, the better consumers like the content contributed by peer users to the UGB programme and the more they are related to the brand which sponsors the UGB programme, the stronger is their attitude toward the UGB programme.

Other hypothesized factors, however, could not be verified by the PLS path model. Although bivariate analysis indicated an influence of UGB-brand fit on UGB attitude, no effect was evidenced in the total model. This is due to the fact that simple bivariate analysis (e.g. mean comparison) only examines the relation between two variables without considering the influence of third exogenous variables.[284] In the case of UGB-brand fit, strong cross-loadings with the exogenous variables attitude toward stimulated UGC (r=0.61) and consumer-brand relationship (r=0.41) were found. That is, the relation between UGB-brand fit and UGB attitude as indicated by bivariate analysis resulted mainly from the influence of the two verified UGB determinants so that it cannot be interpreted as a causal correlation. The same is true for product category involvement: The impact on UGB attitude as detected by bivariate analysis actually derived from the influence of consumer-brand relationship (r=0.39) and attitude toward stimulated UGC (r=0.28).

Alike, no direct effects of user personality related factors on UGB attitude are verified in the total model. An influence of opinion leadership could already be excluded after bivariate analysis. The hypothesized impact of a user's innovativeness and Web2.0 experience was not confirmed by multivariate analysis given effect sizes (f^2=0.00 each) and standardized path coefficients (γ=0.03 and γ=0.04 respectively) below the minimum criteria. That is, a positive attitude toward the UGB programme is not driven

[283] This bias is also observed if measuring the attitude toward the UGB programme variable by means of exactly the same five indicators as applied for the attitude toward the ad variable. In this case, the total mean of UGB liking only slightly increase from 3.30 to 3.44 at a scale from 1 to 5.

[284] For interpretation options of causal correlations see BACKHAUS/ERICHSON/PLINKE et al. (2003), pp. 341 et seqq.

by the fact how open-minded consumers are toward innovation and how experienced they are in Web2.0.

The presented results underline the importance of multivariate analysis for hypothesis testing. If evaluating causal relations between latent variables solely based on bivariate analysis, misinterpretations are likely due to the lack of third variable considerations. Insights regarding direct effects and effect size of latent exogenous variables shall thus be derived from multivariate analysis as executed by the PLS based UGB cause model. Beside latent variables, however, directly measurable classification variables such as usage frequencies and demographics ('hard facts') are examined, too. Since these sample manipulation variables could not be integrated into the UGB cause model representing latent variables only, hypotheses are tested in those cases by means of bivariate analysis.

With regard to usage patterns, a more positive attitude toward the UGB programme was found among actual brand customers and active UGB programme participants. The latter finding is thereby not to be understood contradictory to the message above stating that UGB programmes were liked irrespective of actual UGB programme usage. It just specifies that active participants who write blogs or upload files have an even stronger attitude toward the UGB programme.

With regard to demographics, mean comparison revealed that UGB liking does not necessarily decrease with rising age. From this it follows that UGB programmes are not restricted to "digital natives" but have appeal to mid- and old-agers, too. Other than hypothesized, UGB liking appears to be negatively correlated with education. That is, UGB liking is stronger among less educated users. Furthermore, a slight gender bias in UGB attitude is observed. Women proved to be overall more positive about UGB than men.

Overall, user related factors are evidenced to exert less influence on UGB attitude than UGB programme related factors and participation patterns. From this it follows that UGB programmes may not only be appealing to young, innovative Web2.0 techies – as originally hypothesized – but also to a mass target group. Crucial for the user's acceptance of UGB programmes is the actual user generated content stimulated within the UGB programme and the user's bond to the sponsoring brand.

Applying those findings to explain the observed differences in UGB attitude among the three investigated samples, the following arguments may support the weaker evaluation of the Beck's Festival Video Challenge (approval of 60%) in comparison to the better scored UGC based car brand community (72%) and FRoSTA Blog (76%): First, with respect to UGB programme related factors and participation, a lower UGB programme awareness is evident regarding the Beck's and car brand sample com-

pared to the FRoSTA sample (13%/12% versus 21%). As regards content, the different application types and topics of the UGB programmes could matter. While the FRoSTA sample refers to a blog about the everyday topic food and the car brand sample is based on a community made of nostalgic brand stories, the Beck's sample refers to a video challenge on the niche topic music festivals. As shown by the indicator scores of the UGB variable, the Beck's Festival Video Challenge falls particularly short of identification potential, expectation management, and topic appeal.

Second, with respect to brand and category involvement related factors, a slightly weaker consumer-brand relationship is evidenced regarding the Beck's sample compared to the car brand and FRoSTA sample (means: 2.6 vs. 2.7/2.7). The Beck's sample also shows a slightly lower product category involvement (mean: 2.95) compared to the FRoSTA (3.02) and particularly car brand sample (3.80). The special status of the alcoholic beverages industry is thereby taken into account: In the case of Beck's beer, respondents commented that they rejected any marketing initiative of an alcoholic beverage brand no matter what medium or topic.

Third, regarding demographics, the bias toward men (53%) within the Beck's sample is to be stressed. The FRoSTA sample, in contrast, includes more women (58%) which appeared to be more in favour of UGB. Besides, the Beck's sample comprises more academics than the other two samples (45% vs. 36% both) which appeared to be more reluctant in UGB liking. From the overall argumentation follows that the weaker UGB liking regarding the Beck's sample appears to be caused by multiple reasons including UGB programme and brand related factors, usage as well as demographics. The identified drivers of UGB attitude thereby provide an explanation.

Table 46 provides an overview of the results of hypothesis testing; Figure 58 shows the verified model for determinants of UGB attitude.

Determinants of UGB attitude		
Usage		
H_1	Attitude toward the sponsored UGB programme is the stronger… …the more active the user's participation in the UGB programme.	✓*
H_2	…the heavier the brand usage.	✓*
Demographics		
H_3	Attitude toward the sponsored UGB programme is the stronger… …the younger the user.	x*
H_4	…the more educated the user.	x*
H_5	Attitude toward the sponsored UGB programme is not determined by gender.	x*
UGB programme		
H_6	Attitude toward the sponsored UGB programme is the stronger… …the stronger the attitude toward stimulated UGC within the UGB programme.	✓
H_7	…the better the perceived fit between the UGB programme and the brand.	x
Category		
H_8	Attitude toward the sponsored UGB programme is the stronger… …the stronger the product category involvement.	x
User personality		
H_9	Attitude toward the sponsored UGB programme is the stronger… …the higher the user's innovativeness.	x
H_{10}	…the stronger the user's opinion leadership.	x
H_{11}	…the higher the user's Web2.0 experience.	x
Power of impact		
H_{12}	UGB programme related factors and participation have a stronger substantive influence on the attitude toward the sponsored UGB programme than user related factors.	✓

Note: ✓ – hypothesis confirmed; **x** – hypothesis not confirmed; * – hypothesis validation based on bivariate analysis

Table 46 **Validation of hypotheses regarding determinants of UGB attitude**
Source: Own illustration

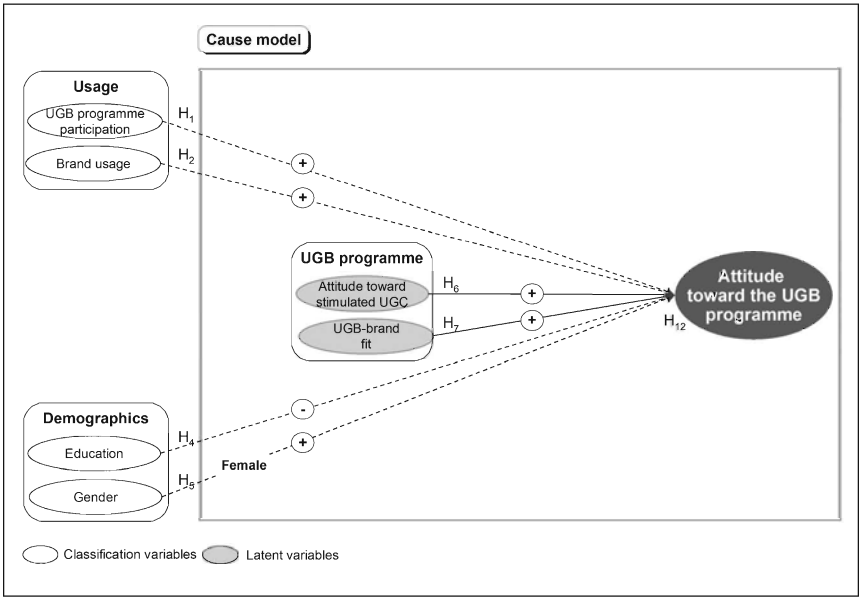

Figure 58 Verified model for determinants of UGB attitude
Source: Own illustration.

5 Validation of UGB effectiveness model

Having examined the second research problem of determinants of UGB attitude, this chapter is dedicated to the third – and main – research problem of UGB effectiveness. The developed structural model is validated according to the quality criteria described in chapter E 2.2.4. First and foremost, the total effects model is estimated, measuring UGB effectiveness and comparing it with ad effectiveness. In order to gain further insights on UGB effectiveness, partial models are estimated, too. On the one hand, UGB effectiveness shall be compared among different programme and brand usage related sub groups. On the other hand, possible moderating variables are analysed in separate interaction models.

5.1 Validation of total UGB effectiveness model

The total UGB effectiveness model represents the core causal analysis of this study. For the purpose of hypothesis testing, the model is run for the whole data set. Having interpreted the impact of UGB attitude on the consumer-brand relationship as well as attitudinal and behavioural effects, the size of power is compared to the impact of attitude toward the ad. In order to validate the hypothesized causality for different UGB applications (blogs, challenges and communities), the model is also estimated for the three sub samples.

5.1.1 Evaluation of UGB effectiveness

In assessing UGB effectiveness within the total model, the effects of UGB attitude on the **consumer-brand relationship** (CBR) are examined first. As depicted in Figure 59, the corresponding standardized path estimate clearly exceeds the minimum level, amounting to 0.30. An achieved 0.1% significance level provides evidence of a high precision of the estimates. From this it follows that the UGB attitude variable exerts a significant positive direct influence on the CBR variable. Thus, hypothesis H_{13} is confirmed.

H_{13}	Attitude toward the sponsored UGB programme has a substantive direct positive influence on the consumer-brand relationship.	✓

With respect to **attitudinal effects**, a positive direct influence of UGB is proven, too. The path coefficient amounts to 0.27 and is highly significant at 0.1% level. Thus, hypothesis H_{14} is confirmed. Consumer-brand relationship is also found to have a positive impact on attitudinal effects. Since the PLS algorithm indicates a higher estimate

for total UGB effects (0.39) including direct and indirect effects[285] than for the direct effects of the UGB attitude variable alone (0.27), a mediating effect of the CBR variable is concluded (see Table 54). That is, UGB attitude is not only able to influence attitudinal effects directly but also through the consumer-brand relationship. Thus, hypothesis H_{15a} is confirmed.

H_{14}	Attitude toward the sponsored UGB programme has a substantive direct positive influence on attitudinal effects toward the brand.		✓
	H_{14a}	Attitudinal effects are, however, mediated by the consumer-brand relationship.	✓

With respect to **behavioural effects**, the direct impact of the attitude toward the UGB programme appears to be negligible. Indeed, the path estimate is significant at 0.1% level – mainly due to the big sample size. With regard to the standardized path coefficient of 0.07, however, it falls short on the minimum quality criterion. Thus, it can be concluded that the relation between attitude toward the UGB programme and behavioural effects is not of substantive power. In contrast, positive influence of the brand-consumer relationship as well as attitudinal effects on behavioural effects is detected. Taking those effects of the CBR and attitudinal effects variable into account, the PLS algorithm states a much higher total UGB effect on the behaviour variable (0.38 vs. 0.07). From this it follows that UGB attitude is able to influence behavioural effects rather through the mechanism of consumer-brand relationship and attitudinal effects than directly. Thus, hypothesis H_{16} claiming a substantive direct positive influence of UGB attitude on behavioural effects is not confirmed. In contrast, hypothesis H_{15a} claiming mediating effects is confirmed.

H_{15}	Attitude toward the sponsored UGB programme has a substantive direct positive influence on behavioural effects toward the brand.		X
	H_{15a}	Behavioural effects are, however, mediated by the consumer-brand relationship and attitudinal effects.	✓

[285] The total UGB effect becomes: direct UGB effect + indirect (direct UGB effect*direct CBR effect). The analysis is supported by the output 'Total effects' of SmartPLS software (see RINGLE/WENDE/WILL (2005)).

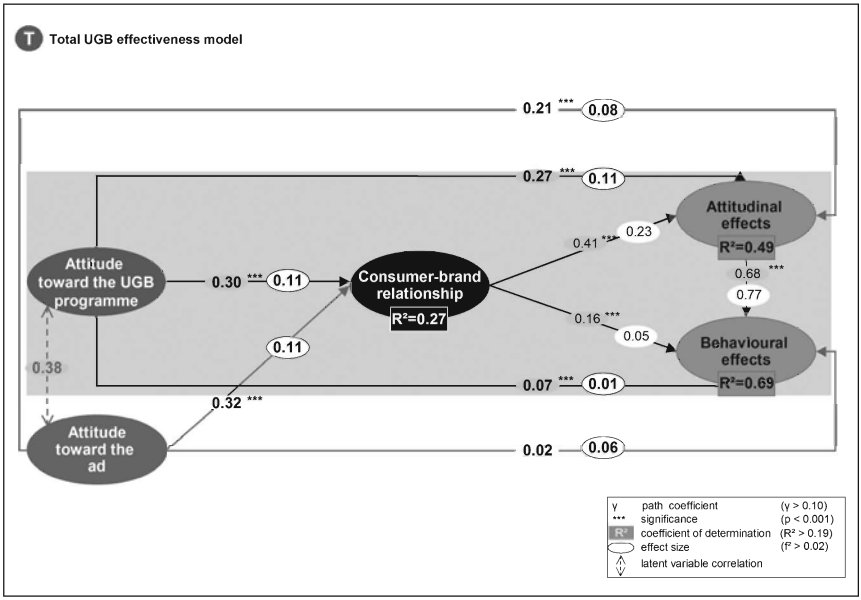

Figure 59 **Parameter estimation for total UGB effectiveness model**
Source: Own illustration.

Total UGB effectiveness	UGB →CBR	Ad →CBR	UGB →Att	Ad →Att	CBR →Att	UGB →Beh	Ad →Beh	CBR →Beh	Att→ Beh
Path coefficient > 0.1	0.304	0.325	0.272	0.214	0.408	0.066	0.019	0.159	0.675
t-value (path coeff.) > 3.922***	14.456 ***	17.165 ***	14.993 ***	12.415 ***	23.529 ***	3.966 ***	1.331	9.290 ***	40.564 ***
Total effects	0.304	0.325	**0.394**	**0.344**	0.408	**0.381**	**0.303**	**0.430**	0.675
t-value (total effects) > 3.922***	14.456 ***	17.165 ***	20.200 ***	20.017 ***	23.529 ***	19.788 ***	17.713 ***	24.480 ***	40.564 ***
Effect size f² > 0.15 mod, > 0.30 high	0.109	0.110	0.114	0.083	0.231	0.010	0.061	0.048	0.772
R² 0.19 low; > 0.33 mod	0.273		0.493			0.690			
Q² > 0	0.175		0.444			0.546			
q²	0.059	0.067	0.091	0.070	0.193	0.005	0.034	0.024	0.409

Table 47 **Quality evaluation for total UGB effectiveness model**
Source: Own illustration.

5.1.2 *Comparison of UGB and ad effectiveness*

In order to size the power of UGB effectiveness, the presented results are now compared with the estimates for ad effectiveness. Similarly to UGB attitude, attitude toward the ad is put into relation with consumer-brand relationship, attitudinal and behavioural effects within the total model (see Figure 59). With regard to the **consumer-brand relationship**, the total model estimation provides a coefficient of determination of 0.27, meaning that 27% of the total variance of the CBR variable is explained by the UGB and ad attitude variable. This suggests a low to moderate influence, but can be regarded an acceptable result given the fact that brand communication programmes reflect only one out of numerous factors which are assumed to define changes in the consumer-brand relationship. Moreover, a Q^2 value clearly above zero indicates predictive relevance. It is to be noted that attitude toward the UGB programme and attitude toward the ad are correlated, too. The PLS algorithm indicates a latent exogenous variable correlation of 0.38.

Comparing the impact of UGB attitude on the consumer-brand relationship with ad attitude, similar effect sizes (f^2=0.11 each) are observed. That is, both exogenous variables exert a similar substantial influence on the endogenous CBR variable. The path coefficients of the ad-CBR relation is thereby slightly higher than the path coefficient of the UGB-CBR relation (γ=0.32 vs. 0.30) at 0.1% significance level. Thus, hypothesis H_{16} claiming a stronger UGB effectiveness compared to advertising cannot be confirmed. The impact is not stronger but similar.

H_{16}	Attitude toward the sponsored UGB programme exerts a stronger substantive direct positive influence on the consumer-brand relationship than attitude toward the ad.	**x**

With regard to **attitudinal effects**, a moderate R-square of 0.49 is estimated, reflecting the proportion of variance in the construct explained by the latent endogenous variables (UGB attitude, ad attitude and consumer-brand relationship).[286] Overall, the consumer-brand relationship exerts the strongest direct influence on attitudinal effects given an effect size of 0.23 and a standardized path coefficient of 0.41 at 0.1% significance level.

[286] It is to be noted that the total effectiveness model contains aggregated variables for attitudinal and behavioural effects (see chapter E 3.3).

Comparing UGB and ad effectiveness, a slightly higher standardized path coefficient for UGB attitude (γ=0.27) than for ad attitude (γ=0.21) is estimated. Total UGB effects considering direct and indirect effects including the CBR influence are also found slightly stronger than total ad effects (0.39 vs. 0.34). This finding is backed by the effect sizes, amounting to 0.11 in the case of UGB attitude and 0.08 in the case of ad attitude. Thus, hypothesis H_{17} claiming a stronger UGB than ad effectiveness in terms of attitudinal effects is confirmed.

H_{17}	Attitude toward the sponsored UGB programme exerts a stronger substantive direct positive influence on attitudinal effects than attitude toward the ad.	✓

With regard to **behavioural effects**, 69% of the variance of the construct can be explained by the latent endogenous variables (UGB attitude, ad attitude, consumer-brand relationship and attitudinal effects). This attests to an overall substantial influence. However, changes in R-square of the behavioural effect variable are first and foremost due to the influence of the attitudinal effect variable, reaching a very high effect size of 0.77.

In contrast, the direct impact of both the UGB and ad attitude variable is negligible. Although a low effect size of attitude toward the ad (f^2=0.06) is detected, the standardized path coefficients for the ad-behaviour relation (γ=0.02) is not significant and falls short on the minimum criterion. It is even found lower than for the significant UGB-behaviour relation (γ=0.07). From this it follows that the impact of attitude toward the ad on behavioural effects is not stronger than the impact of UGB attitude. First of all, however, no substantive direct impact could be measured for both variables. Thus, hypothesis H_{18} is to be rejected from two perspectives.

H_{18}	Attitude toward the sponsored UGB programme exerts a weaker substantive direct positive influence on behavioural effects toward the brand than attitude toward the ad.	X

5.2 Multi group comparisons based on partial UGB effectiveness model

Having estimated the total effects model, the influence of various classification variables on UGB effectiveness shall be further investigated by focusing on the partial UGB effectiveness model.[287] The objective is to identify differences in UGB effectiveness among specific sub groups and to test those differences for significance by means of multi-group analysis.[288] First, UGB effectiveness shall be compared among different UGB applications (blog, community, video challenge). Second, the role of UGB awareness and programme participation is evaluated. Third, it is explored whether UGB effectiveness differs among actual and potential customers.

5.2.1 UGB application specific evaluation

Running the partial UGB effectiveness model for the individual FRoSTA (blog), Beck's (video challenge) and car brand (community) samples, the finding from the total model estimation regarding overall UGB effectiveness is backed. As depicted in Figure 60, all three sub samples provide evidence of a substantive direct positive influence of UGB attitude on the consumer-brand relationship (H_{13}) given high standardized path coefficients (from 0.45 to 0.56) at 0.1% significance level (also see Appendix LXVII). With regard to attitudinal effects (H_{14}), highly significant path estimates (from 0.34 to 0.47) are provided, too. In contrast, no substantial impact on behavioural effects (H_{15}) is evidenced given standard path coefficients below or only slightly above the delimitation level.

Comparing the characteristic values among the three samples, **statistically highly significant differences** are evident (see Table 48). First, it is observed that the Beck's sample indicates a lower impact of UGB attitude on the consumer-brand relationship (γ=0.45; R^2=0.21) than the car brand sample (γ=0.54; R^2=0.29) and FRoSTA sample (γ=0.56; R^2=0.31). It can be concluded that corporate blogs (FRoSTA sample) and brand communities (car brand sample) have a higher potential in strengthening the consumer-brand relationship than video challenges (Beck's sample).

This could be due to the fact that corporate blogs and brand communities invite consumers to interact with the brand on a permanent basis without setting high entry barriers – also lurkers may join easily. Besides, personalized blog and community comments make it easy to consider the brand as a partner and to engage in conver-

[287] Within the partial UGB effectiveness model, attitude toward the UGB programme is the only latent exogenous variable. The latent endogenous variables (consumer-brand relationship, attitudinal effects, and behavioural effects) are identical to the total UGB model.

[288] For details on multi group comparison within PLS see chapter E 2.2.5.

sations. Video challenges, in contrast, are closed-ended by definition; there is less room for brand relationship building. Having a look at the univariate UGB attitude scores, the Beck's Festival Video Challenge (mean score: 3.12) was less appreciated than the UGC based car brand community (3.38) and notably the FRoSTA Blog (3.46). The strength of the consumer-brand relationship, however, is in descriptive terms only slightly weaker regarding the Beck's sample (mean score: 2.63) compared to the car brand (2.65) and FRoSTA sample (2.71).

Second, with respect to the direct influence of UGB on attitudinal effects, it is evidenced that the effect sizes of the FRoSTA (0.29) and Beck's (0.25) samples are much higher than the car brand effect size (0.11). An explanation could be the industry of the examined brands and the resulting product category involvement. While the involvement regarding the small ticket fast-moving consumer good brands FRoSTA and Beck's is rather low (mean score: 3.0), the big ticket automotive brand shows a much higher involvement score (3.8). That implies that existing attitudes in the case of the car brand are less likely to be changed by a single brand communication programme such as the UGC based car brand community. In the case of low involvement goods, however, it is imaginable that innovative brand communication might make consumers look upon the brand more favourably and facilitate relationship building.

Indeed, sample differences exist in terms of behavioural effects, too. However, the overall impact of UGB on behaviour is very low so that an interpretation is not considered value-adding.

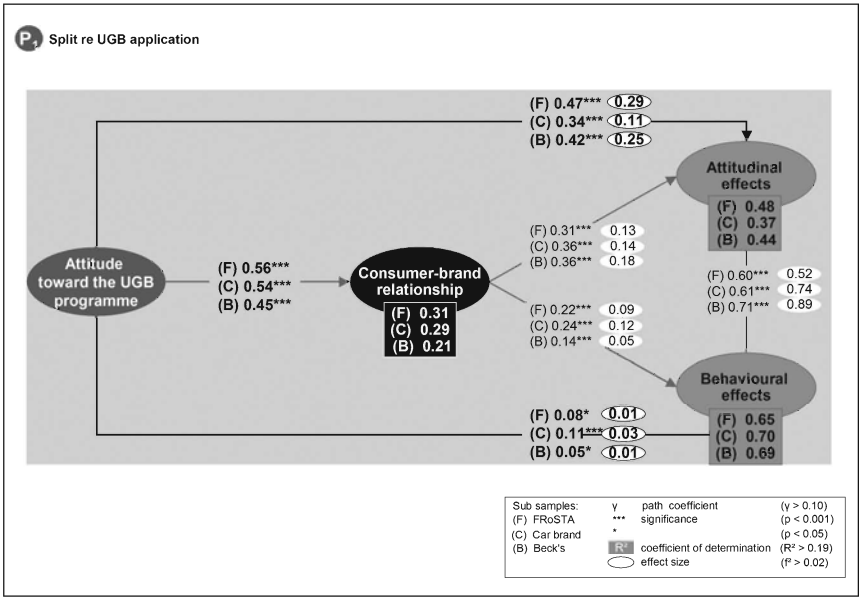

Figure 60 **Parameter estimation for partial UGB effectiveness model in terms of UGB applications**
Source: Own illustration.

P_1: Split re UGB application		UGB → CBR	UGB → Att	CBR → Att	UGB → Beh	CBR → Beh	Att → Beh
Mean rank	FRoSTA	428	470	170	284	371	195
	Car brand	370	107	366	459	424	208
	Beck's	104	327	365	158	106	498
Chi-Square		396	446	170	306	387	389
Asymp. Sig.		0.000	0.000	0.000	0.000	0.000	0.000

Table 48 **Comparison of UGB application specific sample differences for partial UGB effectiveness model (Kruskal-Wallis H test)**
Source: Own illustration.

5.2.2 *UGB awareness and participation specific evaluation*

In order to gain further insights, the partial UGB effectiveness model is run for different UGB awareness and participation groups. As a preliminary step, differences in UGB effectiveness between UGB aware and unaware consumers are explored.[289] Then, effects regarding active UGB participants (branticipants) and passive UGB participants (lurkers) are discussed. It is to be noted that active participation can only be assessed regarding the FRoSTA sample[290] due to very small sample sizes regarding the other two samples.[291]

From the **UGB awareness comparison** regarding the total sample follows that the direct effects of UGB attitude on the consumer-brand relationship as well as attitudinal and behavioural effects are **stronger for UGB unaware consumers** than for aware consumers.[292] As depicted in Figure 61, the corresponding path coefficients and effect sizes are higher among the consumers who learned of the UGB programme within the survey than among the consumers who heard about it before. While 25% of the variance in CBR accounts for UGB regarding that unaware consumer sample, only 12% of CBR variance is explained in case of the aware consumer sample. Examining the observed effects for significant differences among the sub populations, the Mann-Whitney U test indicates that the null hypothesis of equality can be clearly rejected at 0.1% level (see Table 49).

[289] The samples are split into respondents who had heard of the respective sponsored UGB programme before the survey (aware consumers) and respondents who had not (unaware consumers).

[290] Active UGB participants regarding the FRoSTA blog (N=70) refer to respondents who commented, rated or wrote a blog entry.

[291] Regarding the car brand sample, only six respondents contributed a story and ten used community functions such as commenting and rating respectively. Regarding the Beck's sample, only three respondents uploaded a video. Since passive UGB programme usage (visiting the programme homepage) corresponds to UGB programme awareness, the group of passive UGB participants is not additionally analysed.

[292] Concerning behavioural effects, the UGB-behaviour path coefficient of the unaware consumer sample is slightly higher than the beta of the aware group and highly significant at 0.1% level (mainly due to the high sample size). However, the influence is not regarded substantial.

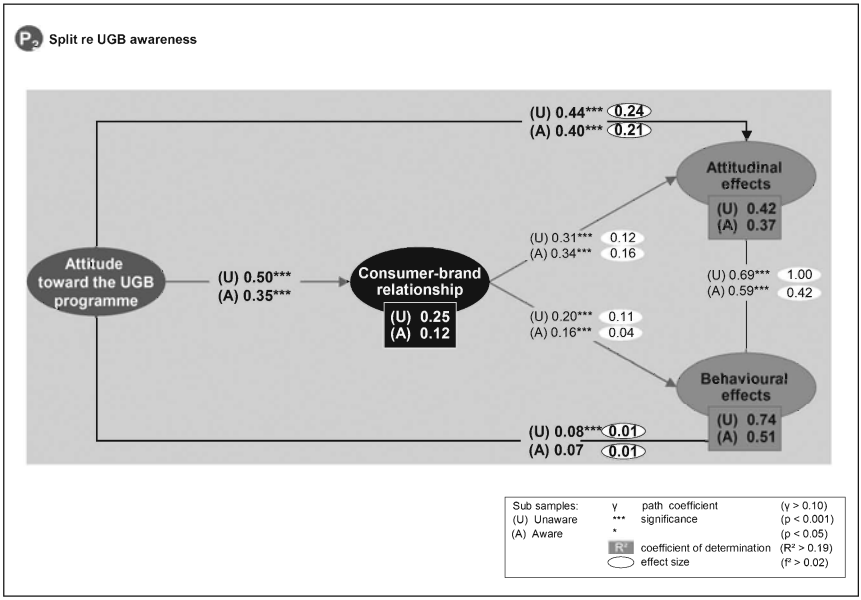

Figure 61 Parameter estimation for partial UGB effectiveness model in terms of UGB awareness
Source: Own illustration.

P_2: Split re UGB awareness		UGB → CBR	UGB → Att	CBR → Att	UGB → Beh	CBR → Beh	Att → Beh
Mean rank	Unaware	299	250	156	229	261	298
	Aware	102	151	245	172	140	103
Mann-Whitney U		224	10,126	11,157	14,259	7,891	550
Wilcoxon W		20,324	30,226	31,257	34,359	27,991	20,650
Z		-17	-9	-8	-5	-10	-17
Asymp. Sig.		0.000	0.000	0.000	0.000	0.000	0.000

Table 49 Comparison of UGB awareness specific sample differences for partial UGB effectiveness model (Mann-Whitney U test)
Source: Own illustration.

The finding is overall confirmed by the UGB application specific sub samples although the Beck's sample indicates a slightly stronger influence on attitudinal effects regarding the aware group (see Appendix LXIX and Appendix LXX).

With respect to the **UGB participation** analysis, the estimates for **active UGB participants** exceed the values observed for passive UGB participants regarding the

impact on the consumer-brand relationship, taking path coefficients, significance and R-square values into account (see Figure 62). The estimates for the active group also suggest a low influence of UGB on behaviour (f^2=0.05; γ=0.23), even if not on a statistically significant level also due to the small sample size (also see Appendix LXXI). Regarding attitudinal effects, in contrast, slightly higher values are observed for passive users. As indicated by the Mann-Whitney U test, the found differences between the sub populations of passive and active users are statistically highly significant except the CBR-behaviour path (see Table 50).

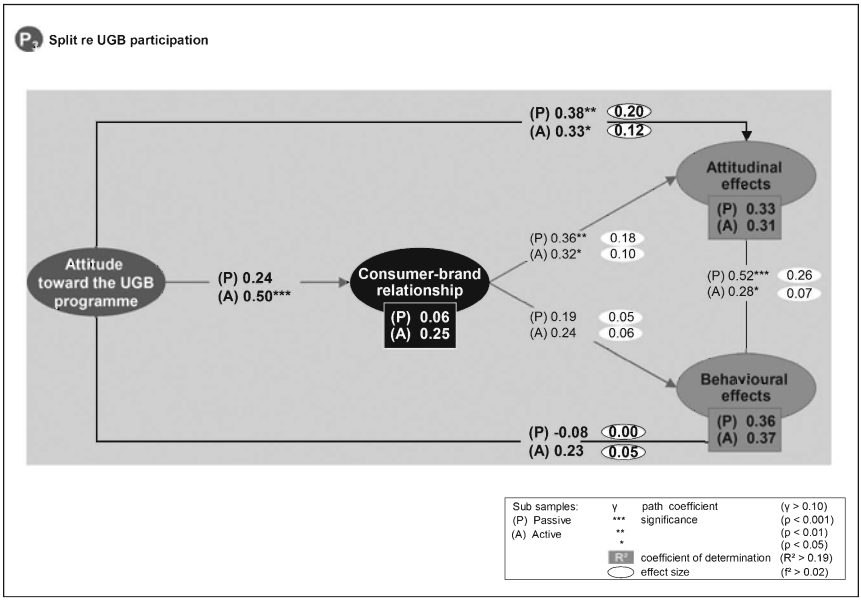

Figure 62 Parameter estimation of partial UGB effectiveness model in terms of UGB programme participation
Source: Own illustration

P_3: Split re UGB participation		UGB → CBR	UGB → Att	CBR → Att	UGB → Beh	CBR → Beh	Att → Beh
Mean rank	Passive	116	220	229	107	195	282
	Active	285	181	171	295	206	119
Mann-Whitney U		3,106	16,172	14,184	1,170	18,860	3,704
Wilcoxon W		23,407	36,072	34,084	21,471	39,161	23,604
Z		-15	-3	-5	-16	-1	-14
Asymp. Sig.		0.000	0.000	0.000	0.000	**0.324**	0.000

Table 50 **Comparison of UGB programme participation specific sample differences for partial UGB effectiveness model (Mann-Whitney U test)**
Source: Own illustration.

Taking all results into account, hypothesis H_{19} claiming a greater UGB effectiveness among active users cannot be fully accepted as true. Indeed, the active group shows a higher UGB impact on CBR and behaviour, but the influence on attitudinal effects is (slightly) lower than regarding the passive group. Given the small size, not all paths are statistically significant. Besides, the participation analysis is to be considered against the background of the UGB awareness analysis, finding stronger UGB effectiveness among UGB unaware consumers than aware consumers. Thus, hypothesis H_{19} can be neither confirmed nor rejected.

H_{19}	UGB effectiveness is greater with active UGB participants (branticipants) than passive participants (lurkers).	/

5.2.3 Brand usage specific evaluation

Furthermore, the UGB effectiveness model is run for different brand usage groups. The samples are thereby split into respondents who have used the brand before (actual customers) and respondents who have not (potential customers). Findings suggest that UGB effects on the consumer-brand relationship are slightly stronger with **potential customers**, taking a higher standardized path coefficient (0.51 vs. 0.48) and R-square of CBR (0.27 vs. 0.23) into account (see Figure 63 and Table 51).

However, direct and total attitudinal and behavioural effects are stronger among actual customers whereby the direct UGB impact on behaviour is not regarded substantive for both groups. In case of potential customers, the influence of CBR is stronger so that the combined influence on attitude is still stronger among potential customers (R^2=0.52 vs. 0.43). It is worth mentioning that, in contrast, only 57% of variance in behaviour is accounted for by the three factors UGB, CBR and attitude regarding po-

tential customers while it is 70% regarding actual customers. That is, a UGB programme affects the (weaker) consumer-brand relationship of a potential customer more than the (stronger) customer-brand relationship of an actual customer and might achieve – indirectly via CBR – stronger attitudinal changes, but does not directly influence the purchase decision of a non-customer.The finding is overall confirmed by the UGB application specific analysis (see Appendix LXXII and Appendix LXXIII). While the FRoSTA and the car brand sample suggest a stronger influence of UGB attitude on the consumer-brand relationship among potential customers, the Beck's sample indicates, however, a slightly stronger UGB effectiveness among actual customers.

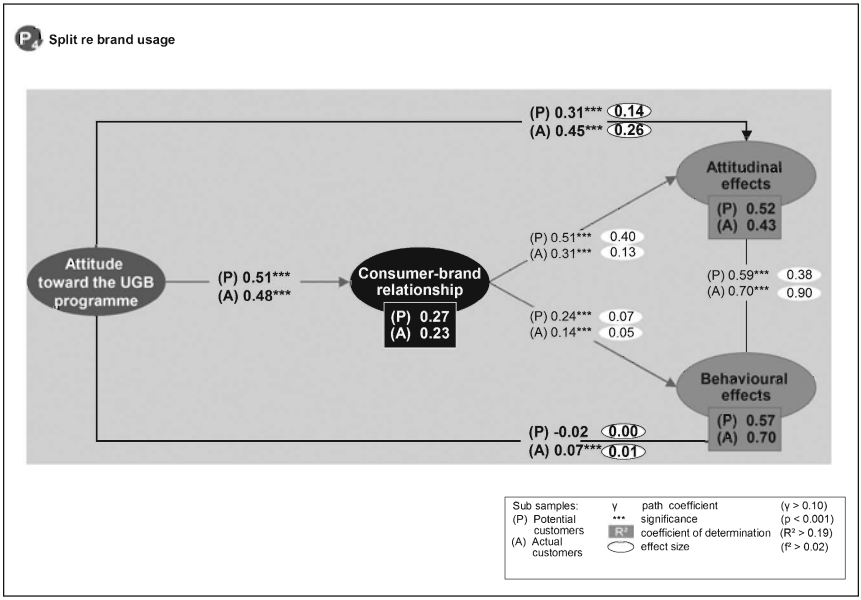

Figure 63 Parameter estimation for partial UGB effectiveness model in terms of brand usage
Source: Own illustration.

P_1: UGB effectiveness (UGB awareness)		UGB → CBR	UGB → Att	CBR → Att	UGB → Beh	CBR → Beh	Att → Beh
Mean rank	Potential	265	101	301	101	290	105
	Actual	136	300	101	300	111	296
Mann-Whitney U		7,060	31	0	69	2,038	861
Wilcoxon W		27,160	20,131	20,010	20,169	22,138	20,961
Z		-11	-17	-17	-17	-16	-17
Asymp. Sig.		0.000	0.000	0.000	0.000	0.000	0.000

Table 51 Comparison of brand usage specific sample differences for partial UGB effectiveness model (Mann-Whitney U test)
Source: Own illustration.

Overall, the analysis suggests that brand usage is not a prerequisite for achieving UGB effectiveness. As shown above, the influence of attitude toward the UGB programme on the consumer-brand relationship may be stronger among potential customers while attitudinal and behavioural effects appear to be stronger among actual customers – even if behavioural effects are not substantive regarding both usage groups. Thus, hypothesis H_{20} can be neither confirmed nor rejected.

H_{20}	UGB effectiveness is greater with actual customers than potential customers.	/

5.3 Validation of partial interaction models

After estimating the total UGB effectiveness model, it is explored in the following whether the impact of attitude toward the sponsored UGB programme on the consumer-brand relationship is moderated by UGB programme and/or user personality related variables. The possibility of such interaction effects is tested by means of the **product indicator approach** as introduced in chapter E 2.2.6. Due to potential accuracy problems, RINGLE suggests not estimating interaction effects in a comprehensive model given the limits of the PLS software.[293] Following his recommendation, the assumed moderator variables are singled out and analyzed in separate PLS models one after another.

Although the overall parameters are estimated for the total sample, the interaction effects are mostly explained by means of the three UGB application specific sub popu-

[293] See RINGLE (2006). RINGLE is the developer of SmartPLS software which was used to estimate the model parameters.

lations. The reason behind are **multi-collinearity** problems which were faced by applying the total sample.[294] Since the examined moderator variables are correlated with both UGB as the predictor and CBR as the criterion, misleading path coefficients occurred in particular in the case of applying the automatic PLS missing value replacement function.[295]

5.3.1 UGB programme related factors

First, it is examined to what extent UGB programme related factors, i.e. the perceived fit between the UGB programme and the brand as well as the attitude toward the stimulated user generated content, overshadow the impact of UGB on CBR. According to the product indicator approach, such an interaction effect can be detected by assessing the interaction path coefficient as well as the additional variance explained as observed in change in R-square when the interaction term is included in the main effects regression model.[296] Therefore, the main effects model is estimates as a reference point in addition to the interaction model for all assumed moderators.[297]

To evaluate the interaction effect in terms of **UGB-brand fit**, the standardized path coefficients are analysed first: The application specific results of the interaction model give high path estimates from the UGB to the CBR variable at 0.1% significance level, a lower but also highly significant standardized path coefficient from the fit to the CBR variable as well as a significant interaction path coefficient (see Figure 64). Citing the Beck's sample as example, the UGB-CBR path estimate is 0.24 and the fit-CBR path estimate is 0.21, resulting in an interaction path coefficient of 0.18. That means that one standard deviation increase in UGB-brand fit will not only impact CBR by 0.21 but it would also increase the impact of UGB on CBR from 0.24 to 0.42 considering the interaction effect of 0.18.

Second, the additional variance explained is applied as a quality criterion. Citing the Beck's sample, the interaction model results in a higher R-square of CBR (R^2=0.17)

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[294] Analysing the total sample, path coefficients were sometimes distorted due to multi-collinearity between the latent variables, since the path coefficients are obtained by performing least squares regressions among the latent variables. In this case, the path coefficient estimates might change erratically in response to small changes in the data. The relevant changes in R^2, however, are shown correctly so that total interaction effects can be concluded. For further discussion of the multicollinearity problem see chapter E 5.5.

[295] In case this undesired effect happened, cases which included missing values for indicators of the interaction-model inherent variables were manually removed from the data set. The problem was less evident when using application specific sub samples individually.

[296] A change in R-square is determined by subtracting the R-square for the two variable main effects model from the R-square for the three variable interaction model.

[297] Comprehensive result tables regarding the quality evaluation of the main effect models are listed in the appendix for all examined factors.

compared to the main effects model (R^2=0.14). That is, a rise in the variance explained is detected. Applying the appropriate formula[298], the interaction effect reaches a medium effect size of 0.18. The bootstrap resampling procedure implies that the interaction effect is significant at 1% level. Moreover, all paths and factor loadings within the interaction model are significant at that or even higher level. Since the composite reliabilities of the product indicator and the constructs are very high (0.93 and above) it can be concluded that the path estimates tend toward the "true effect" (see Table 52).

With regard to the car brand and FRoSTA sample, the interaction estimates are less accurate. Composite reliabilities are high, too (above 0.90 and 0.92 respectively), but the t-values only get above or slightly below the 1.960 value indicating 5% significance (car brand: 2.271; FRoSTA: 1.938). The interaction effect size of the car brand sample amounts to 0.14 testifying to a medium impact (R^2= 0.31→0.36). The FRoSTA sample indicated a low interaction effect of 0.04 (R^2= 0.31→0.32).

Applying the product indicator approach to the total sample, an overall interaction effect of 0.13 is observed. The results suggest that the impact of attitude toward the UGB programme on the consumer-brand relationship is positively moderated by the level of fit perceived between the UGB programme and the brand. Hypothesis H_{21} is therefore confirmed.

H_{21}	The impact of the attitude toward the sponsored UGB programme on the consumer-brand relationship is the stronger... ...the better the perceived fit between the UGB programme and the brand.	✓

[298] The effect size of interaction effects is calculated as follows: $f^2 = \frac{R^2_{interaction} - R^2_{main}}{R^2_{interaction}}$

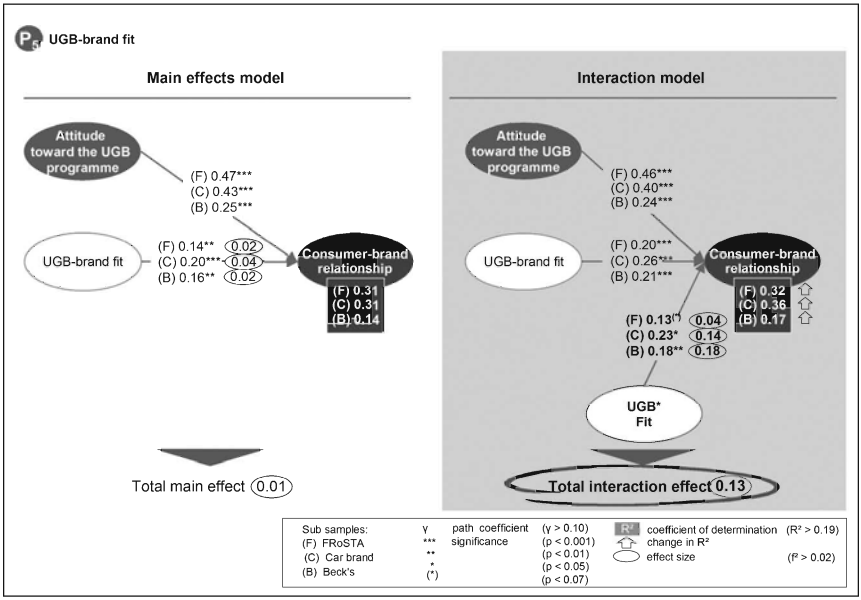

Figure 64 Parameter estimation for UGB-brand fit model
Source: Own illustration.

P_5: Fit interaction	FRoSTA			Car brand			Beck's		
Interaction model (effects)									
	UGB Fit*	**UGB* Fit UGB**	**Fit**	**UGB***	**Fit**	**UGB**	**Fit**	**UGB***	**Fit**
Path coefficient > 0.1	0.457	0.197	0.131	0.400	0.259	0.228	0.243	0.207	0.180
t-value > 2.576**; > 3.922***	10.642 ***	3.924 ***	1.938 (*)	10.67 ***	6.005 ***	2.271 *	6.150 ***	4.617 ***	3.183 **
Effect size f² > 0.02 low; > 0.15 mod	0.040			0.135			0.176		
R² > 0.33 mod; > 0.67 high	0.322			0.361			0.165		
Q² > 0	0.219			0.219			0.103		
Interaction model (internal consistency)									

	UGB	Fit	UGB *Fit	CBR	UGB	Fit	UGB *Fit	CBR	UGB	Fit	UGB *Fit	CBR
Composite reliability > 0.7	0.95	0.93	0.98	0.95	0.94	0.91	0.90	0.93	0.95	0.93	0.97	0.94

Table 52 Quality evaluation for UGB-brand fit interaction model
Source: Own illustration.

With respect to **attitude toward stimulated UGC** – that is, most commented article of the FRoSTA Blog and most popular story contributed to the car brand community[299] – the evidenced interaction effect is negligible. The interaction model provides path estimates of 0.06 in both samples which fall short of the minimum criterion of 0.1 as well as the required 5% significance level (see Table 53). Since the total R-square of CBR remains constant, the resulting interaction effect goes below the minimum size of f^2=0.02 (see Figure 65). For the total sample, an interaction effect of 0.01 is computed, given a minimal change in R^2 from 0.308 to 0.311. From this it follows that attitude toward stimulated UGC is not substantively overshadowing the impact of UGB on CBR. Hypothesis H_{22} is thus not confirmed.

H_{22}	The impact of attitude toward the sponsored UGB programme on consumer-brand relationship is the stronger... ...the stronger the attitude toward stimulated UGC within the programme.	X

In addition to the interaction effect, the direct influence of attitude toward stimulated UGC on the consumer-brand relationship shall be examined and compared to the direct influence of attitude toward the UGB programme. The analysis implies that the UGC variable does not exert a substantive direct influence on the CBR variable given low standardized path estimates and effect sizes in the main effects model (see Table 54). Within the total sample, the path coefficient for the UGC-CBR relation is thereby much lower than for the UGB-CBR relation (γ=0.10 vs. 0.47), resulting in a much lower effect size of UGC attitude compared to UGB attitude (f^2=0.01 v. 0.17). Therefore, hypothesis H_{23} claiming a stronger influence of UGB attitude is confirmed.

H_{23}	Attitude toward the sponsored UGB programme has a stronger influence on the consumer-brand relationship than attitude toward stimulated UGC.	✓

[299] Regarding the Beck's Festival Video Challenge no stimulated user generated content (i.e. video upload) was available by the time of the survey.

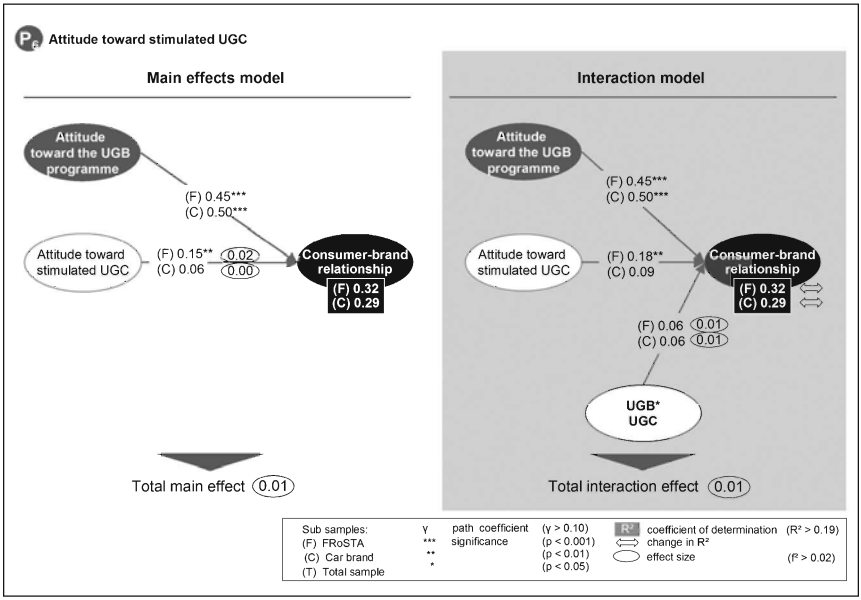

Figure 65 Parameter estimation for UGC attitude model
Source: Own illustration.

P_6: UGC interaction	FRoSTA			Car brand			Beck's
Interaction model (effects)							
	UGB	UGC	UGB* UGC	UGB	UGC	UGB* UGC	
Path coefficient > 0.1	0.446	0.180	0.062	0.499	0.085	0.056	
t-value >1.960*; > 2.576**; > 3.922***	8.909 ***	3.412 **	1.594	11.98 ***	1.777	1.173	
Effect size f^2 > 0.02 low; > 0.15 mod	0.009			0.010			
R^2 > 0.33 mod; > 0.67 high	0.324			0.290			
Q^2 > 0	0.216			0.176			
Interaction model (internal consistency)							
	UGB	UGC	UGB* UGC	CBR	UGB	UGC	UGB* UGC	CBR
Composite reliability > 0.7	0.95	0.96	0.99	0.95	0.94	0.94	0.98	0.93

Table 53 **Quality evaluation for UGC attitude interaction model**
Source: Own illustration.

P_6: UGC main	Total		FRoSTA		Car brand	
Main model: UGB/UGC → CBR						
	UGB	UGC	UGB	UGC	UGB	UGC
Path coefficient 0.1	**0.479**	**0.103**	0.450	0.146	0.495	0.064
t-value > 2.576**; > 3.922***	19.280 ***	4.042 ***	8.282 ***	2.822 **	11.998 ***	1.468
Effect size f^2 > 0.02 low; > 0.15 mod; > 0.30 high	**0.173**	**0.008**	0.132	0.015	0.220	0.004
R^2 > 0.33 mod; > 0.67 high	0.308		0.321		0.287	
Q^2 > 0	0.195		0.210		0.175	

Table 54 **Quality evaluation for UGC attitude main model**
Source: Own illustration.

5.3.2 *User personality related factors*

Beside programme related factors, it was hypothesized that user related factors such as Web2.0 experience and innovativeness may positively moderate the impact of UGB attitude on the consumer-brand relationship. With respect to the user related variable **Web2.0 experience**, the interaction model indicates low interaction effects for the sub samples, amounting to 0.04 (FRoSTA), 0.05 (car brand) and 0.11 (Beck's). However, the standardized path coefficients only go slightly below the minimum criteria of 0.1 and fall short of the required 5% significance level (see Figure 66). Besides, the internal consistency of the product indicator construct is disputable given a low composite reliability of 0.70 in case of the FRoSTA sample (see Table 55).

The total sample analysis suggests no interaction effect at all. This could be explained by the ambiguous direction of influence of the standardized path coefficient of the sub samples: While a negative moderating effect is indicated regarding the Beck's sample, the FRoSTA and car brand samples suggest – as hypothesized – a low but positive moderating effect. Such an opposing direction of influence of web experience was found by researchers before when considering different internet applications.[300] Another reason for the sample differences could be the higher web enjoyment observed regarding the Beck's sample, given the fact that the level of enjoyment was found to negatively moderate the impact of certain online related relations.

To sum up, a positive interaction effect of Web2.0 on the UGB-CBR relation is not confirmed by the overall analysis. Thus, hypothesis H_{24} is to be rejected.

H_{24}	The impact of the attitude toward the sponsored UGB programme on the consumer-brand relationship is the stronger... ...the higher the user's Web2.0 experience.	**X**

[300] For details see explanations in chapter D 3.2.4.

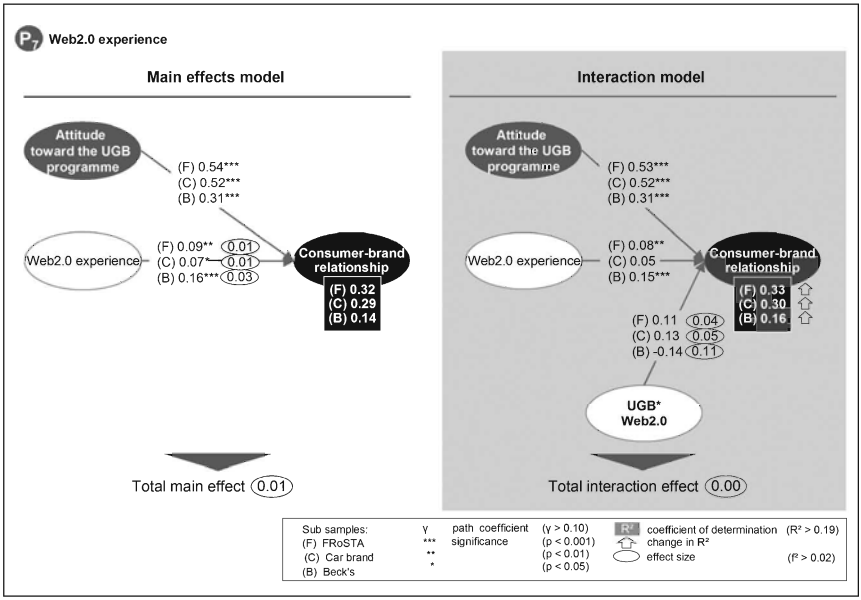

Figure 66 Parameter estimation for Web2.0 experience model
Source: Own illustration.

P_7: Web interaction	FRoSTA			Car brand			Beck's		
Interaction model (effects)									
	UGB	**Web**	**UGB* Web**	**UGB**	**Web**	**UGB* Web**	**UGB**	**Web**	**UGB* Web**
Path coefficient > 0.1	0.531	0.080	0.113	0.520	0.050	0.125	0.309	0.149	-0.136
t-value > 2.576**; > 3.922***	17.140 ***	2.820 **	1.075 16.85	*** 1.415	1.032 9.611	*** 4.474	***	1.324	
Effect size f² > 0.02 low; > 0.15 mod	0.038			0.049			0.113		
R² > 0.33 mod; > 0.67 high	0.330			0.304			0.160		
Q² > 0	0.219			0.184			0.100		
Interaction model (internal consistency)									
	UGB	**Web**	**UGB *Web**	**CBR**	**UGB**	**Web**	**UGB *Web**	**CBR**	**UGB**	**Web**	**UGB *Web**	**CBR**
Composite reliability > 0.7	0.95	0.83	0.70	0.95	0.94	0.84	0.91	0.93	0.95	0.83	0.87	0.94

Table 55 Quality evaluation for the Web2.0 interaction model
Source: Own illustration.

In terms of the **innovativeness** variable, no substantive interaction effect is detected. Standardized path estimates and effect sizes within the interaction model do not exceed the minimum criteria and are not statistically significant for all sub samples. The total interaction effect (f^2=0.01) falls short on the delimitation level, too. However, substantive direct influence of innovativeness on the consumer-brand relationship is found. The main effects model gives standardized path coefficients from 0.16 (car brand) to 0.33 (Beck's) at a 0.1% significance level and effect sizes from 0.04 (car brand) to 0.13 (FRoSTA). This is backed by the detected total effect size of 0.09 testifying to a low to moderate direct influence (see Figure 67).

Thus, hypothesis H_{25} claiming a moderating influence of a user's innovativeness on the UGB-CBR relationship is not confirmed. However, openness to product innovations and new brand developments is found to exert a substantive **direct positive influence** on the consumer-brand relationship.

H_{25}	The impact of the attitude toward the sponsored UGB programme on the consumer-brand relationship is the stronger... ...the higher the user's innovativeness.	X

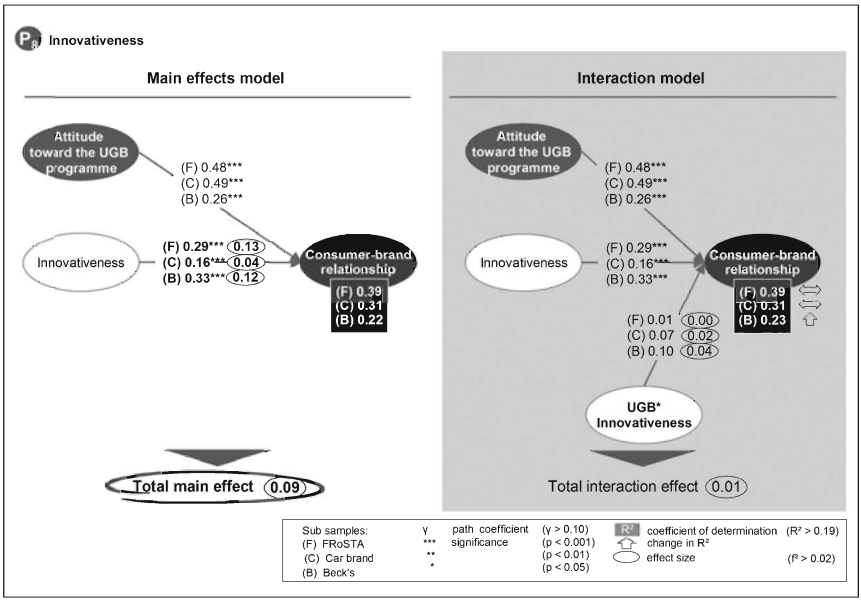

Figure 67 Parameter estimation for innovativeness model
Source: Own illustration.

P_8: Inno interaction	FRoSTA			Car brand			Beck's		
Interaction model (effects)									
	UGB	Inno	UGB* Inno	UGB	Inno	UGB* Inno	UGB	Inno	UGB* Inno
Path coefficient > 0.1	0.483	0.287	0.007	0.489	0.163	0.070	0.258	0.325	0.099
t-value > 2.576**; > 3.922***	14.417 ***	7.925 ***	0.105 14.57	*** 4.503	*** 1.601	9.084 ***	10.523 ***	0.964	
Effect size f^2 > 0.02 low; > 0.15 mod	0.000			0.016			0.044		
R^2 > 0.33 mod; > 0.67 high	0.387			0.314			0.227		
Q^2 > 0	0.260			0.190			0.142		
Interaction model (internal consistency)									
	UGB	Inno	UGB *Inno	CBR	UGB	Inno	UGB *Inno	CBR	UGB	Inno	UGB Inno	CBR
Composite reliability > 0.7	0.95	0.94	0.97	0.95	0.94	0.93	0.97	0.93	0.95	0.92	0.95	0.94

Table 56 **Quality evaluation of innovativeness interaction model**
Source: Own illustration.

P_8: Inno main	Total		FRoSTA		Car brand		Beck's	
Main model: UGB/Inno → CBR								
	UGB	Inno	UGB	Inno	UGB	Inno	UGB	Inno
Path coefficient 0.1	0.396	**0.268**	0.482	0.287	0.494	0.161	0.261	0.325
t-value > 2.576**; > 3.922***	22.474 ***	15.373 ***	14.955 ***	8.731 ***	14.932 ***	4.266 ***	8.092 ***	10.098 ***
Effect size f^2 > 0.02 low; > 0.30 high	0.202	**0.093**	0.354	0.124	0.313	0.036	0.082	0.124
R^2 > 0.33 mod; > 0.67 high	0.283		0.387		0.309		0.217	
Q^2 > 0	0.176		0.260		0.187		0.136	

Table 57 **Quality evaluation of innovativeness main effects model**
Source: Own illustration.

With regard to the user related factors product category involvement and opinion leadership, it was initially hypothesized that these variables rather exert a direct influence on CBR than a moderating influence on the impact of UGB on CBR. In terms of **product category involvement**, the main effects model provides high standardized path coefficients of 0.40 (FRoSTA) and 0.44 (Beck's) at a 0.1% significance level as

well as moderate to high effect sizes of 0.24 and 0.27 respectively (see Figure 68) regarding the FRoSTA and Beck's sample. Regarding the car brand sample, the effect size (0.02) and path estimate (0.12) is lower but still significant at 1% level. The differences between the samples might be explained by brand usage bias. While the FRoSTA and Beck's samples include a high proportion of (heavy) brand users, the car brand sample comprises mostly potential customers. Overall, a total main effect of 0.16 is detected testifying to a medium direct influence of involvement on the consumer-brand relationship.

In contrast, the results of the interaction model imply an overall low interaction effect of f^2=0.02. However, the interaction path estimates fall short of the minimum criteria in two sub samples and do not meet the 5% significance requirement in all three sub samples. Thus, hypothesis H_{26} is confirmed stating a rather substantive direct than moderating influence of involvement on the consumer-brand relationship.

H_{26}	Product category involvement has a rather direct than moderating influence on the consumer-brand relationship.	✓

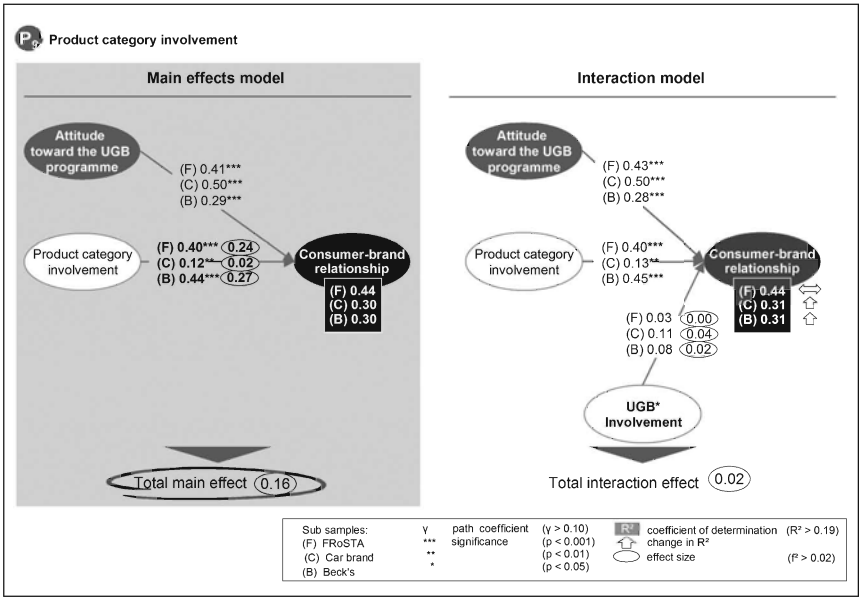

Figure 68 Parameter estimation for involvement model
Source: Own illustration.

P_9: Inv interaction	FRoSTA			Car brand			Beck's		
Interaction model (effects)									
	UGB	Inv	UGB* Inv	UGB	Inv	UGB* Inv	UGB	Inv	UGB* Inv
Path coefficient > 0.1	0.427	0.397	0.026	0.501	0.133	0.113	0.281	0.446	0.080
t-value > 2.576**; > 3.922***	7.365 ***	12.770 ***	0.513	16.31 ***	3.435 ***	1.669	10.850 ***	15.550 ***	1.325
Effect size f^2 > 0.02 low; > 0.15 mod	0.000			0.041			0.020		
R^2 > 0.33 mod; > 0.67 high	0.444			0.311			0.311		
Q^2 > 0	0.299			0.189			0.200		
Interaction model (internal consistency)									
	UGB	Inv	UGB *Inv	CBR	UGB	Inv	UGB *Inv	CBR	UGB	Inv	UGB *Inv	CBR
Composite reliability > 0.7	0.95	0.94	0.98	0.95	0.94	0.93	0.96	0.93	0.95	0.95	0.98	0.94

Table 58 **Quality evaluation for involvement interaction model**
Source: Own illustration.

P_9: Inv main	Total		FRoSTA		Car brand		Beck's	
Main model: UGB/Inv → CBR								
	UGB	Inv	UGB	Inv	UGB	Inv	UGB	Inv
Path coefficient 0.1	0.378	**0.339**	0.407	0.396	0.503	0.121	0.288	0.439
t-value > 2.576**; > 3.922***	18.726 ***	17.650 ***	12.437 ***	11.720 ***	15.597 ***	3.261 **	10.279 ***	15.560 ***
Effect size f^2 > 0.02 low; > 0.15 mod; > 0.30 high	0.200	**0.155**	0.254	0.238	0.330	0.020	0.116	0.265
R^2 > 0.33 mod; > 0.67 high	0.321		0.443		0.298		0.304	
Q^2 > 0	0.203		0.299		0.182		0.197	

Table 59 **Quality evaluation for involvement main model**
Source: Own illustration.

The results of the **opinion leadership** analysis correspond to the involvement findings mentioned above – however, at a lower level (see Figure 69). As hypothesized a rather direct than moderating impact of opinion leadership was found. The main effects model provides significant standardized path coefficients from 0.11 (car brand)

to 0.27 (Beck's) and effect sizes from 0.02 (car brand) to 0.09 (FRoSTA) which are regarded rather low (see Table 61) Again, the results regarding the car brand sample go below the results of the FRoSTA and Beck's sample. One reason could be the demographic sample structure.[301]

With respect to the interaction model, detected effect sizes are only equal or slightly above the minimum level. However, the standardized path estimates fall short of the minimum criteria in two samples and are not significant at the required 5% level. Thus, a potential interaction effect cannot be accurately confirmed. Hypothesis H_{27} claiming a rather direct influence of opinion leadership on consumer-brand relationship, however, is confirmed.

H_{27}	Opinion leadership has a rather direct than moderating influence on the consumer-brand relationship.	✓

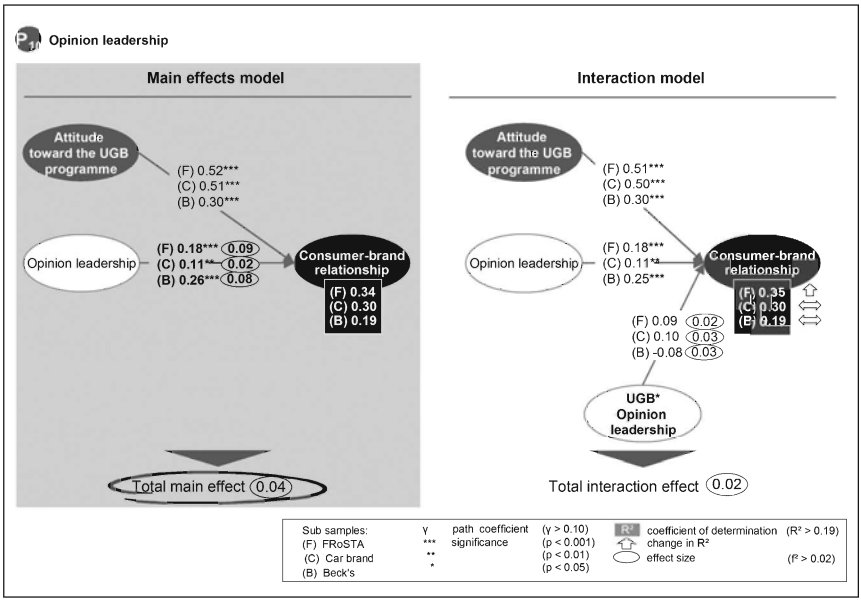

Figure 69 Parameter estimation for opinion leadership model
Source: Own illustration.

[301] For an evaluation of the demographic structure of the sub samples see explanations in chapter E 1.4.1.

P_{10}: OL interaction	FRoSTA			Car brand			Beck's		
Interaction model (effects)									
	UGB	OL	UGB* OL	UGB	OL	UGB* OL	UGB	OL	UGB* OL
Path coefficient > 0.1	0.513	0.183	0.090	0.500	0.109	0.096	0.297	0.253	-0.077
t-value > 2.576**; > 3.922***	17.304 ***	6.243 ***	1.069	15.56 ***	3.609 **	0.945	10.605 ***	7.869 ***	0.076
Effect size f^2 > 0.02 low; > 0.15 mod	0.021			0.030			0.032		
R^2 > 0.33 mod; > 0.67 high	0.348			0.304			0.191		
Q^2 > 0	0.232			0.184			0.120		
Interaction model (internal consistency)									
	UGB	OL	UGB *OL	CBR	UGB	OL	UGB *OL	CBR	UGB	OL	UGB *OL	CBR
Composite reliability > 0.7	0.95	0.83	0.88	0.95	0.94	0.82	0.84	0.93	0.95	0.83	0.90	0.94

Table 60 **Quality evaluation for opinion leadership interaction model**
Source: Own illustration.

P_{10}: OL main	Total		FRoSTA		Car brand		Beck's	
Main model: UGB/OL→ CBR								
	UGB	OL	UGB	OL	UGB	OL	UGB	OL
Path coefficient 0.1	0.426	**0.190**	0.520	0.178	0.514	0.105	0.299	0.263
t-value > 2.576**; > 3.922***	24.132 ***	10.131 ***	16.830 ***	5.794 ***	18.449 ***	3.474 **	9.324 ***	8.648 ***
Effect size f^2 > 0.02 low; > 0.30 high	0.233	**0.044**	0.417	0.086	0.325	0.015	0.108	0.080
R^2 > 0.33 mod; > 0.67 high	0.249		0.341		0.295		0.185	
Q^2 > 0	0.155		0.228		0.179		0.116	

Table 61 **Quality evaluation for opinion leadership main model**
Source: Own illustration.

5.4 Extra: Validation of internal UGB effectiveness model

As mentioned in section C 3.3, UGB applications such as blogs and challenges are not restricted to external target groups but may also be used for internal target groups. In the following, the developed internal UGB effectiveness model is empirically validated by means of the FRoSTA Blog employee sample, aiming at testing the constructed hypotheses. The internal UGB effectiveness model thereby follows the structure of the external UGB effectiveness model discussed above. As presented in chapter D 3.4, attitude toward the UGB programme as latent exogenous variable is kept. Brand commitment and brand citizenship behaviour are integrated as latent endogenous variables. First, the inherent measurement models are tested for reliability and validity according to the introduced quality criteria for reflective measurement models. Second, the structural model is estimated following the same procedure as applied for the external UGB effectiveness model.

5.4.1 Validation of inherent measurement models

The internal UGB effectiveness model comprises three latent variables: Attitude toward the UGB programme, brand commitment and brand citizenship behaviour. In terms of **UGB attitude** the operationalisation follows the measurement model newly developed for the external target group (see chapter E 3.1). As shown in Table 62, all eight indicator variables are verified. Given a first eigenvalue of 0.5154 and a second eigenvalue of 0.838, one-dimensionality of the construct is assured. All factor loadings are significant, exceeding the minimum criteria of $\lambda>0.4$ and – except one item – the recommended value of $\lambda>0.7$. Moreover, a composite reliability value of above 0.9 testifies to high internal consistency. Since the Fornell/Larcker criterion is met, discriminant validity is achieved.

Attitude toward the UGB programme (UGB)	Item level		Construct level			
	Factor loading	t-value	Kaiser Criterion	AVE	Comp. Reliability	Fornell/ Larcker
	> 0.7 (> 0.4)	> 3.922*** > 2.576**	$EV_1 > 1$ $EV_2 < 1$	> 0.5	> 0.7	
Attitude toward the UGB programme						
UGB_1	0.844	15.758***	5.154 0.838	0.639	0.933	✓
UGB_2	0.804	14.851***				
UGB_3	0.762	7.525***				
UGB_4	0.878	12.381***				
UGB_5	0.878	20.200***				
UGB_6	0.861	14.714***				
UGB_7	0.523	2.810**				
UGB_8	0.786	6.187***				

Table 62 Quality evaluation for UGB attitude measurement model (internal target group)
Source: Own illustration.

The measurement model of **brand commitment** is adopted from ZEPLIN, who verified eight items as indicator variables within her internal branding study (see Appendix XLVII).[302] The first five items cover an employee's identification with the brand while the last three reflect the degree of internalisation (see Table 63). However, not all indicators could be verified within this study. An explanation could be the much lower sample size and different questionnaire design of this research endeavour.[303] Applying the original 8-item scale, three factors were extracted and the average variance extracted (AVE) fell short on the minimum level of 0.5. Thus, item BC_4 was eliminated due to factor loading below > 0.4. Besides, further weak items (BC_3, BC_6) were deleted from the measurement scale to obtain one-dimensionality and meet the AVE criteria. As depicted in Table 64, the revised 5-item measurement model is of sufficient quality. However, it is to be noted that the validity and reliability of the brand commitment measurement model is behind on other measurement model standards set within this study.

[302] See also in the following ZEPLIN (2006), pp. 201 et seqq.
[303] ZEPLIN conducted an in-depth study on internal branding, interviewing 1,783 employees in various industries (ibid., p. 154). In contrast, UGB effectiveness among the internal target group is treated as a side aspect within this study; the analysis is only based on 47 valid questionnaires.

Item	Brand commitment (BC)	Reference
Q.: How would you describe your relationship to the FRoSTA brand?		
BC_1	At FRoSTA, I feel as part of a family.	ZEPLIN (2006)
BC_2	The success of the FRoSTA brand makes me proud; bad news about the brand is like suffering a personal setback.	ZEPLIN (2006)
BC_3	I am proud to tell others that I work for FRoSTA.	ZEPLIN (2006)
BC_4	I feel indebted to my line manager to strive for the good of the brand.	ZEPLIN (2006)
BC_5	The FRoSTA management board inspires me to make an extra effort for the brand.	ZEPLIN (2006)
BC_6	I would not prefer to work for another brand since FRoSTA and I are a good fit.	ZEPLIN (2006)
BC_7	I feel associated with FRoSTA since FRoSTA represents the values I personally appreciate.	ZEPLIN (2006)
BC_8	FRoSTA's corporate values are not just sweet-talking for me but affect my daily work.	ZEPLIN (2006)

Table 63 **Operationalisation of brand commitment variable**
Source: Adapted from ZEPLIN (2006), p. 205 (translated from German).

Brand commitment (BC)	Item level		Construct level			
	Factor loading	t-value	Kaiser Criterion	AVE	Comp. Reliability	Fornell/ Larcker
	> 0.7 (> 0.4)	> 3.922*** > 2.576**	$EV_1 > 1$ $EV_2 < 1$	> 0.5	> 0.7	
BC_1	0.548	2.958**	2.739 0.925	0.524	0.842	✓
BC_2	0.658	4.068***				
BC_3						
BC_4						
BC_5	0.618	3.379**				
BC_6						
BC_7	0.850	19.187***				
BC_8	0.884	23.116***				

Table 64 **Quality evaluation for brand commitment measurement model**
Source: Own illustration.

The operationalisation of **brand citizenship behaviour** (BCB) is also based on ZEPLIN.[304] 14 verified indicators variables out of the original scale (see Appendix XLVIII) are selected to measure attitudinal and behavioural effects of UGB effectiveness

[304] See also in the following ibid., pp. 192 et seqq.

among employees.[305] According to ZEPLIN, BCB is represented by three dimensions: willingness to help (BCB_1 to BCB_3)[306], brand enthusiasm (BCB_4 to BCB_9) and willingness to develop (BCB_10 to BCB_13)[307]. BCB_14 represents a global brand citizenship behaviour indicator. To avoid distorted responses due to aspired social acceptance, the wording is indirect so that the respondents – formally – evaluate the attitude and behaviour of colleagues (see Table 65).

Item	Brand citizenship behaviour (BCB)	Reference
Q.: To what degree does the FRoSTA Blog affect the attitude and behaviour toward the FRoSTA brand among your colleagues?		
BCB_1	The FRoSTA Blog makes my colleagues… …show a positive attitude toward customers and other colleagues.	ZEPLIN (2006)
BCB_2	…easily identify with the problems and needs of customers and other colleagues.	ZEPLIN (2006)
BCB_3	… take over extra tasks beyond their area of responsibility if needed (i.e. in terms of complaint management)	ZEPLIN (2006)
BCB_4	…increasingly consider the possible impact of any of their statements and actions on the brand image.	ZEPLIN (2006)
BCB_5	…behave according to the brand identity, even though when they are not watched.	ZEPLIN (2006)
BCB_6	…work particularly accurately and pay attention to quality in case the brand image could be positively influenced.	ZEPLIN (2006)
BCB_7	…accept overtime in case the brand image could be positively influenced (e.g. in order to finish a customer assignment on time).	ZEPLIN (2006)
BCB_8	…personally recommend the brand to their family and friends.	ZEPLIN (2006)
BCB_9	…make efforts to introduce the brand identity to new colleagues	ZEPLIN (2006)
BCB_10	…pro-actively seek for customer and peer feedback.	ZEPLIN (2006)
BCB_11	…voluntarily engage in further training (e.g. by studying manuals or technical journals or attend courses).	ZEPLIN (2006)
BCB_12	…always pass customer feedback and internal problems directly to the people in charge.	ZEPLIN (2006)
BCB_13	…pro-actively suggest new product and service ideas or process improvements.	ZEPLIN (2006)
BCB_14 (global)	…commit to the brand in their daily work beyond the minimal job requirement even without any incentives.	ZEPLIN (2006)

Table 65 **Operationalisation of brand citizenship behaviour variable**
Source: Adapted from ZEPLIN (2006), pp. 193 et seq. (translated from German).

[305] ZEPLIN's original items BCB_HIL2 have not been applied.
[306] Two similar indicators from the original scale reflecting the dimension 'willingness to help' were not included into this study due to research efficiency.
[307] Two indicators from the original scale reflecting further training by literature review and courses were merged into one.

The three dimensions of the BCB construct are empirically validated. By means of factor analysis, one factor was extracted each for willingness to help (EV_1=2.142; EV_2=0.579), brand enthusiasm (EV_1=4.841; EV_2=0.450) and willingness to develop (EV_1=2.922; EV_2=0.527). The average variance extracted ranges from 0.69 to 0.79 which is considered acceptable. Composite reliability values from 0.87 to 0.96 testify to high internal consistency. Although high correlations are indicated among the three dimensions,[308] the squared latent variable correlations are smaller than the respective AVE values so that the Fornell/Larcker criterion is met and discriminant validity is assured. At the item level, all factor loadings prove to be significant and exceed the recommended value of λ=0.7 so that item reliability is assured, too (see Table 66).

Brand citizenship behaviour (BCB)	Item level		Construct level			
	Factor loading	t-value	Kaiser Criterion	AVE	Comp. Reliability	Fornell/ Larcker
	> 0.7 (> 0.4)	> 3.922*** > 2.576**	$EV_1 > 1$ $EV_2 < 1$	> 0.5	> 0.7	
Dimension 'willingness to help'						
BCB_1	0.868	18.930***	2.142 0.579	0.687	0.868	✓
BCB_2	0.843	11.591***				
BCB_3	0.773	8.826***				
Dimension 'brand enthusiasm'						
BCB_4	0.836	10,717***	4.841 0.450	0.790	0.958	✓
BCB_5	0.913	45.334***				
BCB_6	0.931	36.804***				
BCB_7	0.883	24.139***				
BCB_8	0.879	22.793***				
BCB_9	0.888	18.775***				
Dimension 'willingness to develop'						
BCB_10	0.788	8.200***	2.922 0.527	0.710	0.907	✓
BCB_11	0.900	19.015***				
BCB_12	0.790	12.191***				
BCB_13	0.886	11,765***				

Table 66 **Quality evaluation for brand citizenship behaviour measurement model**
Source: Own illustration.

[308] The PLS algorithm indicates a latent variable correlation of 0.64 (willingness to help-willingness to develop), 0.78 (willingness to help-brand enthusiasm) and 0.82 (willingness to develop-brand enthusiasm).

5.4.2 *Validation of structural model*

The structural model of UGB effectiveness depicted in Figure 70 shows a positive influence of UGB attitude on **brand commitment**. About 20% of the total variance in brand commitment is accounted for by the UGB variable. Given the fact that brand commitment was found to be determined – like consumer-brand relationship – by various factors[309], this is regarded an acceptable value for the influence of a single factor. Moreover, the path between UGB and BC is strong (γ=0.44) and highly significant at 0.1% level. Thus, hypothesis H_{28} is confirmed.

H_{28}	Attitude toward the sponsored UGB programme has a substantive direct positive influence on the brand commitment.	✓

Regarding **brand citizenship behaviour**, no direct substantive impact of UGB attitude is observed. Indeed, the path coefficients of willingness to help (γ=0.20) and brand enthusiasm (γ=0.12) exceed the minimum criteria and effect sizes as well as predictive relevance testify to a low impact (see Table 67). However, no statistically significance is obtained. In terms of the third dimension willingness to help, no substantive influence of UGB attitude is observed at all. Therefore, H_{29} claiming a substantive direct influence of UGB attitude on the brand citizenship behaviour cannot be confirmed. However, a substantive impact of BC on all three BCB dimensions is observed, given significant path estimates of 0.45 to 0.49. BC effect sizes range from 0.21 to 0.24 which is considered a moderate influence. Taking total effects into account, a mediating effect of BC concerning the UGB-BCB relation can be concluded. That is, considering both direct and indirect effects exerted by UGB via BC, a statistically significant influence is particularly observed on 'willingness to help' and 'brand enthusiasm'. Hypothesis H_{29a} is thus confirmed.

H_{29}		Attitude toward the sponsored UGB programme has a substantive direct positive influence on the brand citizenship behaviour.	x
	H_{29a}	Brand citizenship behaviour effects are, however, mediated by the brand commitment.	✓

[309] ZEPLIN identified internal brand communication, brand related HR and overall management as determinants of brand commitment.

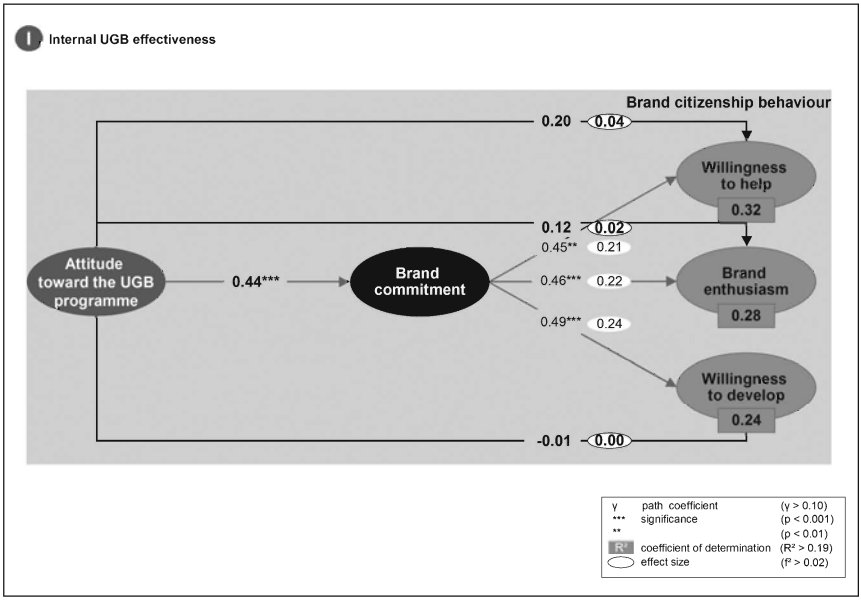

Figure 70 **Parameter estimation for internal UGB effectiveness model**
Source: Own illustration.

Internal UGB effectiveness	UGB → BC	UGB → Help	BC → Help	UGB → Enth	BC → Enth	UGB → Dev	BC → Dev
Path coefficient > 0.1	0.443	0.201	0.450	0.123	0.459	-0.009	0.493
t-value (path coeff.) > 3.922***	4.519***	1.630	3.299**	1.068	4.478***	0.078	4.695***
Total effects	0.443	**0.400**	0.450	**0.326**	0.459	**0.209**	0.493
t-value (total effects) > 3.922***	4.519***	**4.279*** **	3.299**	**2.926****	4.478***	**1.678**	4.695***
Effect size f² > 0.15 mod, > 0.30 high	-	0.040	0.211	0.016	0.215	0.003	0.242
R² 0.19 low; > 0.33 mod	0.196	0.322		0.276		0.239	
² > 0	0.079	0.182		0.206		0.153	
	0.079	0.022	0.112	0.011	0.154	0.000	0.143

Table 67 **Quality evaluation for internal UGB effectiveness model**
Source: Own illustration.

5.5 Discussion and summary of structural model results

Overall, the hypothesized **UGB effectiveness is confirmed** by empirical analysis. A substantive direct positive influence on both consumer-brand relationship (H_{13}) and attitudinal effects (H_{14}) is provided evidence for. That is, liking of sponsored UGB programmes is found to positively affect the perceived cognitive and affective relatedness of a consumer to a brand and to make consumers look upon the brand more positive, facilitating relationship building. However, no substantive direct impact of UGB attitude on behavioural effects (H_{15}) is detected. In fact, the relation between the UGB and behaviour construct is mediated by the consumer-brand relationship and – first and foremost – the attitudinal effects variable (H_{15a}). That is, liking of sponsored UGB programmes does not directly result in behavioural effects like positive word of mouth and (re-)purchase decisions but impacts them indirectly via strengthening the consumer-brand relationship and attitude toward the brand.

Attempting to size the effect of UGB attitude, the detected effectiveness of sponsored UGB programmes is compared to the effectiveness of TV advertising as an example for a classic corporate brand communication tool. Results of comparative analysis imply that the **level of UGB effectiveness is similar to ad effectiveness**. While UGB attitude and ad attitude reach the same effect size regarding the consumer-brand relationship (H_{16}), UGB attitude exerts an even stronger influence on attitudinal effects (H_{17}). Moreover, the findings clearly suggest that the UGB impact on behavioural effects (H_{18}) is not weaker compared to the ad impact although the effect sizes for both variables are on a very low level.

When discussing the results, the simplified research design is to be noted. Both UGB and ad attitude are measured by means of aided recall using screenshots; original web and TV footage was not shown. Given different programme awareness rates, more respondents (67%) could judge the TV commercial based on prior awareness than the UGB programme (15%). Thus, regarding the measurement of attitudinal and behavioural effects the share of intended changes instead of truly experienced changes in greater with UGB than ad effectiveness.

The findings about UGB effectiveness derived from the total sample are reconfirmed by all three analysed sub samples representing different sponsored UGB applications (corporate blog, video challenge and UGC based brand community) and different industries (food, alcoholic beverages and automotive). Thus, it can be concluded that UGB attitude has **impact irrespective of the individual UGB application type and industry**. However, differences among the sub samples are evident. The food blog and the car brand community appear to explain more of the variance in consumer-brand relationship than the beer video challenge. This might correspond to the over-

all weaker liking of the video challenge which allows less instant brand and peer to peer interaction than the other two participatory programmes. In terms of attitudinal effects, a stronger UGB impact regarding the two food stuffs applications is observed. This might be explained with the higher category involvement regarding the car brand, implying stronger pre-defined positions which are harder to change by a single brand communication programme. UGB impact on behavioural effects, however, is negligible for all three sub samples.

Having a look at further multi group comparisons, no clear evidence is provided that UGB effectiveness is greater among active participants (branticipants) compared to passive participants (lurkers) (H_{19}). While the analysed sample implies stronger impact of UGB attitude on consumer-brand relationship among branticipants, the influence of UGB attitude on attitudinal effects appears to be greater with passive participants. From this it follows that positive image transfer and relationship building is **not necessarily linked to active programme participation** (e.g. uploading files, writing entries) – visiting the UGB programme website seems to be sufficient. Comparing the effects between the ones who knew the UGB programme before and others who just learned about it during the study, it can even be concluded that the sole communication of the UGB programme idea is sufficient for strengthening the consumer-brand relationship and evoking positive attitudinal effects. In the total analysed sample, the UGB variable explains more variance in the consumer-brand relationship and attitudinal effects variables among UGB unaware users than among UGB aware users.

To put the UGB effectiveness findings into relation, it is to be noted that the research sample comprised far more UGB unaware users than aware users (85% vs. 15%) and that the share of active UGB programme participants was overall only 4%. That is, the majority of respondents judged the UGB programme based on screenshots of the UGB programme website incorporated into the questionnaire and not based on prior first-hand programme experience. That also means for the measuring of attitudinal and behavioural effects that not only truly experienced changes are considered but also expected or intended changes which might distort the results. Due to the shortage of active UGB participants regarding two sub samples, the presented findings of the UGB participation analysis are only based on one sub sample (food blog) which might restrict the representativeness of the results.

Other than hypothesized, a greater UGB effectiveness among actual customers compared to potential customers (H_{20}) cannot be fully confirmed. On the contrary, UGB impact on consumer-brand relationship and attitudinal effects is even found partly stronger with consumers who do not use the respective brand. From this it follows that UGB effectiveness is **not necessarily linked to prior brand usage**.

In order to get the full picture of UGB effectiveness, possible moderators were examined which might overshadow the impact of UGB attitude on the consumer-brand relationship as main latent exogenous variable. Out of six tested variables, only **UGB-brand fit** is verified with due accuracy **as a moderator** of the UGB-CBR relationship (H_{21}). Given a statistically significant interaction path estimate and a moderate effect size, it can be concluded that the impact of UGB on CBR is stronger if the fit perception between the UGB programme and the brand is high. Regarding the other examined programme (H_{22}: UGC attitude) and user related factors (H_{24}: Web2.0 experience, H_{25}: innovativeness, H_{26}: product category involvement, H_{27}: opinion leadership), on the contrary, such a substantive interaction effect could not be confirmed. As hypothesized, the findings regarding product category involvement and opinion leadership rather suggest a positive direct influence on the consumer-brand relationship. The same appears to be true for innovativeness which is also rather to be considered as a determinant of CBR than as a moderator of the UGB-CBR relationship.

Comparing the direct effects of UGB attitude with UGC attitude (H_{23}) it is observed that the liking of the actual user generated content stimulated within the UGB programme (e.g. individual blog entries, peer community stories or videos) has much less impact on the consumer-brand relationship than the liking of the UGB programme as a whole. This backs the previous finding that the overall idea of the sponsored UGB programme matters – not the actual programme participation or programme output. Figure 71 shows the verified UGB effectiveness model.

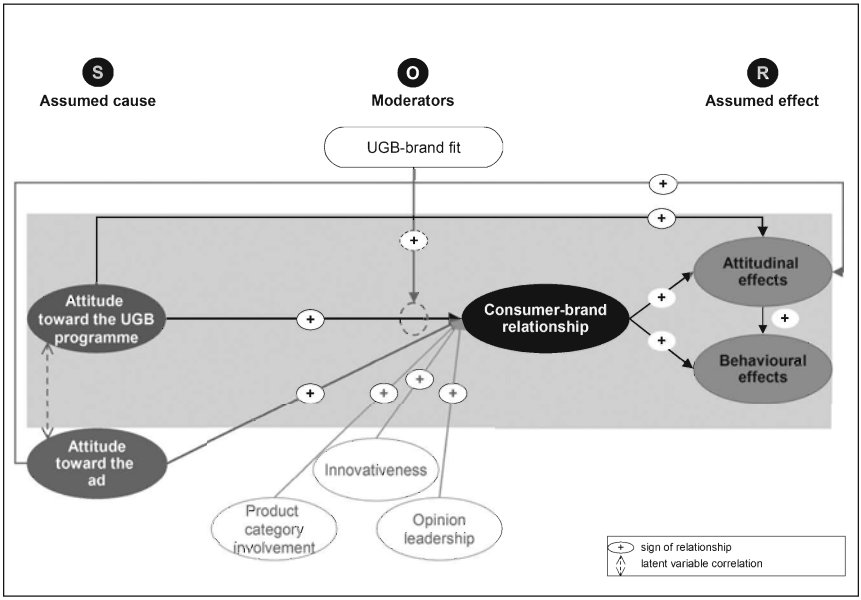

Figure 71 **Verified combined UGB effectiveness model**
Source: Own illustration.

In addition to the comprehensive analysis of the external target group, UGB effectiveness is explored – as an extra – for the **internal target group**. For this purpose, the brand commitment (BC) and brand citizenship behaviour (BCB) constructs are consulted in order to measure effects of internal sponsored UGB programmes on the employee-brand relationship and detect attitudinal and behavioural effects. Similar to the results of the external target group, a substantive direct positive **influence of UGB attitude on brand commitment** as an internal relationship indicator is found (H_{28}). From this it follows that a UGB programme such as an internal corporate blog proves to be an effective internal brand communication tool to strengthen the psychological attachment of employees to the brand which influences their willingness to exert extra efforts toward reaching the brand goals. As hypothesized, brand commitment thereby serves as a mediator between UGB attitude and brand citizenship behaviour (H_{29a}). While BC directly impacts the BCB dimensions willingness to help, brand enthusiasm and willingness to develop, no substantive direct impact is observed regarding UGB attitude (H_{29}). However, considering both direct and indirect UGB effects via BC, it can be concluded that brand citizenship behaviour is positively

affected by the internal brand communication programme. All internal and external results of hypothesis testing are summarized in Table 68.

Impact of UGB attitude			
Overall causality			
H_{13}	Attitude toward the sponsored UGB programme has a substantive direct positive influence on the consumer-brand relationship.		✓
H_{14}	Attitude toward the sponsored UGB programme has a substantive direct positive influence on attitudinal effects toward the brand.		✓
	H_{14a}	Attitudinal effects are, however, mediated by the consumer-brand relationship.	✓
H_{15}	Attitude toward the sponsored UGB programme has a substantive positive direct influence on behavioural effects toward the brand.		x
	H_{15a}	Behavioural effects are, however, mediated by the consumer-brand relationship and attitudinal effects.	✓
UGB effectiveness compared to advertising			
H_{16}	Attitude toward the sponsored UGB programme exerts a stronger substantive direct positive influence on the consumer-brand relationship than attitude toward the ad.		x
H_{17}	Attitude toward the sponsored UGB programme exerts a stronger substantive direct positive influence on attitudinal effects than attitude toward the ad.		✓
H_{18}	Attitude toward the sponsored UGB programme exerts a weaker substantive direct positive influence on behavioural effects than attitude toward the ad.		x
Multi group comparison			
H_{19}	UGB effectiveness is greater with active UGB participants (branticipants) than passive participants (lurkers).		/
H_{20}	UGB effectiveness is greater with actual customers than potential customers.		/
Moderators of UGB effectiveness			
Programme related factors			
H_{21}	The impact of the attitude toward the sponsored UGB programme on the consumer-brand relationship is the stronger... ...the better the perceived fit between the UGB programme and the brand.		✓
H_{22}	...the stronger the attitude toward stimulated UGC within the UGB programme.		x
H_{23}	Attitude toward the sponsored UGB programme has a stronger influence on the consumer-brand relationship than attitude toward stimulated UGC.		✓
User personality related factors			
H_{24}	The impact of the attitude toward the sponsored UGB programme on the consumer-brand relationship is the stronger... ...the higher the user's Web2.0 experience.		x
H_{25}	...the higher the user's innovativeness.		x
H_{26}	Product category involvement has a rather direct than moderating influence on the consumer-brand relationship.		✓
H_{27}	Opinion leadership has a rather direct than moderating influence on the consumer-brand relationship.		✓

To be continued

Extra: Internal UGB effectiveness			
H_{28}		Attitude toward the sponsored UGB programme has a substantive direct positive influence on the brand commitment.	✓
H_{29}		Attitude toward the sponsored UGB programme has a substantive direct positive influence on the brand citizenship behaviour.	x
	H_{29a}	Brand citizenship behaviour effects are, however, mediated by the brand commitment.	✓

Note: ✓ – hypothesis confirmed; **x** – hypothesis not confirmed; / – hypothesis neither confirmed nor rejected

Table 68 Verification of hypotheses regarding UGB effectiveness
Source: Own illustration.

For the critical discussion of the results, the following annotations regarding the applied structural equation modelling and parameter estimation technique are to be considered. First, a common criticism of causal analysis and notably structural equation models is that complex relationships are displayed in a **simplified way**.[310] Based on intense theoretical considerations, a clear direction of relations between variables is postulated, assuming a straight-line functional relationship between the cause and the effect. If a direct impact from the one to the other variable exists, it is referred to as a causal correlation. However, KENNY advises researchers of being realistic about feedback relationships.[311]

A further critical point is the statistical phenomenon of **multi-collinearity** between latent variables, meaning that two or more predictor variables in a multiple regression model are highly correlated.[312] Indeed, multi-collinearity does not reduce the predictive power or reliability of a model as a whole, but affects calculations regarding individual predictors. Within this study, multi-collinearity was observed when estimating interaction effects. Since the examined moderator variables are correlated with both UGB as the predictor and CBR as the criterion, misleading path coefficients occurred within the total sample, in particular, when applying the automatic PLS missing value

[310] See also in the following KENNY (1979), pp. 9 et seqq.; BACKHAUS/ERICHSON/PLINKE et al. (2003), pp. 334 et seq. and explanations in chapter D 1.
[311] Feedback allows for a variable to both cause and be caused by another variable. Econometricians also call it simultaneity (see also in the following KENNY (1979), pp. 32; 122 et seqq.).
[312] See also in the following ibid., pp. 84 et seqq; BARON/KENNY (1986), p. 1174.

replacement function.[313] In order to avoid computational errors, all indicators reflecting predictor and moderator constructs were standardized before multiplication.[314]

When discussing path model results estimated by the PLS approach, the known bias for underestimating structural paths among constructs is to be considered. According to CHIN/MARCOLIN/NEWSTED such bias may occur under small sample sizes and small number of indicators per construct.[315] However, given a total sample size above 2,000 cases, sample size is not regarded an issue of this study. Even regarding the smallest sub sample splits (e.g. internal UGB effectiveness model, external UGB participation analysis), the standard rule of thumb is met.[316] In terms of indicator number per construct, some measurement models within the scope of interaction models go below the recommended size of six to eight items per construct. However, this is balanced by the big sample size as well as very reliable measures.

[313] In case this undesired effect happened, cases which included missing values for indicators of the interaction-model inherent variables were manually removed from the data set. The problem was less evident when using application specific sub samples individually.

[314] By standardizing the indicator variables to a mean of zero and variance of one before multiplication within the product indicator approach, the correlation between the product indicators and their individual components is lowered (see CHIN/MARCOLIN/NEWSTED (1996), p. 26).

[315] In terms of interaction effects, such bias may occur under sample sizes smaller than N=100 and less than six to eight indicators per construct (see also in the following ibid., p. 34).

[316] A standard rule of thumbs suggests that the sample size be equal to the larger of ten times the largest number of structural paths directed at a particular construct in the structural model.

F Summary, critical consideration and outlook

This last section summarizes the results of this thesis. First, the key findings regarding the theoretical and methodological research objectives of this study are presented. Second, the praxeological objective is addressed by showing managerial implications. Third, the research methodology and results are critically considered, by pointing out limitations in design and analysis approach but also contributions to the existing body of academic literature. Both the summary and the critical consideration are kept short at this point. More comprehensive summaries and discussions can be found within the individual sections. This thesis closes by providing manifold indications for future research in the field of user generated branding.

U. Arnhold, *User Generated Branding*, DOI 10.1007/978-3-8349-8857-7_6,

1 Summary of the study results

This study coins the term **user generated branding (UGB)** understood as a brand management approach dealing with the emerging phenomenon of consumer created brand messages in new media. Three research problems have been pursued: first, defining and differentiating user generated branding as a new research field, second, examining factors which drive the attitude toward a UGB programme and third, exploring the effects of a UGB programme sponsored by a brand. While the first two problems establish the basis, the main focus is on the third, i.e. proving the effectiveness of UGB programmes in corporate brand communication. For this purpose, a comprehensive survey among ~3,000 consumers was conducted, analysing three different real life UGB applications from different industries.

In response to the first research problem, this thesis defines UGB within the framework of the identity-based brand management approach as the ***"...strategic and operative management of brand related user generated content (UGC) to achieve brand goals."*** Deriving from the notion of content, brand related UGC is defined as "*...the representation of the voluntary creation and public distribution of personal brand meaning undertaken by non-marketers outside the branding routines and enabled by multimedia technology.*" That is, UGB is considered as a management approach dealing with all kinds of user generated brand related artefacts – from original comments, reviews, ratings and artistic work to remixes with corporate content. Those grassroots messages may be distributed as a text, image, audio or video format via Web2.0 and mobile platforms such as blogs, review, media sharing and social networking sites. They may thereby represent both expression of customer complaint and brand fan dedication.

With regard to the elaborated UGB definition, UGB is not to be confused with **related terms**. Unlike mass customization, it does not refer to a co-design process within a fixed solution space but deals with freely created personal brand meaning. UGB as a whole is also not to equate with online brand communities and word of mouth (WOM): While brand communities represent a network and WOM represents a channel, UGB refers to content. This content, however, may be generated by community members and disseminated by online WOM. UGB creators are thereby regarded as creative consumers but not necessarily as lead users. Since not the users are the sole authors but the brand-owning company still interferes, UGB is also not to be mixed up with open source brands. Finally, UGB is more than eBranding. While the latter aims at using the channel internet to present a brand, UGB refers to a grass-

roots movement in internet usage beyond conventional internet brand management behaviour.

Focusing on the management of those consumer related brand messages, this thesis proposes to distinguish between **sponsored and non-sponsored UGB**. Non-sponsored UGB is defined as the management of naturally occurring unprompted brand related UGC created by vigilante users. On the contrary, sponsored UGB is defined as the management of stimulated brand related UGC created by participants on demand.

Overall, UGB is found to serve four brand management purposes. First, UGB may be considered as an **instrument of applied market research** gaining insights for the improvement of the current brand offering and brand innovation by monitoring brand related UGC. This is regarded the primary goal of non-sponsored UGB. Second, sponsored UGB may be applied for the purpose of **commercialisation**: On the one hand, ideas of non-marketers might be pro-actively collected by means of crowd sourcing such as user generated advertising campaigns. On the other hand, brand-owning companies might create and utilize own Web 2.0 content on their behalf in order to promote their offering. Third, UGB may also be used for **customer retention** aiming at strengthening brand loyalty through active social media participation. In a figurative sense, the mentioned UGB applications may be also used for **internal branding** stimulating and monitoring brand related UGC among employees.

Having systematised the UGB phenomenon based on the literature review, the nature of sponsored UGB programmes is explored by an **empiric analysis** to address the second and third research problem of this study. To cover the range of possible UGB applications in different industries, a corporate blog by a convenience food brand (FRoSTA blog), a video challenge by a beer brand (Beck's Festival Video Challenge) and a UGC based community by a car brand were examined. Based on online questionnaires, 2,188 valid cases reflecting potential customers were obtained as the total sample for quantitative analysis, complemented by an ad diagnostic study (N=261), a content analysis (348) and point of sales surveys (207).

The descriptive analysis shows a rather positive evaluation of the examined UGB programmes despite low UGB programme awareness and active participation among the respondents. In general, a broad **approval of open brand communication** is found. Compared to traditional advertising, the majority judged participatory initiatives more customer-friendly and reliable and even indicated a positive influence on the purchase intention.

In response to the second research problem, UGB programme as well as usage patterns are identified as **determinants of UGB attitude**. As revealed by PLS path

modelling, the attitude toward stimulated UGC is the strongest driver of UGB attitude, followed by the UGB-brand fit. That is, the better consumers like the content contributed by peer users and the more they perceive a fit with the brand which sponsors the UGB programme, the stronger is their attitude toward the UGB programme. Other than hypothesized, user personality factors such as opinion leadership, innovativeness as well as Web2.0 experience are not found to influence UGB attitude significantly. Moreover, bivariate analysis revealed that UGB liking does not necessarily depend on a young age and higher education. In contrast, the more (academically) educated the users, the less do they like a UGB programme. Interestingly, women proved to be more positive about UGB than men. Multi group comparison also showed that actual customers have a stronger attitude toward the UGB programme than potential customers and that active participants appreciate it even more than consumers who do not actively contribute to the programme.

In response to the third research problem, the hypothesized **UGB effectiveness** is **confirmed** overall. Attitude toward the sponsored UGB programme is found to substantively affect the consumer-brand relationship and attitudinal effects in a positive way. That is, liking of sponsored blogs, challenges and communities fosters the consumers' relatedness to the brand and makes them look upon it more favourable in terms of image and trust. However, no substantive direct impact of UGB attitude on behavioural effects (i.e. recommendation and purchase behaviour) is detected. Since the consumer-brand relationship and attitudinal effects act as mediating variables, however, indirect behavioural effects are exerted by UGB attitude. Given the fact that these findings are reconfirmed by all three sub samples, it can be concluded that UGB attitude has impact **irrespective of the individual UGB application type and industry**.

Sizing the power of UGB impact, the level of UGB effectiveness is found to be **similar to ad effectiveness**. While the effect on the consumer-brand relationship is the same for both the UGB and ad variable, a slightly stronger influence of UGB attitude on attitudinal effects is detected. That is, 'pulling' UGB programmes may strengthen the bond to the brand at least in the same way as 'pushing' TV commercials and can be thus regarded as an efficient tool within the brand communication mix.

The results of PLS path modelling furthermore suggest that UGB effectiveness is **not necessarily linked to prior brand usage**. There are even indications that the impact of UGB attitude is stronger with potential customers who have not used the respective brand before. Other than hypothesized, UGB effectiveness is also found to be **not necessarily linked to active programme participation**. The overall impact among 'branticipants' who write blogs, upload videos, etc. is not measured clearly stronger than among 'lurkers' who passively attend the programme. Effects among

those UGB programme aware consumers did not even exceed the effects among consumers who just learned about the UGB programmes during the study. From this it follows that the sole communication of the UGB programme idea is sufficient for strengthening the consumer-brand relationship and evoking positive attitudinal effects. This conclusion is backed by the finding that attitude toward the sponsored UGB programme as a whole exerts a stronger influence than attitude toward stimulated user generated content as the output of the UGB programme.

Examining further effects which might overshadow the impact of UGB attitude, **UGB-brand fit** is verified as a **moderator**. That is, the impact of UGB attitude on the consumer-brand relationship is stronger if the fit perception between the UGB programme and the brand is high. No interaction effect, however, was found regarding user personality related factors. Product category involvement, innovativeness and opinion leadership, on the contrary, tend to exert a rather direct than moderating influence on the consumer-brand relationship.

Similar to the results of the external target group, UGB effectiveness is also verified – as an extra – for the **internal target group**. Examining the FRoSTA blog which also targets employees, substantive positive influence of UGB attitude on the employees' brand commitment is found based on a specifically developed internal effect model. That is, UGB attitude may strengthen the psychological attachment of employees to the brand which influences their willingness to exert extra efforts in favour of the brand. Via brand commitment as a mediator, UGB attitude might even indirectly affect brand citizenship behaviour as evidenced by willingness to help, brand enthusiasm and willingness to develop. Hence, sponsored UGB programmes appear to be effective brand communication tools for the internal target group, too.

With respect to hypothesis testing, 15 out of the 32 constructed hypotheses regarding the second and third research problem are confirmed and 15 are not confirmed. 2 hypotheses can be neither confirmed nor rejected (see Table 69).

Determinants of UGB attitude		
Usage		
H_1	Attitude toward the sponsored UGB programme is the stronger… …the more active the user's participation in the UGB programme.	✓*
H_2	…the heavier the brand usage.	✓*
Demographics		
H_3	Attitude toward the sponsored UGB programme is the stronger… …the younger the user.	x*
H_4	…the more educated the user.	x*
H_5	Attitude toward the sponsored UGB programme is not determined by gender.	x*
UGB programme		
H_6	Attitude toward the sponsored UGB programme is the stronger… …the stronger the attitude toward stimulated UGC within the UGB programme.	✓
H_7	…the better the perceived fit between the UGB programme and the brand.	x
Category		
H_8	Attitude toward the sponsored UGB programme is the stronger… …the stronger the product category involvement.	x
User personality		
H_9	Attitude toward the sponsored UGB programme is the stronger… …the higher the user's innovativeness.	x
H_{10}	…the stronger the user's opinion leadership.	x
H_{11}	…the higher the user's Web2.0 experience.	x
Power of impact		
H_{12}	UGB programme related factors and participation have a stronger substantive influence on the attitude toward the sponsored UGB programme than user related factors.	✓
Impact of UGB attitude		
UGB effectiveness		
H_{13}	Attitude toward the sponsored UGB programme has a substantive direct positive influence on the consumer-brand relationship.	✓
H_{14}	Attitude toward the sponsored UGB programme has a substantive direct positive influence on attitudinal effects toward the brand.	✓
	H_{14a} Attitudinal effects are, however, mediated by the consumer-brand relationship.	✓
H_{15}	Attitude toward the sponsored UGB programme has a substantive positive direct influence on behavioural effects toward the brand.	x
	H_{15a} Behavioural effects are, however, mediated by the consumer-brand relationship and attitudinal effects.	✓

To be continued

UGB effectiveness compared to advertising		
H_{16}	Attitude toward the sponsored UGB programme exerts a stronger substantive direct positive influence on the consumer-brand relationship than attitude toward the ad.	x
H_{17}	Attitude toward the sponsored UGB programme exerts a stronger substantive direct positive influence on attitudinal effects than attitude toward the ad.	✓
H_{18}	Attitude toward the sponsored UGB programme exerts a weaker substantive direct positive influence on behavioural effects than attitude toward the ad.	x
Multi group comparison		
H_{19}	UGB effectiveness is greater with active UGB participants (branticipants) than passive participants (lurkers).	/
H_{20}	UGB effectiveness is greater with actual customers than potential customers.	/
Moderators of UGB effectiveness		
Programme related factors		
H_{21}	The impact of the attitude toward the sponsored UGB programme on the consumer-brand relationship is the stronger... ...the better the perceived fit between the UGB programme and the brand.	✓
H_{22}	...the stronger the attitude toward stimulated UGC within the UGB programme.	x
H_{23}	Attitude toward the sponsored UGB programme has a stronger influence on the consumer-brand relationship than attitude toward stimulated UGC.	✓
User personality related factors		
H_{24}	The impact of the attitude toward the sponsored UGB programme on the consumer-brand relationship is the stronger... ...the higher the user's Web2.0 experience.	x
H_{25}	...the higher the user's innovativeness.	x
H_{26}	Product category involvement has a rather direct than moderating influence on the consumer-brand relationship.	✓
H_{27}	Opinion leadership has a rather direct than moderating influence on the consumer-brand relationship.	✓
Extra: Internal UGB effectiveness		
H_{28}	Attitude toward the sponsored UGB programme has a substantive direct positive influence on the brand commitment.	✓
H_{29}	Attitude toward the sponsored UGB programme has a substantive direct positive influence on the brand citizenship behaviour.	x
	H_{29a} Brand citizenship behaviour effects are, however, mediated by the brand commitment.	✓

Note: ✓ – hypothesis confirmed; **x** – hypothesis not confirmed; / – hypothesis neither confirmed nor rejected; * – hypothesis validation based on bivariate analysis

Table 69 **Final results of hypothesis testing**
Source: Own illustration

To sum up, the main **theoretical objective** of this thesis is met. On the one hand, a definition and differentiation of the UGB concept is provided, adding value to the

academic discussion by capturing and systemising the multi-facet phenomenon. On the other hand, a comprehensive model to explain the effectiveness of sponsored UGB programmes is developed and validated. Thus, this study succeeds in providing evidence for sponsored UGB programmes as effective brand communication tools.

Since the designed measurement instrument proved to be valid and reliable, the **methodological objective** of this study is also reached. In particular, the newly developed measurement model for attitude toward the UGB programme but also the operationalisations for attitudinal and behavioural effects, UGB-brand fit, Web2.0 experience, etc. proved to be valid scales.

With regard to the **praxeological objective** of this study, managerial implications from the theoretical and empirical findings are addressed in the following chapter.

2 Managerial implications

The key learning derived from this study for brand management practice is that stimulating user generated content within corporate programmes proves to be an **effective brand communication tool**. Sponsored UGB programmes such as corporate blogs, challenges and communities are likely to strengthen the consumer-brand relationship and improve the attitude toward the brand. As evidenced with traditional brand communication instruments as well, a substantive change in purchase decision, however, cannot be expected as a direct outcome of such a programme. That is, the positive impact of sponsored UGB programmes is proven for brand relationship building as a pre-economic value which is, in turn, regarded the foundation of a brand's overall economic value. Hence, it is generally recommended to apply sponsored UGB programmes within the corporate brand communication mix.

The study results thereby imply that UGB programmes exert positive impact irrespective of active UGB programme participation. That is, positive effects may be achieved by solely announcing the UGB programme idea. From this it follows that UGB programmes should be promoted as **symbols of open communication**. Since interactive brand campaigns which invite consumers to take part in the brand are found to be judged more customer-friendly and reliable, the aspects of transparency and participation should be highlighted. The participatory element of UGB programmes is thereby regarded more effective for image building than the Web2.0 element with respect to the broad target group.

If the 'open door' idea beyond the Web2.0 setting comes to the fore, sponsored UGB programmes are found to have **'offline' appeal**, too. For instance, mass approval of the examined FRoSTA Blog could be reached by positioning it primarily as a forum to talk to the FRoSTA makers rather than a tech application of the blogosphere. The car brand community could be primarily understood as a market place for peer-to-peer storytelling – the multimedia support is secondary.

In this sense, sponsored UGB programmes may be **designed for everybody**. Other than assumed, not only 'digital natives' and well educated people feel attracted by participatory formats. On the contrary, also older consumers may enjoy UGB programmes provided that the topic (e.g. brand nostalgia) and brand (e.g. category killer) suit the target group. Non-academics are even found to be more positive about UGB than academics, testifying to the universally valid open communication idea. Interestingly, women may be expected even more responsive than men.

The UGB idea seems to be appealing to **both actual and potential customers**. As shown in the study, UGB effectiveness is not necessarily linked to prior brand usage.

A positive impact on the consumer-brand relationship and attitudinal effects is also observed among consumers who have not bought the brand before. That implies that sponsored UGB programmes may be effective for both customer retention and customer acquisition provided that a convincing idea is promoted.

Highlighting the sponsored UGB programme idea, the communication of the programme idea may be **integrated into traditional communication measures**. As exemplified by the car brand community, the UGB programme idea can be part of a corporate brand image campaign, communicated through TV and print advertising. As the study results suggest, such multi-channel communication of the UGB idea might, indeed, strengthen the consumer-brand relationship but might not necessarily cause a cross-media activation, resulting in programme participation. That implies that the success of UGB programmes should not be measured solely by the number of programme web site visits, user registrations, file uploads and downloads, etc. To capture UGB programme effects among both participants and non-participants, effect analysis regarding relationship building – as conducted within this study – seems to be appropriate.

Comparing UGB effectiveness in relationship building with traditional brand communication tools, notably TV advertising, a similar effect level was found regarding the target group. If a branded company thus lowered the share of traditional mass media marketing spend in favour of UGB programmes, it could higher the **cost saving potential** according to the working hypothesis by SCHÖGEL/HERHAUSEN/WALTER.[1] The cost of setting up a UGB programme website (e.g. for a video challenge) is thereby apparently lower than running a TV prime time advertising campaign. In case of long-term UGB programmes such as blogs and communities, however, the cost for enduring programme maintenance has to be considered. A further advantage of sponsored UGB over other brand communication tools is the online traceability of consumer contact. Moreover, the consumer contact is of high quality given the active role of the consumer in the branding programme. This refers to the self-creation of brand related content but also to the voluntary recommendation and spread of peer content.

Although this study backs the application of sponsored UGB programmes as an effective communication tool, it does **not imply the total replacement of traditional brand communication tools**. On the one hand, low awareness and even lower participation rates were observed regarding the examined UGB programmes, in particular, if they were not announced via traditional mass media. That is, sponsored UGB

[1] See SCHÖGEL/HERHAUSEN/WALTER (2008), pp. 345 et seqq. and explanations in chapter C 3.4.

programmes depend to some extent on traditional mass media campaigns to get reach. On the other hand, it would be overconfident to assume that UGB programmes could totally replace traditional brand communication initiatives in all areas of brand building. For long-term brand building, for instance, practitioners still believe in the power of TV commercials with recurring icons and claims.[2]

Overall, the share of usage of sponsored UGB shall be **in line with the brand heritage and brand management competences.** Although this study found positive effects of sponsored UGB programmes irrespective of the examined industries, one category might be more suitable than the other. In particular, the UGB-brand fit is assumed to be better with volume brands than premium brands. Luxury goods, in general, rely on a selected but standardized high-end offering which is not subject to local adaptations. Beside brand origin, brand management competences have to be taken into account, too. Setting up sponsored UGB programmes demands not only a convincing idea, but also the willingness to accept a certain loss of control. This could cause a problem to branded companies with a 'closed-minded' corporate culture. In organisations where brand communication is understood as a one-way process from few enabled spokespersons to a silent mass of both internal and external stakeholders, the establishment of participatory formats such as UGB programmes requires change management.

Apart from the outcome, this thesis might be useful for practitioners from a methodological point of view, too. The proposed UGB effectiveness model as a whole might be adapted by corporate market research as (preliminary) **response model**. Although the UGB effectiveness model constitutes a pre-economic model and thus does not permit relating marketing expenditure inputs to market share and/or sales response, it provides indications for the effectiveness of sponsored UGB programmes compared to other brand communication instruments. Thus, it can be useful – in the broader sense – in addressing the increased management concern about the return of marketing investments.

To sum up, the management orientation of this study shall be underlined by referring this study's methodology and findings to the criteria of WIND/GREEN's **diffusion process** by which research advances are tested and implemented in the real world.[3] First, both the elaborated UGB definition and the UGB effectiveness model are designed to be applied at the business enterprise level. To ensure suitability to practice, the con-

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[2] For instance, FRoSTA still allocates a major share of the marketing budget to its TV advertising despite the enduring success of the FRoSTA Blog. Claims and key visuals including testimonials are thereby kept constant over years (see AHLERS (2009a)).

[3] For details on the diffusion process see WIND/GREEN (2005), pp. 301 et seqq.

cept development and test was conducted in close collaboration with cooperation partners from brand management practice. Second, given the emerging phenomenon of consumer created brand messages and the lack of theoretical and practical experience in dealing with it, this study may be considered a significant improvement over existing approaches. The research problem of UGB and notably the UGB effectiveness model address important brand management issues. Applying PLS for hypothesis testing, the latest developments in statistics are captured, too. Third, the developed UGB effectiveness model lends itself to standardization so that it can be applied irrespective of the original developer. Having validated the model on relevant samples reflecting the actual target group of existing brands at big sample size, the real world orientation of this study is evidenced. Last but not least, the procedure and results of this study were well perceived und fully understood by the cooperating enterprises. From this it can be concluded that the UGB definition and UGB effectiveness model is readily teachable to industry leaders.

3 Critical consideration of the study results

This thesis represents an **initial study** about the new concept of user generated branding (UGB). Due to the emerging nature of the phenomenon, extensive gaps in research are faced. This is true for both theoretical considerations and empiric analysis. With respect to the theoretical reference framework, neither an established UGB definition nor a clear differentiation from related terms existed. This early research state allows, on the one hand, to coin the UGB term. On the other hand, it also bears a risk due to a lack of reference. Therefore, the theoretical framework of this study is not only based on findings from marketing and brand management research but also on insights from other fields. Systematisations and definitions are thus based on adopted principles.

With respect to the research design of the empiric analysis, the **comprehensiveness of the study** is to be stressed. Overall, more than 3,000 cases are obtained by online and offline surveys as well as content analysis, allowing statistically sound hypothesis testing. Three different study objects are thereby analysed which reflect three different UGB applications and industries. From this it follows that the study has not only an enlarged scope but also an inherent sanity check mechanism, 'double-checking' individual sample results against findings from other samples already within the study. Distortion is also counteracted by applying a multi-channel approach in data collection. By using online panels and PoS surveys not only brand fans and active UGB participants were addressed but also potential customers and UGB unaware users. Thus, the phenomenon of self-fulfilling prophecy is widely avoided.

However, the selected research design also bears risks. This study is primarily based on **non-probability sampling** due to the undefined nature of the sampling frame reflecting both actual and potential customers. In particular, the applied anonymous online surveys hold a self-selection error since survey participation depends on a consumer's interest in the topic or medium, making an accurate representation of the total population unlikely.

Furthermore, it is to be noted that this study applies a **non-experimental cross-sectional design**. That is, the hypothesized cause-and-effect relationship is not studied by introducing an intervention as a cause of change and measuring the difference between the statuses of the dependent variables at the 'after' and 'before' observation. Although the evaluation of a programme after introduction is regarded absolutely legitimate in marketing, it is not an appropriate design for measuring the impact of a programme in the sense of change in attitude in relation to time. Moreover, the chosen design is not suitable to quantify the effect of extraneous variables

via control groups or compare the effectiveness of different treatment modalities via comparative designs.

Besides, the unexpectedly **low awareness and participation** rate of the examined UGB programmes turns out to be a disadvantageous point of this study. In particular, the data basis for the sub sample of active UGB participants was low which might restrict the representativeness of these specific results. In order to brief probands who were not familiar with the examined UGB programmes, the initiatives were introduced by means of screenshots and original programme information within the questionnaire. This recall approach is efficient, but cannot replace a first-hand programme usage by the respondents. That also means for the measuring of attitudinal and behavioural effects that not only truly experienced changes are considered but also expected or intended changes which might distort the results. For instance, with regard to the comparison between UGB and effectiveness, more respondents could judge the TV commercial based on prior awareness than the UGB programme.

With respect to the empiric data analysis, a common criticism regarding **causal models** is to be addressed. Causal models such as the UGB effectiveness model simplify complex relationships as linear relations. However, latent variables may also be involved in a feedback relationship. A further critical point is the statistical phenomenon of multi-collinearity between latent variables. Although the reliability of the model as a whole is not harmed, path estimates regarding individual predictors may be distorted due to high correlation between them. Within this study, this problem occurred in particular when estimating interaction effects.

As a parameter estimation technique, the **Partial Least Squares** (PLS) approach is preferred to covariance based approaches. PLS is regarded suitable because of the predictive purpose of this study and less limiting data premises, including minimal demands on measurement scales and residual distributions. The known bias of PLS for overestimating factor loadings of a latent variable and underestimating structural paths among the constructs is counteracted by the high sample size and a sufficient number of indicators regarding most constructs within this study.

Within the critical discussion, the **pioneer character** of this thesis is to be taken into account. Despite the named restrictions, the applied research design and statistical methods are regarded appropriate and efficient with regard to the limited resources and exploratory nature of this study. In fact, this thesis represents a first comprehensive study fully dedicated to the emerging phenomenon of user generated branding. Value is added to the existing body of knowledge through the systematic academic research approach resulting in a sound definition and differentiation of UGB. Furthermore, the study results provide evidence of the effectiveness of sponsored UGB programmes as new instruments within the brand communication mix. Thus, the de-

veloped and verified UGB model is considered an essential contribution to the branding discussion from both a methodology and outcome point of view. The identified patterns are of interest to managers and academics alike and establish a basis for further research.

4 Directions of future research

Throughout this thesis, it is referred to the early stage of UGB development and the resultant extensive research gaps. Thus, there is sufficient room for future research. On the one hand, the pursued direction of this initial UGB study may be followed up. On the other hand, researchers may address themselves to other UGB facets.

With respect to the **further development of the UGB effectiveness model**, more studies need to be done under varying conditions to assess the impact of UGB attitude regarding different applications and subpopulations. In order to validate whether long-term blogs and communities are more effective than short-term challenges as indicated in this study, various examples per **application type** need to be analysed and compared. In order to find out whether sponsored UGB really works throughout all **industries**, other categories than addressed in this study (convenience food, alcoholic beverages and automotive) should be examined. In particular, it should be investigated whether sponsored UGB only suits volume brands or if it is also applicable to premium brands. Given the fact that this study lacked in active **programme participants**, the analysis should be replicated for this group.

If modifying the effect model components, other traditional **brand communication instruments** could be integrated in order to size the effect of sponsored UGB programmes. Instead of attitude toward TV advertising, also liking of print, outdoor and online ads could be measured. A comparison could also be drawn to sponsoring programmes, promotion activities, CRM measures, etc. Furthermore, UGB effectiveness could be related to other **pre-economic effects** than consumer-brand relationship and attitudinal and behavioural effects. In this context, an analysis of UGB impact on brand image would be of interest.

In terms of research design, future studies should aim at measuring UGB effectiveness with regard to **change** in attitude in relation to time. Hence, longitudinal or before-and-after study designs should be applied. Also experimental set-ups should be considered, enabling the researcher to quantify the effect of extraneous variables via control groups and to compare UGB effectiveness of different treatment modalities.

While this study focuses on the external target group, more studies are needed to validate UGB effectiveness for the **internal target group**. The designed internal effect model establishes a basis. However, further validation is necessary with respect to different UGB applications from different industries as well as possible interaction effects. As conducted for the external effect model, attitude toward the sponsored UGB programme might be compared to attitude toward other internal communication and management instruments. Thus, the role of internal UGB programmes within in-

ternal brand management could be explored. Such analysis could be enlarged from employees to business partners such as suppliers and sales intermediaries.

Apart from optimising the proposed effect model, more research is needed on the '**cause**' side. Indeed, determinants of UGB attitude are identified within this study. Admittedly, this cause model does not meet the requirements of a comprehensive structural model. Future studies could work on identifying success factors for UGB programme quality by developing a diagnostic tool for UGB programme evaluation. Besides, motivational drivers for UGB programme participation have not been sufficiently validated in empiric analysis so far.

Special attention should be paid in future to **peer-to-peer interactions**. Per definition, UGB does not only refer to consumer-brand relationships but also to consumer-consumer relationships. Within sponsored UGB programmes, user generated content is commented, ranked and shared by other consumers. Thus, studies should explore to what extent P2P affects the liking of sponsored UGB programmes as well as the quality and amount of user generated content within the programme. Moreover, effects of conjoint brand building efforts could be investigated.

This study is dedicated to sponsored UGB, aiming at actively managing consumer created brand messages. However, UGB also comprises **non-sponsored UGB**, referring to grassroots brand messages occurring without the interference and even knowledge of the brand-owning company. Future research is needed to investigate to what extent companies may handle this natural user generated content which can be the work of brand fans and opponents alike. On the one hand, existing **social media monitoring** approaches could be explicitly related to the strategic and operative brand management process, showing how to benefit from those grassroots messages. On the other hand, **anti-brand content** whose viral distribution could harm the brand image deserves closer attention. Studies should aim at developing a kind of 'alarm system' telling branded companies what kind of off-brand messages bear a risk and at what stage and by means of what tools they should react. In particular, the fine line between consumer approval and disapproval of brand interference in off-brand platforms is of matter.

As shown, UGB research is still at a very early stage. This thesis is considered a first step, hoping to stimulate further research in order to bridge the large research gap.

Appendix

Overview

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Definition of Web2.0 and new media marketing terms

In the following, definitions are provided for technical terms which are used in the main part of this thesis. The notions refer to both Web2.0 and new media marketing platforms and types. Special attention is paid to the aspects of user generated content and word of mouth.

Distribution platforms	Description	Types	Examples
Internet forum	- Text posts made by users on online boards - Includes discussions and forum on message boards and large email portals - May serve as membership group	- Online bulletin boards - Public discussions (Usenet newsgroups)	- Alumni boards (e.g. college) - Google groups (e.g. Blogger Help Group)
Feedback and review site	- Web sites allowing users to review content and express opinion and critique - Feedback to other users through bulletin boards, forums and rooms - Includes product reviews, ratings and complaints as well as feedback to non-product related creative work	- Review and rating sites - Feedback & complaint sites - Product review community sites - Non-product related feedback sites	- Amazon - Dell-Hell - Ciao - FanFiction
Blog (Weblog)	- Digital web log, or personal web site - Containing user-created entries updated at regular intervals outside of traditional media - May include text, pictures, audio, video, or a combination of them - Mostly hyperlinked to and commented on by other blogs (total of blogs is called blogosphere)	- Stand-alone blogs - Blogs on sites	- BoingBoing, Engadget - MSN Spaces, CyWorld, Skyblog, LiveJournal
Social networking site	- Web site allowing users to create personal profiles to connect to people - Contact and relationship networks serving various purposes: connecting to friends or business people, but also sharing content and services - May include text, pictures, audio, video, blogs, and two-way communication (email, instant messaging)	- People connecting sites (private/ professional) - Content sharing sites - Service sharing sites	- Private: Facebook, studiVZ; Professional: Xing, LinkedIn - MySpace - Google's Co-Op, Yahoo's Trip Planner
Video and photo sharing site	- Platforms allowing users to present their own videos or photos - Allowing users to upload, share, rate and comment on contributions - Content may be mostly used without member registration	- Video community - Photo community	- YouTube, Clipfish, Sevenload - Flickr

To be continued

Distribution platforms	Description	Types	Examples
Wiki	- Online, collaborative work space for multiple users (Wiki – 'What I know is') - Allowing users to add, remove, or otherwise edit and change content (usually text) collectively - In a lighter form: text-based collaboration format allowing users to log in and co-operate on editing of documents	- Wiki encyclopaedia site - Wiki hosting sites - Writing collaboration site	- Wikipedia - PBWiki, JotSpot, SocialText - Google Docs, Writeboard
Social content aggregator and bookmarking site	- Web site to where users contribute links of articles and media and rate, tag, or otherwise aggregate them collaboratively - Allow users to post links to favourite articles, blogs etc. for public usage - Based on key word index (tag)	- Group-based aggregation sites - Social bookmarking sites	- Digg - del.icio.us
Pod and video cast site	- Internet platform providing audio and/or video recording for real-time listening or downloading - Distributing of multimedia files using syndication feeds (podcast software FeedBruner, WinAmp, iPodderX, @Podder) - Playback possible on PCs or mobile devices	- Commercial - Non-commercial	- iTunes (not UGC-specific)
Virtual world	- Online-game like 3D digital environment - Allowing users to subscribe to and create own virtual content (using scripting language and integrated development environment) - User is represented by virtual personal character (avatar)		- Second Life, Active Worlds, Entropia Universe, Dotsoul Cyberpark
Content or file sharing sites	- Legitimate web sites helping to share content between users and artists		- Digital Media Project

Appendix I **Distribution platforms of user generated content**
Source: Own illustration based on WUNSCH-VINCENT/VICKERY (2007), pp. 36 et seqq.; FISCH/GSCHEIDLE (2008), p. 357; NIELSENBUZZMETRICS (2006); KNAPPE/KRACKLAUER (2007), pp. 16 et seqq.

Content type	Description	Distribution platforms	Examples
Text	- Original writings or expansion of other texts posted and shared online - Including non-fiction (e.g. journalistic reporting/citizen journalism, presentations, product reviews, personal profiles) and fiction (e.g. short stories, novels, poems, jokes)	- Blogs - Community web sites (user-creative networks) - Wikis and writing collaboration web sites - Feedback and review sites - Social networking sites - Personal homepages (e.g. amateur authors)	- Media 2.0 - Fanfiction, Quizilla - Google Docs, Writeboard - Amazon - Xing, studiVZ, Facebook
Photos and images	- Digital photographs created and/or modified by users and posted and/or distributed online - Including original shots, remixes and hybrid forms	- Photo sharing web sites - Photo blogs - Social networking sites - Personal homepages	- Flickr, Ofoto, Snapfish - Xing, studiVZ, Facebook
Music and audio	- Personal audio content recorded and/or edited by users and posted and/or distributed in digital format online - Including home recordings, remixes and hybrid forms	- Audio sharing platforms - Podcast hosting web sites - Remix service web sites - Social networking sites - Personal homepages (e.g. amateur bands)	- MySpace - Tellerrand, Pimp my brain - Facebook
Video and film	- Personal video content recorded and/or edited by users and posted and/or distributed in digital format online - Including home recordings (incl. parodies) and remixes (e.g. recut film trailers) and hybrid forms (e.g. lip synching)	- Video sharing platforms - Live video service sites - Videocasts hosting web sites - Video blogs - Social networking sites - Personal homepages	- YouTube, Google Video, MyVideo, Sevenload - Stickam, LiveLeak - Current - Facebook

Appendix II **Types of user generated content**
Source: Own illustration based on WUNSCH-VINCENT/VICKERY (2007), pp. 31 et seqq.; NIELSENBUZZMETRICS (2006).

Marketing platforms	Marketing strategy description	Marketing goals	Examples
Search engine	- Search-based advertising according to user-selected keywords - Search engine optimization: get top placement in natural user search - Paid search ads: Get premium ad spots if indicated search term is chosen - Paid inclusion: get top placement for search term results	- Customer acquisition (info-intensive purchases)	- Google, Yahoo
Display	- Posting online advertising as banners, pop-ups, etc. - Traditional: posting on relevant web sites - Contextual: placement based on keyword relevance - Behavioural: placement based on user's recent web surfing history	- Brand-building - Product info - Customer acquisition	- Various brands
Communities/ Social networks	- Posting advertising in communities based on community interest - Target advertising on the community - Sponsorship of 3rd party community - Creating micro-site within community - Creating own community - Soliciting user-generated ads (contests) - Getting viral advertising distribution	- Brand-building - Product info	- Ads on XING - Pfizer@blogs - JP Morgan on Facebook - P&G Vocalpoint - Doritos - Dove on YouTube
Widgets	- Small portable web applications (animated icons, etc.) to be selected by user - Delivering branded utility (brand name appears on tool) for viral distribution (adaptation from blogs, etc.)	- Brand-building - Promotion	- STA travel planning (branded To-Do list, alarm clock, weather)
RSS feeds	- Real-time subscriptions to web content updates, e.g. news and blog feeds (preventing the need for manual search) - Sending promotions and product updates to users	- Brand-building - Promotion - Product info	- Southwest Airlines (DING! software)

Appendix III **Platforms of Web 2.0 marketing**
Source: Own illustration based on BERNHARDT et al. (2008a); BERNHARDT et al. (2008b).

Marketing platforms	Marketing strategy description	Marketing goals	Examples
Mobile devices	- Advertising on mobile device linked to user's real-time location and time - Pushing point-of-purchase services and impulse buys - Techniques: real time messages (SMS), multimedia content, sponsored search and banner ads	- Customer acquisition (esp. local commerce) - Brand-building	- Pepsi 2007 'Super Bowl' campaign - Pontiac 'Catch a G6' campaign
Gaming	- Advertising on computer games - Techniques: in-game advertising or advergames (online branded games)	- Brand-building - Promotion	- Burger King 'Subservient Chicken'
Interactive TV	- Dedicated ad locations - Techniques: video on demand, 'Red Button' info requests	- Brand-building - Promotion	
Rich media	- Advertising on rich media (e.g. iPod) - Techniques: online video, podcasting, digital radio, UGC	- Product info	

Appendix IV **Platforms of new media marketing**
Source: Own illustration based on BERNHARDT et al. (2008a); BERNHARDT et al. (2008b).

WOM type	Cluster	Description	Examples
Product seeding	Message	Promotion through placing the **product** into the hands of target group representatives - Providing buzz worthy information or samples to influential individuals	- Procter & Gamble (2001 to date) – 'Tremor' seeding initiative: sampling panel of teen opinion leaders to optimize product launches - Procter & Gamble (2005 to date) – 'Tremor Moms': sampling panel of young mothers
Cause marketing	Message	Promotion through supporting **social causes** in order to earn respect from people who feel strongly about the cause - Good corporate citizenship	- Nike (2004) – 'Armstrong Bands' campaign: wristbands to support Lance Armstrong foundation in fight against cancer - Nike (2005) – 'Stand up, speak up' campaign: wristbands to promote anti-racism message
Advertainment	Message/ Channel	Promotion through online campaign combining advertising and **entertainment**	- The Blair Witch Project (1999) – 'The Blair Witch Project web site': online mystery to stimulate WOM for movie
Advergame	Channel	Promotion through **online branded game**	- Burger King (2004) – 'Subservient Chicken' viral game initiative: game to promote chicken sandwich
Alternate reality game	Channel	Promotion through **cross-media game** blurring the distinction between fiction and reality - Using fake web sites, puzzles, telephone messages and clues in the media	- Microsoft (2004) – Xbox Halo 2 'ilovebees' ARG campaign: spewing messages as pre-launch advertising for console game
Buzz marketing	Channel	Promotion through initiatives designed to get people and the **mass media** talking positively about the brand - Creating entertainment or news via event or public activity	- General Motors (2004) – 'Oprah's Great Pontiac Giveaway' buzz stunt: cars given away to TV show live audience
Blog marketing	Channel	Promotion through creating **blogs** and participating in the blogosphere (brand blogging) - Sharing information that blog community may talk about	- General Motors (2004) – 'Fastlane Blog' campaign: blog with online diaries of senior car industry executives
Viral marketing	Channel	Promotion through persuasive message designed to spread **from person to person** - Entertaining or informative messages - Passed along in an exponential fashion, often by email message or video	- Hotmail (1996) – 'Get your free email at Hotmail' viral campaign: P.S. message added as footer to outgoing emails - Agent Provocateur (2001) – 'Proof' online ad campaign: viral clip starring Kylie Minogue
Referral programs	Channel	Promotion through created tools that enable satisfied customers to **refer their friends**	- Dove (1998) –'Share a Secret' campaign: free Dove samples for friends of Dove users

To be continued

WOM type	Cluster	Description	Examples
Community marketing	Recipient	Promotion through **niche communities** that are likely to share interests about the brand - Targeting user groups, fan clubs, and discussion forums - Providing tools, content, and information to support those communities	
Grassroots marketing	Recipient	Promotion through **local volunteers** who can be motivated to engage in personal or local outreach	
Evangelist marketing	Recipient	Promotion through evangelists, **advocates**, or volunteers who are encouraged to take a leadership role in actively spreading the word on brand's behalf	- adidas (2002) – 'Fevercards' brand advocacy campaign: sets of free contact cards for evangelists to hand out to friends
Influencer marketing	Recipient	Promotion through key communities and **opinion leaders** who are likely to talk about products and have the ability to influence the opinions of others	- Hasbro (2001) – POX 'Alpha Pubs' viral seeding campaign: identification of coolest kids for product seeding

Appendix V **Types of word of mouth marketing**
Source: Own illustration based on WOMMA (2006), p. 5; MARSDEN (2006). p. xvii et seqq.; BALTER (2004), p. 3 et seqq.

Technique	Communi-cation	Description	Examples
Shilling	Offline/ Online	Paying people to talk about (or promote) a product without disclosing that they are working for the company - Impersonating a customer	- Sony Ericsson (2002) – 'Fake tourist' live buzz campaign: brand conversation started by agents about new camera phone T68
Infiltration	Offline/ Online	Using fake identities in an online discussion to promote a product - Taking over a web site, conversation, or live event against the wishes/rules set by the proprietor	- Sony (2006) – 'All I want for xmas is a PSP' campaign: faked brand related blog created by ad agency under the pseudonym of teenage users 'Charly' and 'Jeremy'
Falsification	Offline/ Online	Knowingly disseminating false or misleading information	- Wikipedia – Falsification of German politics related user entries during election campaigns (e.g. deletion of scandals in politician profile)
Defacement	Offline/ Online	Vandalizing or damaging property to promote a product	
Spam	Online	Sending bulk or unsolicited email or other messages without clear, voluntary permission	
Comment Spam	Online	Using automated software ('bots') to post unrelated or inappropriate comments to blogs or other online communities	

Appendix VI **Types of stealth marketing**
Source: Own illustration based on WOMMA (2006), p. 7; SCHÖNEBERG (2007).

UGC examples from brand management practice

In addition to chapter A 1.2 and C 3, real world examples for brand related UGC are described in the following. Cases for both natural and stimulated brand related UGC are presented.

Example Intel

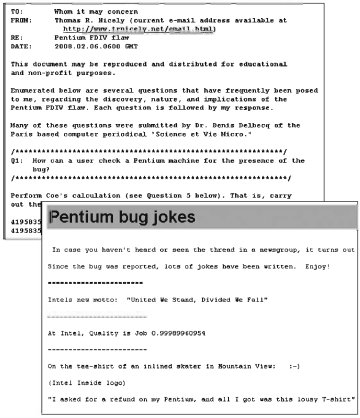
Incident:

In 1994 a mathematics professor pointed out a calculation mistake of a processor type to the producer Intel by e-mail but the company ignored the advice. The displeased customer informed acquaintances; the problem about the so-called Pentium FDIV bug spread via online forums evoking explanatory comments and jokes about Intel's competences.

Impact on brand:

Traditional media covered the incident criticising Intel's unprofessional complaint handling. Intel suffered from a substantial brand image loss and had to build a provision for losses of US$ 475 million in that year to cover product exchange.

UGC sample:



Appendix VII **UGC in answer to Intel's mishandling of the Pentium bug**
Source: Own illustration based on NICELY (2008) (screenshot 1); UNKNOWN (2008c) (screenshot 2); TÖPFER (1999); KNAPPE/KRACKLAUER (2007), p. 81.

Example Strato

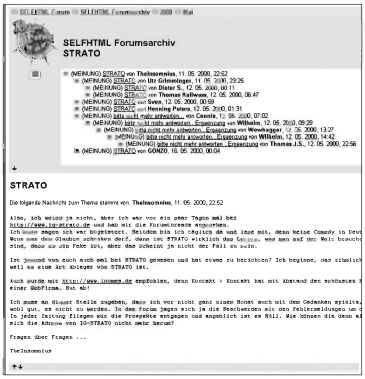
Incident:

In 1999 the German web hoster Strato got into crises, suffering from system failures and neglecting support requests by its customers. Unsatisfied customers then founded the online discussion forum 'IG Strato'—to help each other out and complain about Strato's bad service quality and rude customer handling. Based on those forum entries online news wires covered the Strato incidents in 'real time'.

Impact on brand:

With regard to the bad publicity Strato postponed its planned initial public offering and lost its market leadership in the meantime. In the following years, the company suffered from further breakdowns and bad press.

UGC sample:



Appendix VIII **UGC in answer to Strato's insufficient crises communication**
Source: Own illustration based on UNKNOWN (2000) (screenshot); ROSELIEB (2000); ROSELIEB (2002), pp. 213 et seqq.

Example Kryptonite

Incident:

To his surprise a customer managed to hack his US50$ Kryptonite U-lock with a ballpoint pen although the US bike lock producer had positioned it as best for toughest bicycle security even in crime areas. After being ignored by the complaint handling department of the company he posted the story on a web forum including a video of the incident. The case was picked up within a day by other user communities, news and video sharing sites; within four days traditional media covered the story—Kryptonite, however, kept silent.

Impact on brand:

Under public pressure Kryptonite finally offered a lock exchange program—the financial damage for the company was estimated approx. $US 10 million.

UGC sample:

Appendix IX **UGC in answer to Kryptonite's product failure**
Source: Own illustration based on TORRONE (2004b) (screenshot 1); TORRONE (2004a) (screenshot 2); KNAPPE/KRACKLAUER (2007), pp. 83 et seq.

Example Comcast

Incident:

A US law student experienced problems with his internet connection but his cable provider Comcast ignored his service requests. The finally assigned Comcast technician fell asleep on the customer's couch while on hold with Comcast's repair office! The student filmed the incident and posted the video online—the clip spread virally reaching only on YouTube more than 1.3 million views and provoking dozens of copycats.

Impact on brand:

The incident was covered immediately by online services, news wires and US and foreign traditional media. 'The New York Times' cited it as example "*...of angered customers*" branding Comcast poor service.

UGC sample:

Appendix X **UGC in answer to Comcast's poor service mentality**
Source: Own illustration based on UNKNOWN (2006b) (screenshot); BELSON (2006); MCCONNELL/HUBA (2006).

Example AOL

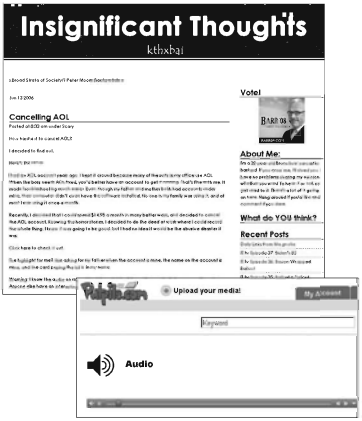
Incident:

A New Yorker attempted to cancel his AOL membership over the phone but was stonewalled by an AOL representative. The customer posted the incident on his blog 'Insignificant Thoughts' including the recorded client conversation. The audio file was viewed almost 400,000 times online; hundreds of users reported a similar treatment by AOL.

Impact on brand:

'The New York Times' called the incident "*...a wild, horrifying descent into customer-service hell*". The bad publicity forced AOL to apologize publicly and revamp its procedures for dealing with phone cancellations.

UGC sample:



Appendix XI **UGC in answer to AOL's problematic cancellation policy**
Source: Own illustration based on FERRARI (2006) (screenshot 1);UNKNOWN (2006a) (screenshot 2); STROSS (2006); MELILLO/VOIGHT (2007).

Example Apple iPod

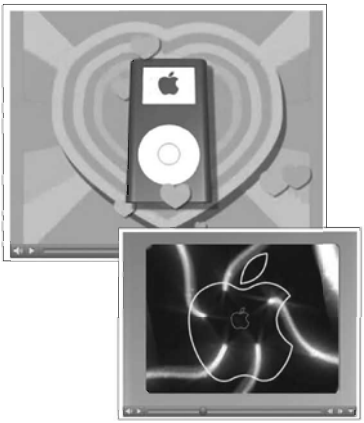
Incident:

A high school teacher and motion graphics hobbyist from California created in his spare time a 60-second advertising spot for his beloved brand Apple iPod mini—just for fun. It took him five months to animate coloured flying devices and psychedelic '70s graphics. Then the teacher posted the spot to his web site for feedback where it suddenly 'went viral': In a couple of days, the ad was watched several ten thousand times.

Impact on brand:

Advertising analysts consider the passionate work one of the first sophisticated 'pure' product ads on the internet created by a brand fan. There is consensus that the spot did not harm the brand. Apple officially pursued a 'non-reaction strategy'.

UGC sample:



Appendix XII **UGC as a brand fan's homage to Apple iPod**
Source: Own illustration based on MASTERS/WITT/BOOZER (2005) (screenshots); KAHNEY (2004).

Example Nogger

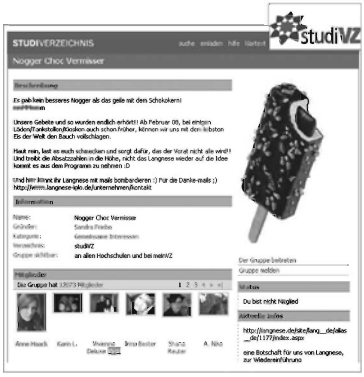
Incident:

More than 12,000 fans of the discontinued German ice cream brand Nogger Choc have participated in a discussion group on Germany's leading social networking site studiVZ to demand the comeback of their favourite treat brand. Thousands of users also signed a brand fans' call for re-launch on a petition web site.

Impact on brand:

In answer to the UGC campaign the producer Langnese reintroduced the Nogger Choc brand in spring 2008. The company explicitly gave the internet petition of "*...the committed Web 2.0 community*" as reason for the first online community driven re-launch in the company's history.

UGC sample:



Appendix XIII **UGC as a brand fans' call for the re-launch of Nogger**
Source: Own illustration based on GILDEMEISTER (2008) (screenshot 1); WIEGAND (2008); RIECKE (2008).

Example Diet Coke/Mentos

Incident:

A lawyer and a juggler created an arty video showing a series of experiments in which they dropped Mentos candies into a bottle of Diet Coke and thus produced a geyser-like effect. The clip posted on YouTube was watched more than 7.5 million times and raised a storm of several thousand copycats* of Diet Coke/Mentos experiments with similar high viewing numbers.

Impact on brand:

While the Coca Cola company distanced itself from the grassroots movement Mentos welcomed the fuss even holding official Mentos geyser contest. The 'geyser' advertising value for Mentos is estimated €10 million—twice the annual advertising budget—causing a sales increase of 15% within one year.

UGC sample:

* For the key words 'Mentos Diet Coke' 7,610 results were found on YouTube accessed on 12 August 2008.

Appendix XIV **UGC as a fun experiment featuring Diet Coke and Mentos**
Source: Own illustration based on UNKNOWN (2006c) (screenshot); BURMANN (2007); MELILLO/VOIGHT (2007).

Example VW Polo

Incident:

Two young London advertising creatives generated a commercial-mimicking spot for self-promotion employing the imagery of a Palestinian suicide car bomber driving a VW Polo. When attempting to blow up a café the bomb causes no damage to the car—the fake claim of the clip is "Polo. Small but tough." The fake commercial spread virally in the internet and got about 12 million hits.

Impact on brand:

First, VW was incriminated to have launched the offensive piece for publicity reasons although the company distanced itself from the advertisement. The UK newspaper 'The Guardian' revealed the real authors of the clip. VW announced legal action giving reputation damage due to a false link to terrorism as reason.

UGC sample:

Appendix XV **UGC as a fake commercial featuring VW Polo**
Source: Own illustration based on UNKNOWN (2005) (screenshot); BROOK (2005); WEIß (2007), p. 27; GARFIELD (2005A).

Example Current

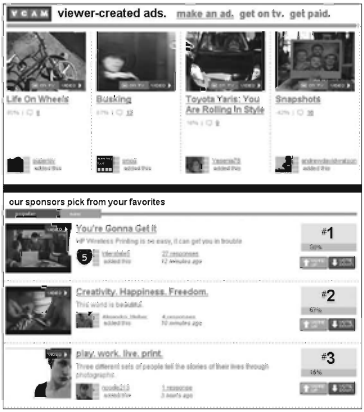
Incident:

Major brands such as Sony, L'Oreal and Toyota invite users on the marketing crowd sourcing platform Current to make TV ads on their behalf. After the detailed assignment is posted, users may submit video contributions—so-called VCAM (viewer created advertising messages)—which are then publicly voted on by peers. If the UGC spot is chosen to air on Current TV or by the brand sponsor the user can earn ten thousands of dollars.

Impact on brand:

Current's VCAM site represents a low-cost marketing platform for the brand sponsors which are able to benefit from both promoting their (product) brand and generating grassroots ideas. Since the assignments include mandatories there is a certain control over the UGC contributions.

UGC sample:



Appendix XVI **UGC as an assignment hosted by the marketing platform Current**
Source: Own illustration based on CURRENT (2008b) (screenshot); GARFIELD (2006); FRANK (2008), p. 38.

Example Kraft

Incident:

By monitoring social media, notably online communities, the food producer Kraft learned that consumers were more interested in portion control than in diet foods. As a result, Kraft launched the so-called '100 Calorie Packs'. By now, the category comprises more than 30 products from cookies and energy bars to pudding and cappuccino. Further products across the portfolio will be introduced under the same name.

Impact on brand:

The launch of the '100 Calorie Packs' was a commercial success: According to Kraft, the line 'Nabisco 100 Calorie Packs' alone has become a $100 million dollar brand.

UGC sample:

Appendix XVII **Monitoring UGC as impetus for product launch (Kraft)**
Source: Own illustration based on KRAFT (2008b) (screenshot 1); KRAFT (2008a) (screenshot 2)

Example Threadless

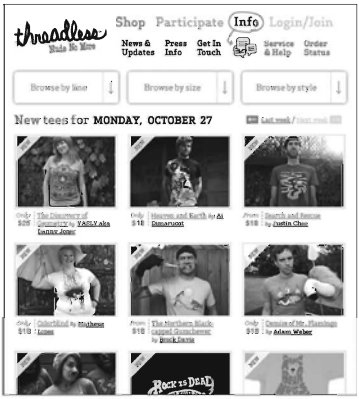
Incident:

The T-shirt business Threadless utilizes crowd sourcing by soliciting users—incentivised by cash awards—for submitting T-shirt designs. The winning design is selected by peers via online voting and sent to production. Hence, the market exists before the products are made—no Threadless T-shirt has ever flopped. By now, the online business serves 370,000 T-shirt fans who post about 800 new designs and 750,000 evaluations a week.

Impact on brand:

Threadless' reliance on crowd sourcing enables a lightweight, high-margin business model: Consumer research and design talent are virtually for free—only little capital investment is needed. The gross margin is estimated $250,000 per employee.

UGC sample:



Appendix XVIII **Sourcing UGC as business model (Threadless)**
Source: Own illustration based on THREADLESS (2008) (screenshot 1); UNKNOWN (2007a); BARTON et al. (2008), p. 47.

Example Dove

Incident:

In order to reach young women and educate them about self-limiting beauty stereotypes the cosmetics brand Dove designed a viral campaign for its Dove Self-Esteem Fund. It assigned the advertising agency Ogilvy & Mather to produce a video about the artificial evolution of beauty and used the video sharing site YouTube as channel. The inventive spot spread virally: The clip was downloaded approx. 8 million times by now.

Impact on brand:

By employing the UGC platform YouTube the campaign achieved its goal of raising awareness at low cost. Moreover, the video was awarded a Cannes Lion in 2007 in the category film.

UGC (platform) sample:

Appendix XIX **Leveraging the viral distribution power of UGC platforms (Dove)**
Source: Own illustration based on UNKNOWN (2006d) (screenshot); DOVE (2008); UNILEVER (2007).

Example JP Morgan Chase

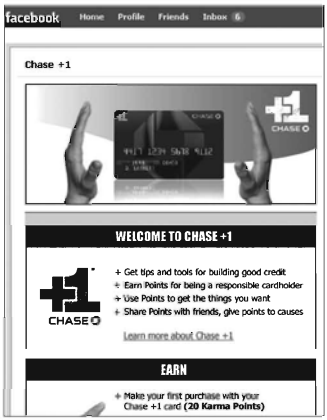
Incident:

In order to reach their student target group the financial institution JPMorgan Chase advertised its 'Chase +1' credit card on the leading social networking site Facebook. It has hosted a group on the site and customised the programme exclusively for Facebook members aiming at rewarding the young card holders for maintaining good credit. So participants may earn so-called Karma Points (approx. $1 in retail value) by passing a test and paying bills on time. These points may be used to purchase member exclusive goods and may be shared with friends.

Impact on brand:

By leveraging the Web 2.0 platform JPMorgan Chase has succeeded in attracting more than 50,000 programme participants which are educated to become responsible card holders.

UGC (platform) sample:



Appendix XX **Leveraging social networking at UGC platforms (JP Morgan Chase)**
Source: Own illustration based on CHASE (2008b) (screenshot); CHASE (2008a).

Example Adidas

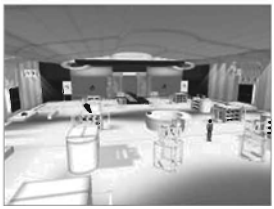
Incident:

The sports apparel manufacturer Adidas opened a 'store' in the virtual world Second Life in summer 2006 to promote its products such as the a3 Microride sneakers. On the one hand, users may purchase the cyber shoes for their virtual alter ego—the so-called avatars—who may then move like an astronaut on the moon and virally inspire other avatars. On the other hand, the Second Life residents are directed from the virtual store to the corporate web site where they may purchase the real sneakers.

Impact on brand:

Adidas' Second Life branch is regarded a milestone in the acceptance of virtual worlds. Although the impact on sales was vague the a3 Microride campaign achieved the goals of raising brand awareness and testing product perception.

UGC (platform) sample:



Appendix XXI **Leveraging virtual UGC worlds (Adidas)**
Source: Own illustration based on SECONDLIFE (2008a) (screenshots); SECONDLIFE (2008c); SCHMIDT (2007); BREUER (2007).

Example Sprint

Incident:

Aiming at leveraging online word of mouth the mobile service provider Sprint offered about 400 influential bloggers free mobile phones with six months of pre-paid service. There was no obligation on the participant's part to spread positive word of mouth, but it appeared that Sprint pampered the promoters with further free phones and kicked out the detractors. Overall, many bloggers considered the 'Ambassador Programme' an intrusion into their ethos.

Impact on brand:

Although Sprint evaluated the programme as success due to generated hits on search engines, negative comments by bloggers overshadowed the campaign. In the minds of online influentials Sprint positioned itself as company that did not understand the web.

UGC sample:

Appendix XXII **Stimulating UGC by trial product campaign (Sprint)**
Source: Own illustration based on SPOLSKY (2006) (screenshot); MACE (2008); WOOD (2006)

Example P&G

Incident:

The consumer goods company Procter & Gamble (P&G) created its online community 'Vocalpoint' to target opinion leaders and stimulate word of mouth. It has 'recruited' mothers with large social networks (i.e., those who interact with more than 20 mothers a day) from other online communities offering them early access to new products, coupons to use and hand out to friends and a chance to share their opinions with P&G and other consumers.

Impact on brand:

By mid 2006, already 600,000 mothers had enrolled. Hence, it is estimated that P&G is enabled to 'touch' 12 to 18 million members of their target market via word of mouth. It is proven that unit sales in markets with 'Vocalpoint' presence are greater than those without.

UGC (platform) sample:

Appendix XXIII **Stimulating UGC via word of mouth platforms (P&G)**
Source: Own illustration based on based on VOCALPOINT (2008) (screenshot); P&GTREMOR (2008); BERNER (2006).

Example Red Bull

Incident:

The beverage brand Red Bull has leveraged UGC by founding the Red Bull Music Academy (RBMA). Every year, it stages international music events asking DJs, singers, dancers and producers for applications. The generated content comprises pieces for the 24/7 RBMA web radio reaching more than 200,000 users a month as well as for RBMA radio, documentaries, magazines and the festival programme.

Impact on brand:

Through RBMA Red Bull has evolved from a beverage producer to a content supplier. Red Bull has succeeded in building the brand in its target community helping to launch its core products in new markets. The established culture projects were well acknowledged by the press.

UGC (platform) sample:

Appendix XXIV **Stimulating UGC via own community (Red Bull)**
Source: Own illustration based on RBMA (2008) (screenshot).

Questionnaires used within this study

Lehrstuhl für innovatives Markenmanagement (LIM)©
Fachbereich Wirtschaftswissenschaft (FB7)
Prof. Dr. habil. Christoph Burmann
Universität Bremen

Hi there!

Please take a couple of minutes to help on marketing science and tell us your opinion about the latest **Beck's** brand communication. We will draw a **Beck's fan package** among those who participate in the survey!

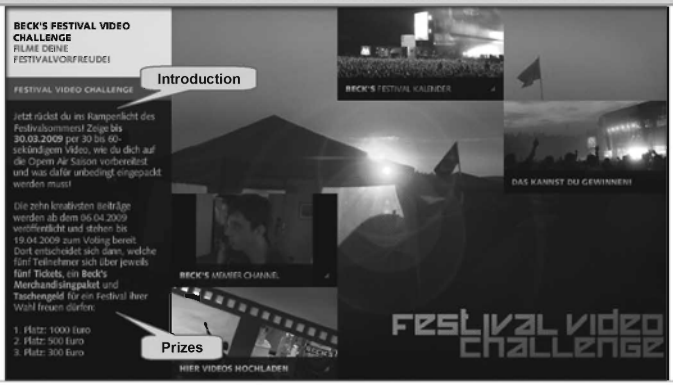
The survey is part of a research project conducted by the **University of Bremen**. There are no "correct" or "false" answers to the questions. It is all about your individual judgement!

PART 1: FESTIVAL VIDEO CHALLENGE

Beck's has just called on internet users to submit self-made videos about the Beck's Festival Summer. Do you know this initiative named "Beck's Festival Video Challenge"?

☐ Yes ☐ No

If ‚No', please have a look at the screenshot below to get a first impression of this challenge.



How do you like this video challenge?
In case you have not been aware of this initiative yet, please tell us your first impressions. Please tick the respective box in order to indicate to what extent you agree on the statements below.

	Do not agree at all	Hardly agree	Partly agree	Mostly agree	Fully agree	Don't know
	-2	-1	0	+1	+2	
This challenge is interesting to me.	☐	☐	☐	☐	☐	☐
The topic of this challenge is appealing to me.	☐	☐	☐	☐	☐	☐
This challenge is attractive to me.	☐	☐	☐	☐	☐	☐
I can easily identify with this challenge.	☐	☐	☐	☐	☐	☐
This challenge has a good reputation.	☐	☐	☐	☐	☐	☐
This challenge will keep its promises & commitments.	☐	☐	☐	☐	☐	☐
I think this challenge is poorly done/in need of improvement.	☐	☐	☐	☐	☐	☐
I dislike this challenge.	☐	☐	☐	☐	☐	☐

Page 1

PART 2: OPEN COMMUNICATION

How do you evaluate the fit between the video challenge and Beck's?

	Do not agree at all	Hardly agree	Partly agree	Mostly agree	Fully agree	Don't know
The video challenge fits...	-2	-1	0	+1	+2	
...to the typical Beck's customers as I picture them.	❑	❑	❑	❑	❑	❑
...to the product beer.	❑	❑	❑	❑	❑	❑
...to the Beck's brand overall.	❑	❑	❑	❑	❑	❑

Uploading, commenting, rating - how do you like such open brand communication compared to traditional top-down communication such as advertising? :
We are interested in your evaluation of open communication programmes such as video challenges, blogs and communities compared to TV and print advertising and other classic communication types which you cannot contribute to.

	Do not agree at all	Hardly agree	Partly agree	Mostly agree	Fully agree	Don't know
Open brand communication is...	-2	-1	0	+1	+2	
...more customer friendly.	❑	❑	❑	❑	❑	❑
...more creative.	❑	❑	❑	❑	❑	❑
...more innovative.	❑	❑	❑	❑	❑	❑
...more trustworthy.	❑	❑	❑	❑	❑	❑
...more socially responsible.	❑	❑	❑	❑	❑	❑
I do not like open brand communication.	❑	❑	❑	❑	❑	❑

To what extent does such open brand communication influence your purchase behaviour?

	Do not agree at all	Hardly agree	Partly agree	Mostly agree	Fully agree	Don't know
	-2	-1	0	+1	+2	
I would rather buy brands which allow consumers to participate in their communication programmes.	❑	❑	❑	❑	❑	❑

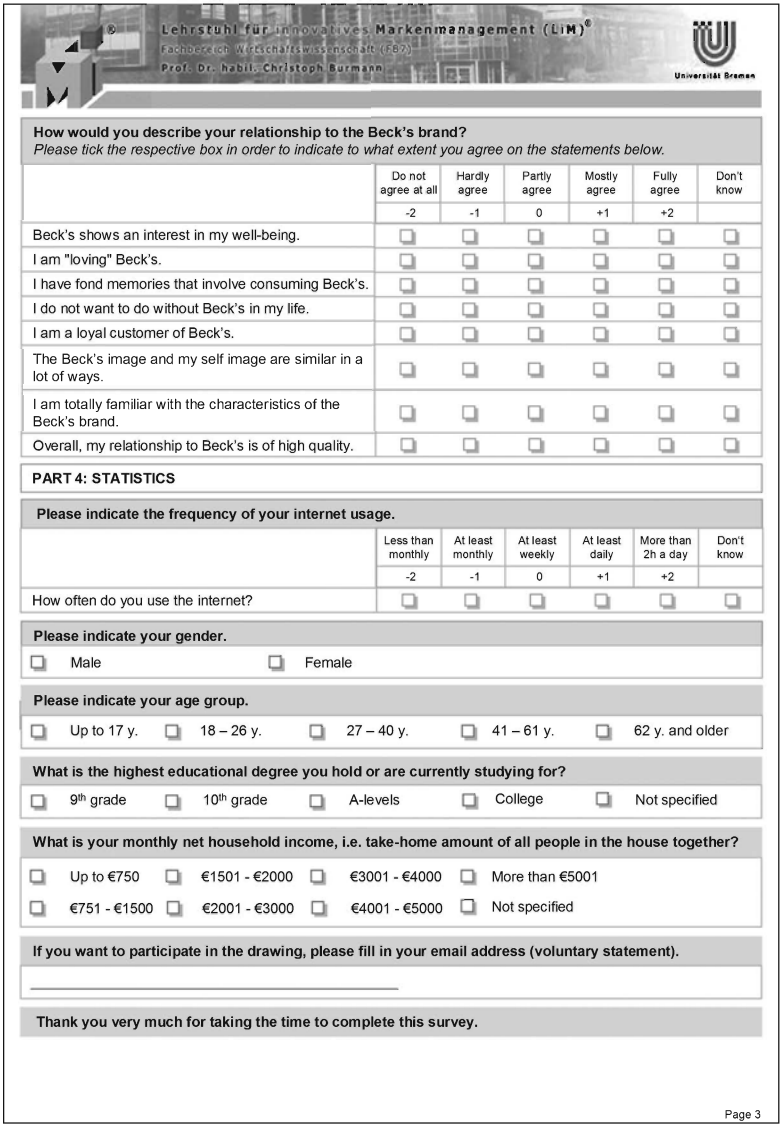
PART 3: RELATIONSHIP TO BECK'S

How familiar are you with the Beck's brand?

	Do not agree at all	Hardly agree	Partly agree	Mostly agree	Fully agree
	-2	-1	0	+1	+2
I am familiar with the Beck's brand.	❑	❑	❑	❑	❑

How often do you consume Beck's (e.g. Beck's Pils, Gold, Green Lemon, Ice, Chilled Orange)?

	Never	At least once a year	A few times a year	At least monthly	At least weekly
	-2	-1	0	+1	+2
How often do you buy and/or drink Beck's beer?	❑	❑	❑	❑	❑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Fachbereich Wirtschaftswissenschaft (FB7)
Prof. Dr. habil. Christoph Burmann
Universität Bremen

How would you describe your relationship to the Beck's brand?
Please tick the respective box in order to indicate to what extent you agree on the statements below.

	Do not agree at all	Hardly agree	Partly agree	Mostly agree	Fully agree	Don't know
	-2	-1	0	+1	+2	
Beck's shows an interest in my well-being.	☐	☐	☐	☐	☐	☐
I am "loving" Beck's.	☐	☐	☐	☐	☐	☐
I have fond memories that involve consuming Beck's.	☐	☐	☐	☐	☐	☐
I do not want to do without Beck's in my life.	☐	☐	☐	☐	☐	☐
I am a loyal customer of Beck's.	☐	☐	☐	☐	☐	☐
The Beck's image and my self image are similar in a lot of ways.	☐	☐	☐	☐	☐	☐
I am totally familiar with the characteristics of the Beck's brand.	☐	☐	☐	☐	☐	☐
Overall, my relationship to Beck's is of high quality.	☐	☐	☐	☐	☐	☐

PART 4: STATISTICS

Please indicate the frequency of your internet usage.

	Less than monthly	At least monthly	At least weekly	At least daily	More than 2h a day	Don't know
	-2	-1	0	+1	+2	
How often do you use the internet?	☐	☐	☐	☐	☐	☐

Please indicate your gender.

☐ Male ☐ Female

Please indicate your age group.

☐ Up to 17 y. ☐ 18 – 26 y. ☐ 27 – 40 y. ☐ 41 – 61 y. ☐ 62 y. and older

What is the highest educational degree you hold or are currently studying for?

☐ 9th grade ☐ 10th grade ☐ A-levels ☐ College ☐ Not specified

What is your monthly net household income, i.e. take-home amount of all people in the house together?

☐ Up to €750 ☐ €1501 - €2000 ☐ €3001 - €4000 ☐ More than €5001
☐ €751 - €1500 ☐ €2001 - €3000 ☐ €4001 - €5000 ☐ Not specified

If you want to participate in the drawing, please fill in your email address (voluntary statement).

_____

Thank you very much for taking the time to complete this survey.

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Appendix XXV **Paper and pencil questionnaire applied within Beck's pub survey**
Source: Own illustration.

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Fachbereich Wirtschaftswissenschaft (FB7)
Prof. Dr. habil. Christoph Burmann
Universität Bremen

Herzlich willkommen bei der Befragung zur interaktiven Markenkommunikation!

Die Studie wird vom Lehrstuhl für innovatives Markenmanagement (LiM) der Universität Bremen durchgeführt.

Die Beantwortung des anonymen Fragebogens wird je nach Filterführung 10-20 Minuten dauern. Als Dankeschön verlosen wir Merchandisingpakete unserer Kooperationspartner!

Universität Bremen | FRoSTA | THE BECK'S

Los geht's! Im Folgenden bitten wir Sie um Ihre Einschätzung zu neuen interaktiven Kommunikationsformen, d.h. Internetportale, Video-Wettbewerbe und Blogs anhand der Beispielmarken [redacted] Beck's und FRoSTA.

	Alle	[redacted] (Auto) + Portal	Beck's (Bier) + Video	FRoSTA (Gerichte) + Blog
Für welche Kommunikationskampagnen interessieren Sie sich?	○	○	○	○

VERTRAUTHEIT MIT FRoSTA

Bitte sagen Sie uns, wie gut Sie die Marke FRoSTA kennen.

	Trifft gar nicht zu	Trifft kaum zu	Trifft teils-teils zu	Trifft überwiegend zu	Trifft völlig zu
	-2	-1	0	+1	+2
Ich bin mit der Marke FRoSTA vertraut.	○	○	○	○	○

Bitte sagen Sie uns, ob und wie oft Sie FRoSTA-Produkte verwenden.

	Nie	Mindl. 1x pro Jahr	Alle paar Monate	Mind. 1x pro Monat	Mind. 1x pro Woche
	-2	-1	0	+1	+2
Wie häufig kaufen bzw. verzehren Sie FRoSTA-Gerichte?	○	○	○	○	○

FRoSTA-BLOG

Seit 2005 veröffentlicht FRoSTA als erste deutsche Lebensmittelmarke auf seiner Internetseite ein Webtagebuch, das von Mitarbeitern geschrieben wird und von Besuchern gelesen und öffentlich kommentiert werden kann.

Kennen Sie dieses Webtagebuch, das sogenannte FRoSTA-Blog (siehe Logo)?

- ○ Ja
- ○ Nein

Inwieweit sind Sie mit dem FRoSTA-Blog vertraut?

	Nie -2	Weniger als 1x pro Monat -1	Mind. 1x pro Monat 0	Mind. 1x pro Woche +1	Mind. 1x pro Tag +2
Ich lese Einträge im FRoSTA-Blog.	○	○	○	○	○
Ich schreibe selbst Einträge (inkl. Kommentare und Abstimmungen) im FRoSTA-Blog.	○	○	○	○	○

Wie gefällt Ihnen grundsätzlich das FRoSTA-Blog?

	Trifft gar nicht zu -2	Trifft kaum zu -1	Trifft teils-teils zu 0	Trifft über-wiege-nd zu +1	Trifft völlig zu +2	Weiß nicht
Das FRoSTA-Blog ist interessant.	○	○	○	○	○	○
Das Themenspektrum des FRoSTA-Blogs sagt mir zu.	○	○	○	○	○	○
Das FRoSTA-Blog ist einladend.	○	○	○	○	○	○
Ich kann mich mit dem FRoSTA-Blog identifizieren.	○	○	○	○	○	○
Das FRoSTA-Blog hat eine gute Reputation.	○	○	○	○	○	○
Das FRoSTA-Blog hält, was es verspricht.	○	○	○	○	○	○
Ich finde das FRoSTA-Blog schlecht gemacht/ verbesserungswürdig.	○	○	○	○	○	○
Ich mag das FRoSTA-Blog nicht.	○	○	○	○	○	○

Was sind die Gründe, warum Ihnen das FRoSTA-Blog gefällt bzw. missfällt?

Die folgende Abbildung zeigt Ausschnitte aus dem FRoSTA-Blogeintrag mit den bisher meisten Kommentaren (386). FRoSTA-Marketing-Vorstand Herr Ahlers kündigt darin die Reduzierung des Verpackungsinhalts von FRoSTA-Gerichten an - Kunden diskutieren diese Unternehmensentscheidung kritisch.

Bitte überfliegen Sie die folgenden Einträge und beantworten Sie dann die darunter stehende Frage.

FRoSTA Blog
100% frei von Farbstoff- und Aromazusätzen

Startseite | Blog-Info | Blog-Autoren | Blog-Charta | Kontakt | Datenschutz | Impressum | FRoS

Da wir nicht zu Verlusten produzieren wollen haben wir eigentlich nur 2 Möglichkeiten, die wir lange bei uns beraten haben:

Entweder das Gewicht zu reduzieren oder die Preise zu erhöhen. Da wir schlechte Erfahrungen mit Preisen über 2,99€ gemacht haben, haben wir uns für die Gewichtsreduktion entschieden.
In der Vergangenheit (vor der Zeit unseres Reinheitsgebotes), hätten wir wahrscheinlich auch noch die Möglichkeit geprüft, mit Zutaten und Zusatzstoffen zu spielen, um es doch wieder etwas günstiger hinzukriegen. Aber das wollen wir ja nun nicht mehr.

Kommentare von Besuchern

386 Kommentare zu "FRoSTA wird kleiner!"

1. Manfred Zischke [Besucher] am 06 Apr 2007 um 11:21

Da ja die Gewichte in den Verpackungen verringert werden, könnt Ihr ja gar nicht zurück, sobald die Gemüsepreise wieder rückläufig sind. Ausserdem macht Ihr doch immer frühzeitig die Kontrakte mit euren Vorlieferanten. Oftmals für ein ganzes Jahr im Voraus. Da muss ich mir wohl eine kleinere Pfanne kaufen, damit ich die 500 g nach der Aufbereitung noch wiederfinde. Früher waren mal 750 g in einem Beutel. Wie sollen 2 Personen von einem Beutel noch satt werden. Ihr habt jetzt eine wirkliche Singleverpackung gemacht.

2. Alexander Greisle [Besucher] am 06 Apr 2007 um 11:35

Hm. Einerseits verstehe ich die Argumentation ja. Andererseits, sorry, beweg' ihr euch damit in einen Bereich, an dem ich als Kunde ein bisserl im Regen stehe.

3. Jürgen Hestermann [Besucher] am 06 Apr 2007 um 11:38

Mir wäre es wesentlich lieber, die Packungsgrößen würden bleiben wie sie sind. Seitdem ich auf das Kantinenessen verzichte, ist so ein FRoSTA Beutel meine einzige warme Mahlzeit am Tag. Da ist der aktuelle Inhalt von 600/650g manchmal noch zu wenig.

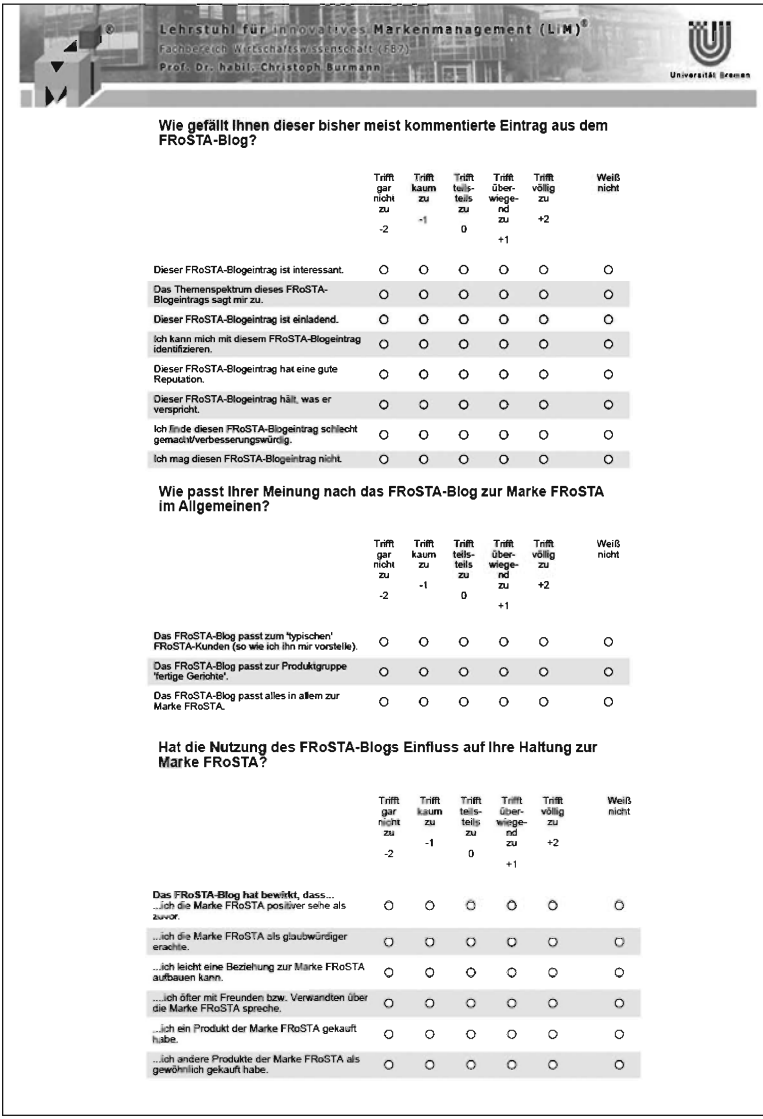
6. Mirco [Besucher]

mit der Packungsgröße von 500 gr kann ich prima leben. denn das schaffe ich gut alleine. bei den 600/650er packungen blieb immer ein kleiner rest übrig, den ich mir dann doch irgendwie reingezwängt habe... Meine figur unterstützt euer vorhaben bestimmt. ich werde berichten.
Schade wäre bloß, wenn man wieder nirgendwo einkaufen kann.

7. Felix Ahlers (Verstand Marketing und Vertrieb) [FRoSTA] am 06 Apr 2007 um 21:10

@ alle: sollten die Preise sinken werden wir natuerlich reagieren. Allerdings erwarten wir im Moment, dass besonders die Gemuespreise hoch bleiben. Durch die Biokraftstoffe und den hohen Oelpreis haben Bauern heute ganz neue Alternativen die oft mehr Geld bringen.

Zur richtigen Packungsgroesse: klar, 500g reicht fuer 2 nicht aus, aber viele Kunden sagten uns auch, dass 600g fuer eine Person zu viel ist. Unser Wok Gerichte haben ja bereits jetzt 500g und sind ganz erfolgreich. Dort wird sich der Preis erhoehen, die Groesse bleibt gleich.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Wie gefällt Ihnen dieser bisher meist kommentierte Eintrag aus dem FRoSTA-Blog?
Trifft gar nicht zu -2
Trifft kaum zu -1
Trifft teils-teils zu 0
Trifft über-wiege-nd zu +1
Trifft völlig zu +2
Weiß nicht
Dieser FRoSTA-Blogeintrag ist interessant.
Das Themenspektrum dieses FRoSTA-Blogeintrags sagt mir zu.
Dieser FRoSTA-Blogeintrag ist einladend.
Ich kann mich mit diesem FRoSTA-Blogeintrag identifizieren.
Dieser FRoSTA-Blogeintrag hat eine gute Reputation.
Dieser FRoSTA-Blogeintrag hält, was er verspricht.
Ich finde diesen FRoSTA-Blogeintrag schlecht gemacht/verbesserungswürdig.
Ich mag diesen FRoSTA-Blogeintrag nicht.
Wie passt Ihrer Meinung nach das FRoSTA-Blog zur Marke FRoSTA im Allgemeinen?
Trifft gar nicht zu -2
Trifft kaum zu -1
Trifft teils-teils zu 0
Trifft über-wiege-nd zu +1
Trifft völlig zu +2
Weiß nicht
Das FRoSTA-Blog passt zum 'typischen' FRoSTA-Kunden (so wie ich ihn mir vorstelle).
Das FRoSTA-Blog passt zur Produktgruppe 'fertige Gerichte'.
Das FRoSTA-Blog passt alles in allem zur Marke FRoSTA.
Hat die Nutzung des FRoSTA-Blogs Einfluss auf Ihre Haltung zur Marke FRoSTA?
Trifft gar nicht zu -2
Trifft kaum zu -1
Trifft teils-teils zu 0
Trifft über-wiege-nd zu +1
Trifft völlig zu +2
Weiß nicht
Das FRoSTA-Blog hat bewirkt, dass...
...ich die Marke FRoSTA positiver sehe als zuvor.
...ich die Marke FRoSTA als glaubwürdiger erachte.
...ich leicht eine Beziehung zur Marke FRoSTA aufbauen kann.
....ich öfter mit Freunden bzw. Verwandten über die Marke FRoSTA spreche.
...ich ein Produkt der Marke FRoSTA gekauft habe.
...ich andere Produkte der Marke FRoSTA als gewöhnlich gekauft habe.

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FRoSTA TV-Spot
Die folgende Abbildung zeigt einen Ausschnitt aus dem aktuellen FRoSTA-Werbespot. Die TV-Werbung mit „Peter von FRoSTA" zu den Gerichten der Brigitte-Diät ist zurzeit im Fernsehen zu sehen.

Kennen Sie den FRoSTA-TV-Spot?

- ○ Ja
- ○ Nein

Wie gefällt Ihnen dieser FRoSTA-TV-Spot?

	Trifft gar nicht zu -2	Trifft kaum zu -1	Trifft teils-teils zu 0	Trifft über-wiegend zu +1	Trifft völlig zu +2	Weiß nicht
Der FRoSTA-TV-Spot ist interessant.	○	○	○	○	○	○
Das Thema des FRoSTA-TV-Spots sagt mir zu.	○	○	○	○	○	○
Der FRoSTA-TV-Spot ist einladend.	○	○	○	○	○	○
Ich kann mich mit dem FRoSTA-TV-Spot identifizieren.	○	○	○	○	○	○
Ich finde den FRoSTA-TV-Spot schlecht gemacht/verbesserungswürdig.	○	○	○	○	○	○
Ich mag den FRoSTA-TV-Spot nicht.	○	○	○	○	○	○

Hat der FRoSTA TV-Spot Einfluss auf Ihre Haltung zur Marke FRoSTA?

	Trifft gar nicht zu -2	Trifft kaum zu -1	Trifft teils-teils zu 0	Trifft über-wiegend zu +1	Trifft völlig zu +2	Weiß nicht
Der FRoSTA-TV-Spot hat bewirkt, dass... ...ich die Marke FRoSTA positiver sehe als zuvor.	○	○	○	○	○	○
...ich die Marke FRoSTA als glaubwürdiger erachte.	○	○	○	○	○	○
...ich leicht eine Beziehung zur Marke FRoSTA aufbauen kann.	○	○	○	○	○	○
...ich öfter mit Freunden bzw. Verwandten über die Marke FRoSTA spreche als zuvor.	○	○	○	○	○	○
...ich ein Produkt von FRoSTA gekauft habe.	○	○	○	○	○	○
...ich andere Produkte von FRoSTA als gewöhnlich gekauft habe.	○	○	○	○	○	○

BEZIEHUNG ZU FROSTA

Wie würden Sie insgesamt Ihre Beziehung zur Marke FRoSTA beschreiben?

	Trifft gar nicht zu -2	Trifft kaum zu -1	Trifft teils-teils zu 0	Trifft über-wiegend zu +1	Trifft völlig zu +2	Weiß nicht
FRoSTA ist an meinem Wohlbefinden interessiert.	○	○	○	○	○	○
Ich „liebe" FRoSTA.	○	○	○	○	○	○
Mit FRoSTA verbinde ich viele schöne Erinnerungen.	○	○	○	○	○	○
Ich möchte FRoSTA in meinem Leben nicht missen.	○	○	○	○	○	○
Ich bin ein treuer Kunde von FRoSTA.	○	○	○	○	○	○
Es besteht eine enge Verbindung zwischen FRoSTA und dem Bild, was ich von mir selbst habe.	○	○	○	○	○	○
Die Eigenschaften von FRoSTA sind mir voll und ganz bekannt.	○	○	○	○	○	○
Alles in allem hat meine Beziehung zur Marke FRoSTA eine hohe Qualität.	○	○	○	○	○	○

OFFENE MARKENKOMMUNIKATION

Eigene Beiträge machen, kommentieren und abstimmen, die Marke mitgestalten - wie finden Sie diese Art der offenen Markenkommunikation?

	Trifft gar nicht zu -2	Trifft kaum zu -1	Trifft teils-teils zu 0	Trifft über-wiegend zu +1	Trifft völlig zu +2	Weiß nicht
Offene Markenkommunikation ist... ...kundenfreundlicher.	○	○	○	○	○	○
...kreativer.	○	○	○	○	○	○
...innovativer.	○	○	○	○	○	○
...vertrauenswürdiger.	○	○	○	○	○	○
...sozial verantwortlicher.	○	○	○	○	○	○
Ich glaube den Aussagen, die in offener Markenkommunikation gemacht werden, mehr als der Werbung.	○	○	○	○	○	○
Ich mag offene Markenkommunikation nicht.	○	○	○	○	○	○

Inwieweit hat solch offene Markenkommunikation Einfluss auf Ihr Kaufverhalten?

	Trifft gar nicht zu -2	Trifft kaum zu -1	Trifft teils-teils zu 0	Trifft über-wiegend zu +1	Trifft völlig zu +2	Weiß nicht
Ich würde eher Marken kaufen, die Verbraucher markenbezogene Inhalte mitgestalten lassen.	○	○	○	○	○	○

GEWOHNHEITEN UND INTERESSEN

Um Ihre Antworten zur Markenkommunikation einordnen zu können, möchten wir gern mehr über Ihre Internetgewohnheiten erfahren.

	Weniger als 1x pro Monat -2	Mind. 1x pro Monat -1	Mind. 1x pro Woche 0	Mind. 1x pro Tag +1	Mehr als 2h pro Tag +2	Weiß nicht
Wie oft benutzen Sie das Internet?	○	○	○	○	○	○

Wie oft benutzen Sie die folgenden Internetanwendungen?

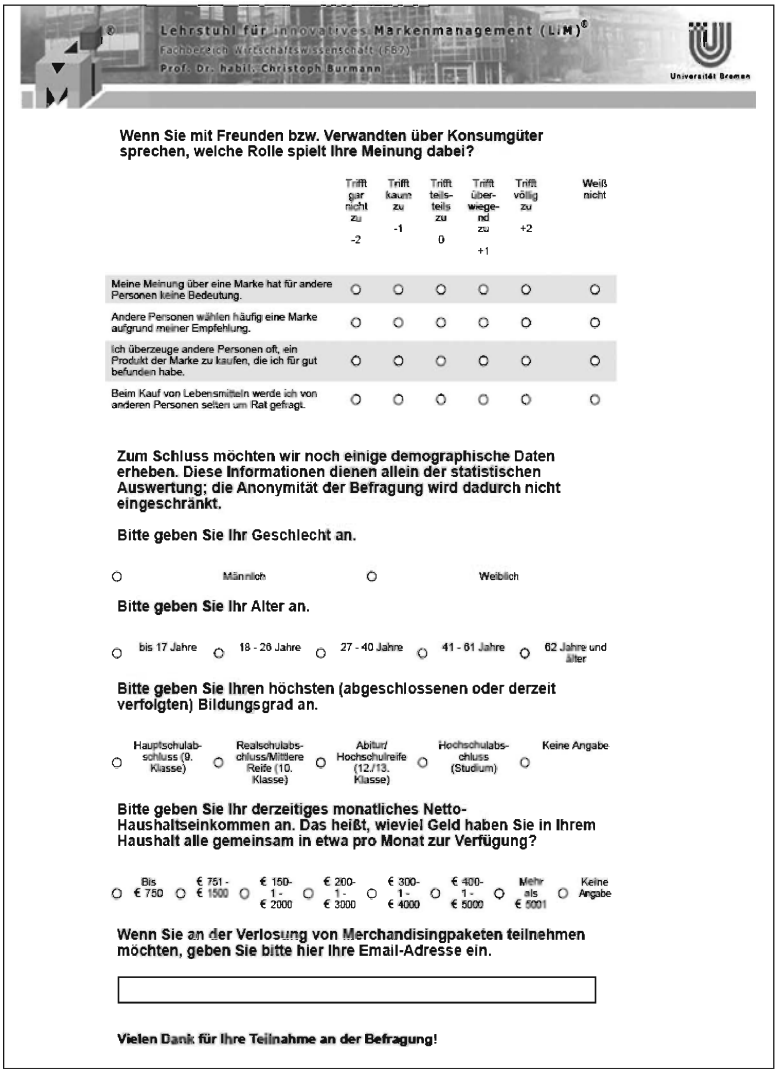
	Nie -2	Alle paar Monate -1	Mind. 1x pro Monat 0	Mind. 1x pro Woche +1	Mind. 1x pro Tag +2	Weiß nicht
Email	○	○	○	○	○	○
Internet-Suchmaschine (z.B. Google)	○	○	○	○	○	○
Online-Enzyklopädie (z.B. Wikipedia)	○	○	○	○	○	○
Online-Shops (z.B. Amazon)	○	○	○	○	○	○
Shopping-Communities/ Produktbewertungsseiten (z.B. Ciao, Dooyoo)	○	○	○	○	○	○
Soziale Netzwerke & Communities (z.B. Facebook, XING)	○	○	○	○	○	○
Video-Portale (z.B. YouTube)	○	○	○	○	○	○
Foto-Portale (z.B. Flickr)	○	○	○	○	○	○
Blogs	○	○	○	○	○	○
Virtuelle Welten (z.B. SecondLife)	○	○	○	○	○	○

Wie schätzen Sie Ihre grundsätzliche Haltung zu Produktinnovationen* im Bereich Konsumgüter ein?

	Trifft gar nicht zu -2	Trifft kaum zu -1	Trifft teils-teils zu 0	Trifft über-wiegend zu +1	Trifft völlig zu +2	Weiß nicht
Im Allgemeinen bin ich in meinem Bekanntenkreis unter den Ersten, die ein neues Produkt kaufen.	○	○	○	○	○	○
Wenn ich erfahre, dass ein neues Produkt im Handel erhältlich ist, möchte ich es ausprobieren.	○	○	○	○	○	○
Im Vergleich zu meinen Freunden bzw. Verwandten verwende ich nur wenige unterschiedliche Produktmarken.	○	○	○	○	○	○
Im Allgemeinen bin ich der Letzte in meinem Bekanntenkreis, der über neue Marken und Produktentwicklungen Bescheid weiß.	○	○	○	○	○	○
Ich will ein neues Produkt haben, bevor es alle anderen Leute kaufen.	○	○	○	○	○	○

Wie stark interessieren Sie sich für die Produktgruppe?

	Trifft gar nicht zu -2	Trifft kaum zu -1	Trifft teils-teils zu 0	Trifft über-wiegend zu +1	Trifft völlig zu +2	Weiß nicht
Fertige Gerichte... ...sind für mich wichtig.	○	○	○	○	○	○
...bedeuten mir viel.	○	○	○	○	○	○
...finde ich interessant.	○	○	○	○	○	○



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Wenn Sie mit Freunden bzw. Verwandten über Konsumgüter sprechen, welche Rolle spielt Ihre Meinung dabei?

	Trifft gar nicht zu -2	Trifft kaum zu -1	Trifft teils-teils zu 0	Trifft überwiegend zu +1	Trifft völlig zu +2	Weiß nicht
Meine Meinung über eine Marke hat für andere Personen keine Bedeutung.	○	○	○	○	○	○
Andere Personen wählen häufig eine Marke aufgrund meiner Empfehlung.	○	○	○	○	○	○
Ich überzeuge andere Personen oft, ein Produkt der Marke zu kaufen, die ich für gut befunden habe.	○	○	○	○	○	○
Beim Kauf von Lebensmitteln werde ich von anderen Personen selten um Rat gefragt.	○	○	○	○	○	○

Zum Schluss möchten wir noch einige demographische Daten erheben. Diese Informationen dienen allein der statistischen Auswertung; die Anonymität der Befragung wird dadurch nicht eingeschränkt.

Bitte geben Sie Ihr Geschlecht an.

○ Männlich ○ Weiblich

Bitte geben Sie Ihr Alter an.

○ bis 17 Jahre ○ 18 - 26 Jahre ○ 27 - 40 Jahre ○ 41 - 61 Jahre ○ 62 Jahre und älter

Bitte geben Sie Ihren höchsten (abgeschlossenen oder derzeit verfolgten) Bildungsgrad an.

○ Hauptschulabschluss (9. Klasse) ○ Realschulabschluss/Mittlere Reife (10. Klasse) ○ Abitur/ Hochschulreife (12./13. Klasse) ○ Hochschulabschluss (Studium) ○ Keine Angabe

Bitte geben Sie Ihr derzeitiges monatliches Netto-Haushaltseinkommen an. Das heißt, wieviel Geld haben Sie in Ihrem Haushalt alle gemeinsam in etwa pro Monat zur Verfügung?

○ Bis € 750 ○ € 751 - € 1500 ○ € 150-1 - € 2000 ○ € 200-1 - € 3000 ○ € 300-1 - € 4000 ○ € 400-1 - € 5000 ○ Mehr als € 5001 ○ Keine Angabe

Wenn Sie an der Verlosung von Merchandisingpaketen teilnehmen möchten, geben Sie bitte hier Ihre Email-Adresse ein.

Vielen Dank für Ihre Teilnahme an der Befragung!

Note: This extract reflects the FRoSTA related part (filter: FRoSTA + UGB aware customers) of the questionnaire.

Appendix XXVI **Electronic questionnaire as applied within online panel survey (extract)**
Source: Own illustration (screenshots).

Normality tests for explored latent variables

As prerequisite for statistical tests, the explored latent variables are checked for normal distribution by means of histograms and the Kolmogorov-Smirnov test (K-S).[1] To exemplify the reliability and representativeness of these analyses, the UGB attitude variable is additionally tested for skewness and kurtosis as indications for a distribution's symmetry and "peakedness" respectively.[2] In this case, results of both total sample and sub samples are provided.

UGB attitude		Total		FRoSTA		Car brand		Beck's	
Kolmogorov-Smirnov test p > 0.05 (normality)	**Item**	**Δ K-S**	**Sign.**	**Δ K-S**	**Sign.**	**Δ K-S**	**Sign.**	**Δ K-S**	**Sign.**
	UGB_1	0.239	0.000	0.245	0.000	0.252	0.000	0.224	0.000
	UGB_2	0.219	0.000	0.239	0.000	0.235	0.000	0.190	0.000
	UGB_3	0.212	0.000	0.219	0.000	0.220	0.000	0.200	0.000
	UGB_4	0.167	0.000	0.170	0.000	0.182	0.000	0.182	0.000
	UGB_5	0.200	0.000	0.198	0.000	0.213	0.000	0.214	0.000
	UGB_6	0.202	0.000	0.217	0.000	0.209	0.000	0.221	0.000
	UGB_7r	0.216	0.000	0.226	0.000	0.232	0.000	0.198	0.000
	UGB_8r	0.198	0.000	0.222	0.000	0.205	0.000	0.197	0.000
	Factor	0.072	0.000	0.083	0.000	0.760	0.000	0.660	0.000

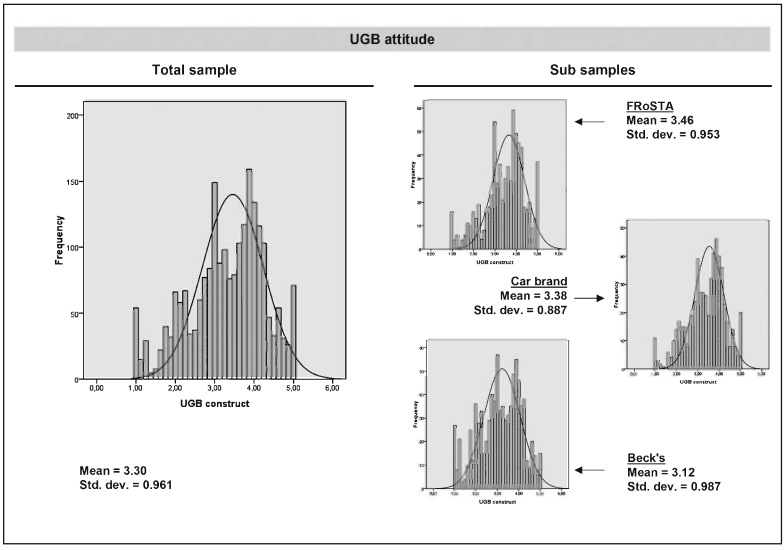
To be continued

[1] The null hypothesis of similarity to normal distribution is to be rejected, if the K-S significance level is sufficiently small ($p < 0.05$). Within this study the Kolmogorov-Smirnov test is conducted with Lilliefors significance correction. For details regarding the Kolmogorov-Smirnov test see amongst others PALLANT (2007), p. 62; BÜHL/ZÖFEL (2005), pp. 312 et seq.

[2] If a distribution is perfectly normal, skewness and kurtosis values equal 0. For details regarding the interpretation of skewness and curtosis see amongst others PALLANT (2007), p. 56; BÜHL/ZÖFEL (2005), p. 121.

UGB attitude		Total		FRoSTA		Car brand		Beck's	
Skewness & Kurtosis = 0 (normality)	**Item**	**Skew.**	**Kurt.**	**Skew.**	**Kurt.**	**Skew.**	**Kurt.**	**Skew.**	**Kurt.**
	UGB_1	-0.512	-0.480	-0.644	-0.182	-0.605	-0.109	-0.399	-0.810
	UGB_2	-0.361	-0.759	-0.534	-0.335	-0.477	-0.474	-0.112	-1.055
	UGB_3	-0.396	-0.537	-0.464	-0.424	-0.400	-0.479	-0.333	-0.648
	UGB_4	0.165	-0.837	0.000	-0.882	0.118	-0.679	0.347	-0.724
	UGB_5	-0.337	-0.279	-0.398	-0.221	-0.391	0.015	-0.214	-0.415
	UGB_6	-0.378	-0.158	-0.490	-0.017	-0.365	0.075	-0.257	-0.295
	UGB_7r	-0.568	-0.609	-0.828	-0.166	-0.524	-0.513	-0.428	-0.830
	UGB_8r	-0.615	-0.585	-0.747	-0.340	-0.699	-0.502	-0.474	-0.730
	Factor	-0.445	-0.353	-0.591	-0.079	-0.488	-0.045	-0.295	-0.622

Appendix XXVII **Kolmogorov-Smirnov test, skewness and kurtosis for UGB attitude variable**
Source: Own illustration.



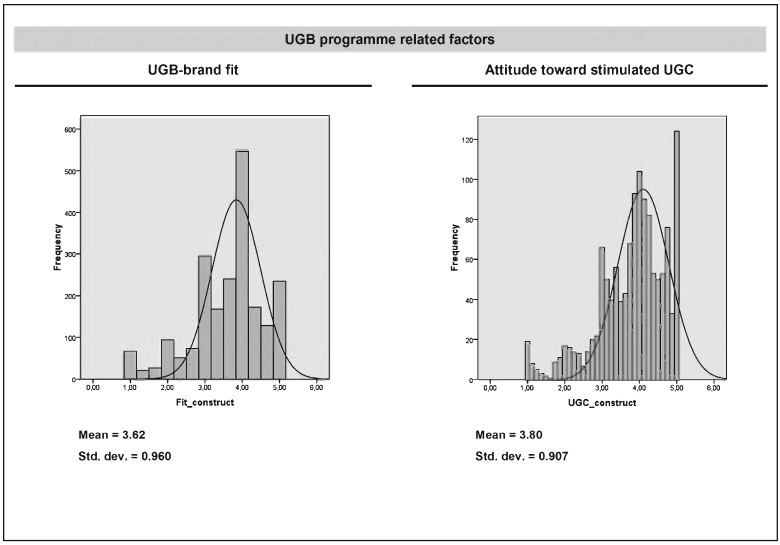
Appendix XXVIII **Histograms of UGB attitude variable**
Source: Own illustration.

Kolmogorov-Smirnov test		Most extreme differences (absolute)	Asymp. Sig. (2-tailed)
UGB-brand fit	Fit_1	0.238	0.000
	Fit_2	0.250	0.000
	Fit_3	0.257	0.000
	Factor	0.153	0.000
UGC attitude	UGC_1	0.243	0.000
	UGC_2	0.249	0.000
	UGC_3	0.235	0.000
	UGC_4	0.169	0.000
	UGC_5	0.239	0.000
	UGC_6	0.251	0.000
	UGC_7r	0.242	0.000
	UGC_8r	0.306	0.000
	Factor	0.100	0.000
Consumer-brand relation-ship	CBR_1	0.164	0.000
	CBR_2	0.162	0.000
	CBR_3	0.156	0.000
	CBR_4	0.171	0.000
	CBR_5	0.222	0.000
	CBR_6	0.230	0.000
	CBR_7	0.192	0.000
	CBR_8	0.169	0.000
	Factor	0.057	0.000
Involvement	Inv_1	0.185	0.000
	Inv_2	0.150	0.000
	Inv_3	0.198	0.000
	Factor	0.092	0.000
Innovativeness	Inno_1	0.166	0.000
	Inno_2	0.172	0.000
	Inno_5	0.190	0.000
	Factor	0.070	0.000
Opinion leadership	OL_1r	0.213	0.000
	OL_2	0.236	0.000
	OL_3	0.203	0.000
	OL_4r	0.193	0.000
	Factor	0.093	0.000

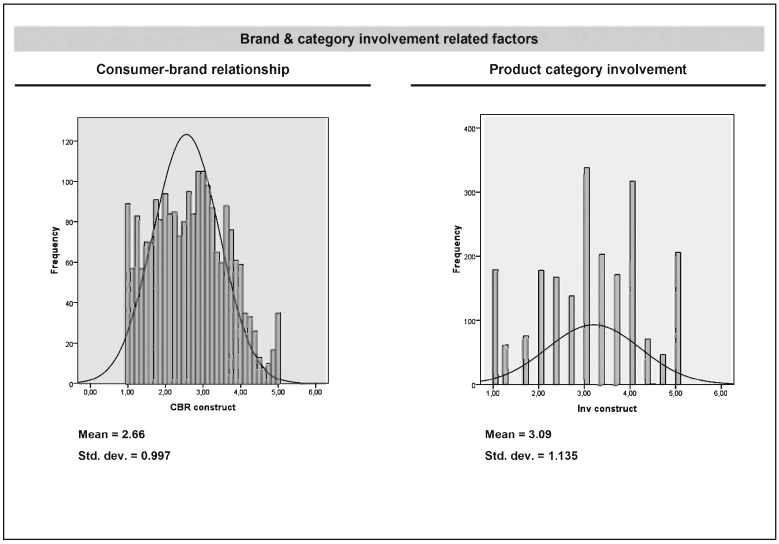
To be continued

Kolmogorov-Smirnov test		Most extreme differences (absolute)	Asymp. Sig. (2-tailed)
Web2.0 experience	Web_2	0.199	0.000
	Web_3	0.217	0.000
	Web_4	0.289	0.000
	Web_5	0.220	0.000
	Factor	0.048	0.000

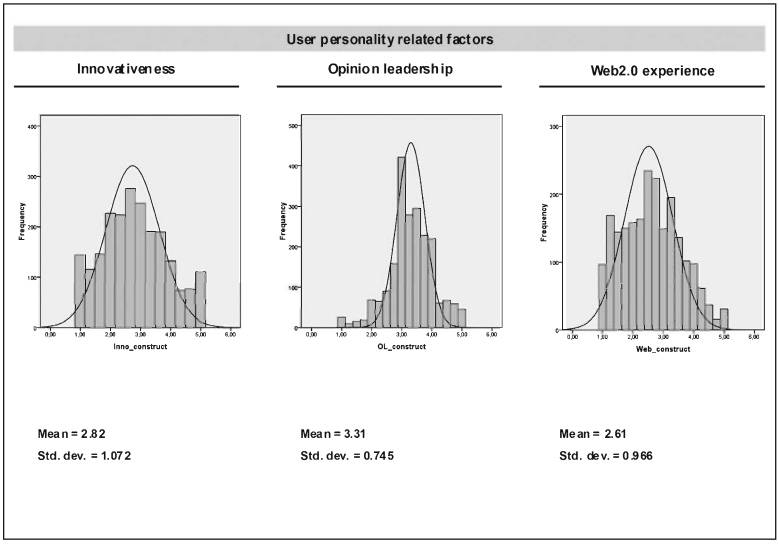
Appendix XXIX **Kolmogorov-Smirnov test for further explored latent variables**
Source: Own illustration.



Appendix XXX **Histograms of UGB programme related factors**
Source: Own illustration.



Appendix XXXI **Histograms of brand and category involvement related factors**
Source: Own illustration.



Appendix XXXII **Histograms of user personality related factors**
Source: Own illustration.

Original measurement scales referred to in this study

In addition to chapter E 3, original measurement scales referred to within this study are displayed in the following. Items directly used for study-inherent latent variables are in **bold text**.

Item	Attitude toward the ad measure by LEE/MASON	Confirmed by WENSKE (in German)
1r	**I dislike the ad.**	✓ Ich mochte diese Werbung überhaupt nicht.
2	**The ad is appealing to me.**	✓ Diese Werbung war ansprechend.
3	**The ad is attractive to me.**	✓ Diese Werbung war verlockend.
4	**The ad is interesting to me.**	✓ Diese Werbung war interessant.
5r	**I think the ad is bad.**	✓ Ich fand diese Werbung schlecht.

Appendix XXXIII **Attitude toward the ad measure by LEE/MASON and WENSKE**
Source: Adapted from LEE/MASON (1999), p. 160; WENSKE (2008a), p. 221.

Item	Attitude toward the brand community measure by STICHNOTH (in German)
Brand community liking ("Brand Community-Gefallen")	
1	Ich sehe mich als typisches und repräsentatives Mitglied der Community.
2	Es war eine gute Entscheidung der Community beizutreten.
3	Die Community entspricht meinen Erwartungen voll und ganz.
4	Die Inhalte der Community treffen genau meine Interessen.
5	**Diese Community is interessant.**
6	**Ich kann mich mit der Community identifizieren.**
7	**Diese Community is verlockend.**
8	**Das Angebot der Community gefällt mir sehr gut.**
9	**Die Community hat eine gute Reputation.**
10	**Die Community hält, was sie verspricht.**
Brand community evaluation ("Brand Community-Bewertung")	
11r	**Ich finde diese Community schlecht/verbesserungswürdig.**
12r	**Ich mag diese Community überhaupt nicht.**

Appendix XXXIV **Attitude toward the brand community measure by STICHNOTH**
Source: Adapted from STICHNOTH (2008), p. 84.

Item	E-commerce measure by LYNCH/KENT/SRINIVASAN
Trust	
1	**This site has a good reputation.**
2	This website is trustworthy.
3	**This website will keep its promises and commitments.**
Affect	
4	How happy did you feel on the site?
5	How excited did you feel on the site?
6	How enthusiastic did you feel on the site?
Site quality	
7	Was this site easy to use?
8	How would you rate the quality of this site's search engine?
9	Did the site have helpful pictures and graphics?
10	How complete was the information at this website?

Appendix XXXV **E-commerce measure by LYNCH/KENT/SRINIVASAN**
Source: Adapted from LYNCH/KENT/SRINIVASAN (2001), p. 19.

Item	Customer-brand relationship by WENSKE ("Marke-Kunde-Beziehung", in German)	Allocated dimension from FOURNIER scale (revised BRQ)
1	**Die Marke ist an meinem Wohlbefinden interessiert.**	Partner quality
2	**Ich "liebe" die Marke.**	Love
3	**Mit der Marke verbinde ich viele schöne Erinnerungen.**	Nostalgic connection
4	**Ich möchte die Marke in meinem Leben nicht missen.**	Passionate attachment
5	**Ich bin ein treuer Kunde der Marke.**	Personal commitment
6	**Es besteht eine enge Verbindung zwischen der Marke und dem Bild, was ich von mir selbst habe.**	Self-concept connection
7	**Die Eigenschaften der Marke sind mir voll und ganz bekannt.**	Intimacy
8	**Alles in allem hat meine Beziehung zu der Marke eine hohe Qualität.**	-

Appendix XXXVI **Customer-brand relationship measure by WENSKE based on FOURNIER**
Source: Adapted from WENSKE (2008a), p. 211 based on FOURNIER (1994), pp. 128 et seqq.; 167.

Item	Brand relationship quality by THORBJØRNSEN et al.	Allocated dimension from FOURNIER scale (original BRQ)
1	I have a powerful attraction toward (the brand).	Love/passion
2	I feel my relationship with (the brand) is exclusive and special.	Love/passion
3	**I have feelings for (the brand) that I don't have for many other brands.**	Love/passion
4	I feel that (the brand) and I were really 'meant for each other'.	Love/passion
5	(The brand) says a lot about the kind of person I am.	Self-connection
6	(The brand's) image is consistent with how I'd like to see myself.	Self-connection
7	(The brand) helps me make a statement about what is important to me in life.	Self-connection
8	I feel related to the type of people who are (the brand's) customers.	Self-connection
9	I feel like (the brand) actually cares about me.	Intimacy
10	(The brand) really listens to what I have to say.	Intimacy
11	I feel as though I really understand (the brand).	Intimacy
12	I feel as though (the brand) really understands me.	Intimacy
13	(The brand) treats me like an important and valuable customer.	Partner quality
14	(The brand) is dependable and reliable.	Partner quality
15	(The brand) has always been good to me.	Partner quality
16	If (the brand) makes a claim or promise about its products, it's probably true.	Partner quality

Appendix XXXVII Brand relationship quality measure by THORBJØRNSEN et al.
Source: Adapted from THORBJØRNSEN et al. (2002), p. 28 based on FOURNIER (1994), pp. 198 et seq.

Item	Brand community effects measure by STICHNOTH (in German)
1	**Seit ich Mitglied in der Community bin, spreche ich öfter mit Freunden bzw. Verwandten über die Marke als zuvor.**
2	**Diese Community hat mich dazu bewegt, ein Produkt der Marke zu kaufen.**
3	**Die Community hat mich dazu bewegt, ein anderes/andere Produkt(e) der Marke zu kaufen.**
4	**Seit ich Mitglied in der Community bin, sehe ich die Marke positiver als zuvor.**
5	**Diese Community macht die Marke glaubwürdig.**
6	**Die Community macht es mir leicht, eine Beziehung zu der Marke aufzubauen.**
7	Ich glaube den Aussagen, die in der Community gemacht werden mehr als der Werbung.

Appendix XXXVIII Brand community effects measure by STICHNOTH
Source: Adapted from STICHNOTH (2008), p. 88.

Item	Attitude toward the site measure by CHEN/WELLS
1	**This web site makes it easy for me to build a relationship with this company.**
2	I would like to visit this web site again in the future.
3	I'm satisfied with the service provided by this web site.
4	I feel comfortable in serving this web site.
5	I feel surfing this web site is a good way for me to spend my time.
6	Compared with other web sites I would rate this one as one of the worst/one of the best.

Appendix XXXIX **Attitude toward the site measure by CHEN/WELLS**
Source: Adapted from CHEN/WELLS (1999), p. 28.

Item	Behavioural effects measure by FOURNIER	Adapted by WENSKE (in German)
Future buying intention		
1	How likely are you to buy (the brand) the next time you buy (the product category)?	✓ Wenn ich mir heute (die Produktgruppe) kaufen würde, würde ich wieder (die Marke) kaufen.
2	How likely is it that you will be using (the brand) one year from now?	
3	How likely is it that you will be using (the brand) five years from now?	
4	If a brand other than (the brand) offered a $0.50 price promotion on (the package size), how likely would you be to take advantage of the offer?	
Brand "stickiness"		
1	I would be willing to testify about the high quality of (the brand) in a television commercial.	
2	I would be willing to try an unfamiliar (product) that came out under the (brand) name.	
3	If a competitor came out with a new and improved version of their (product), I would wait until (the brand) had a chance to match this offering with their own new and improved (product).	✓ Wenn es (die Produkte der Marke) auch von anderen (Marken) geben würde, würde ich diese auch kaufen. (r)
4	I would be willing to pay a higher price for (the brand) than what is charged now.	✓ Wenn (die Produke der Marke) deutlich teurer würden, würde ich trotzdem noch genau so viele (Produkte der Marke) kaufen.
5	I would recommend (the brand) to my friends.	✓ Ich würde die Marke weiterempfehlen.

Appendix XL **Behavioural effects measure by FOURNIER and WENSKE**
Source: Adapted from FOURNIER (1994), pp. 318 et seq.; WENSKE (2008a), p. 216.

Item	Event-brand fit measure by DRENGNER (in German)
1	**Findest Du, dass (das Event) zur (Marke) passt (gepasst hat)?**

Appendix XLI **Event-brand fit measure by DRENGNER**
Source: Adapted from DRENGNER (2003), p. 170.

Dim.	Event-brand fit measure by NITSCHKE (in German)
1	**Wie gut passen die nachfolgenden Produkte bzw. Dienstleistungen ihrer Verwendung nach zum (Event)?**
2	**Wenn Sie an die typischen Kunden der nachfolgenden Unternehmen denken, wie gut passen diese Ihrer Meinung nach zum (Event)?**

Appendix XLII **Event-brand fit measure by NITSCHKE**
Source: Adapted from NITSCHKE (2006), pp. 354 et seqq.

Items	Web2.0 applications measure by FISCH/GSCHEIDLE (in German)
1	**Videoportale (z.B. YouTube)**
2	**Wikipedia**
3	**Fotosammlungen, Communities**
4	Lesezeichensammlungen
5	Berufliche **Netzwerke u. Communities**
6	Private **Netzwerke u. Communities**
7	**Weblog**
8	**Virtuelle Spielewelten**

Appendix XLIII **Web2.0 applications measure by FISCH/GSCHEIDLE**
Source: Adapted from FISCH/GSCHEIDLE (2008), p. 358.

Item	Domain-specific innovativeness (DSI) measure by GOLDSMITH/HOFACKER*
1	**In general, I am among the first** (the last) **in my circle of friends to buy a new (product) when it appears.**
2	**If I heard that a new (product) was available in the store, I would** (not) **be interested enough to buy it.**
3	**Compared to my friends, I own a few of** (a lot of) **(products).**
4	**In general, I am** the first **(the last) in my circle of friends to know titles/brands of the latest (product).**
5	I will not buy a new (product) if I haven't heard/tried it yet.
6	**I** (do not) **like to buy (a product) before other people do.**

Appendix XLIV **Domain-specific innovativeness measure by GOLDSMITH/HOFACKER**
Source: Adapted from GOLDSMITH/HOFACKER (1991), p. 209.

Item	Original scale by ZAICHKOWSKY	Confirmed by FOURNIER	Confirmed by WENSKE and STICHNOTH (in German)
1r	**important – unimportant**	✓	✓ unwichtig – wichtig
2	of no concern – of concern to me	✓	
3	irrelevant – relevant		
4r	**means a lot to me – means nothing to me**	✓	✓ bedeutet mir viel viel – gar nichts
5	useless – useful	✓	
6r	valuable – worthless		
7	trivial – fundamental		
8r	beneficial – not beneficial		
9r	matters to me – Doesn't matter		
10	uninterested – interested		
11r	significant – insignificant		
12r	vital – superfluous		
13	**boring – interesting**	✓	✓ uninteressant – interessant
14	unexciting – exciting		
15r	appealing – unappealing	✓	
16	mundane – fascinating		
17r	essential – nonessential		
18	undesirable – desirable	✓	
19r	wanted – unwanted		
20	not needed – needed	✓	

Appendix XLV **Original scales to measure product category involvement**
Source: Adapted from ZAICHKOWSKY (1985), p. 350; FOURNIER (1994), pp. 205; 316; WENSKE (2008a), p. 224; STICHNOTH (2008), p. 80.

#	Original scale by FLYNN/GOLDSMITH/EASTMAN	Confirmed by WENSKE and STICHNOTH (in German)
1	**My opinion on (a product category) seems not to count with other people. (r)**	✓ Meine Meinung über (eine Produktkategorie/Marke) hat für andere Personen keine Bedeutung. (r)
2	When they choose a (product category), other people do not turn me for advice. (r)	
3	**Other people rarely come to me for advice about choosing (a product category). (r)**	✓ Beim Kauf von (einer Produktkategorie) werde ich von anderen Personen selten um Rat gefragt. (r)
4	**People that I know pick (a product category) based on what I have told them.**	✓ Andere Personen wählen häufig (eine Marke einer Produktkategorie) aufgrund meiner Empfehlung.
5	**I often persuade others to buy the (product category) that I like.**	✓ Ich überzeuge andere Personen oft, (eine Produktkategorie/ein Produkt der Marke) zu kaufen, die ich für gut befunden habe.
6	I often influence people's opinions about (a product category).	

Appendix XLVI **Original scales to measure opinion leadership**
Source: Adapted from FLYNN/GOLDSMITH/EASTMAN (1996), pp. 137 et seqq.; WENSKE (2008a), p. 226; STICHNOTH (2008), p. 78.

Item	Brand commitment measure by ZEPLIN (in German)	Theme
1	**Ich fühle mich in unserem Unternehmen als Teil einer Familie.**	Identifikation
2	**Die Erfolge unserer Marke erfüllen mich mit Stolz, schlechte Nachrichten über unsere Marke empfinde ich als persönliche Rückschläge.**	Identifikation
3	**Ich bin stolz, wenn ich anderen erzählen kann, dass ich für dieses Unternehmen arbeite.**	Identifikation
4	**Ich fühle mich meinem direkten Vorgesetzten gegenüber verpflichtet, mich besonders für unsere Marke anzustrengen.**	Identifikation
5	**Unsere Geschäftleitung bringt mich dazu, mich besonders für unsere Marke anzustrengen.**	Identifikation
6	**Für eine andere Marke würde ich nicht so gerne arbeiten wie für unsere, weil unsere Marke so gut zu mir passt.**	Internalisierung
7	**Ich fühle mich unserer Marke verbunden, weil sie für Werte steht, die mir persönlich wichtig sind.**	Internalisierung
8	**Die Werte, für die unsere Marke steht, sind für mich nicht nur schöne Worte, sondern beeinflussen mein tägliches Handeln.**	Internalisierung
9	Ich fühle mich mit unserer Marke verbunden, so dass ich bereit bin, mich besonders für die Marke einzusetzen.	Global

Appendix XLVII **Original scale to measure brand commitment**
Source: Adapted from ZEPLIN (2006), pp. 201 et seq.

Item	Brand citizenship behaviour measure by ZEPLIN (in German)	Theme
1	**Meine Kollegen haben eine positive Einstellung gegenüber Kunden und anderen Kollegen.**	Hilfsbereitschaft
2	Meine Kollegen sind immer freundlich zu Kunden und anderen Kollegen.	Hilfsbereitschaft
3	Meine Kollegen sind immer hilfsbereit gegenüber Kunden und anderen Kollegen.	Hilfsbereitschaft
4	**Meine Kollegen versuchen immer, sich in die Sichtweise und Probleme der Kunden und anderen Kollegen hineinzuversetzen.**	Hilfsbereitschaft
5	**Meine Kollegen würden auch Verantwortung für Aufgaben außerhalb des eigenen Verantwortungsbereichs übernehmen falls notwendig (z.B. in der Verfolgung von Beschwerden oder Reklamationen).**	Hilfsbereitschaft
6	**Meine Kollegen denken bei allem, was sie sagen oder tun, an die Auswirkungen auf unser Markenimage.**	Markenbewusstsein
7	**Meine Kollegen verhalten sich entsprechend der Markenidentität, auch wenn sie nicht beobachtet oder kontrolliert werden.**	Markenbewusstsein
8	**Meine Kollegen arbeiten besonders sorgfältig arbeiten und achten auf Qualität, wenn es unser Markenimage positiv beeinflusst.**	Markenenthusiasmus
9	**Meine Kollegen würden Mehrarbeit in Kauf nehmen, wenn dies unser Markenimage positiv beeinflussen würde (um z.B. einen Kundenauftrag termingerecht fertig stellen zu können).**	Markenenthusiasmus
10r	Meine Kollegen beschweren sich über den Aufwand, der getrieben wird, um ein positives Markenimage zu schaffen.	Leidenschaft
11r	Meine Kollegen klagen über Schwierigkeiten und lästige Pflichten bei ihrer Arbeit.	Leidenschaft
12	**Meine Kollegen würden ihren Freunden, Bekannten oder Verwandten unsere Marke im privaten Gespräch empfehlen.**	Markenmissionierung
13	**Meine Kollegen geben sich Mühe, unsere Markenidentität neuen Mitarbeitern zu vermitteln, z.B. im informellen Gepräch oder durch Übernahme einer Mentorenrolle.**	Markenmissionierung
14	**Um noch besser die Erwartungen, die an unsere Marke gestellt werden, erfüllen zu können… …fragen meine Kollegen Kunden und andere Kollegen aktiv nach Feedback.**	Selbstverwirklichung
15	**...bilden meine Kollegen sich durch Lesen von Handbüchern, Ratgebern oder Fachzeitschriften weiter.**	Selbstverwirklichung
16	**...nehmen meine Kollegen regelmäßig freiwillig an Schulungen oder Fortbildungen teil.**	Selbstverwirklichung
17	**...geben meine Kollegen Kundenfeedback oder interne Probleme/Schwierigkeiten immer umgehend an die verantwortlichen Stellen weiter..**	Markenentwicklung
18	**...entwickeln meine Kollegen unaufgefordert neue Ideen für Produkte, Dienstleistungen oder Prozessverbesserungen.**	Markenentwicklung
Global	Meine Kollegen setzen sich freiwillig durch ihre täglichen Entscheidungen und Verhaltensweisen für unsere Marken ein, auch über das hinaus, was minimal von ihnen verlangt wird, und auch ohne dass sie dafür besonders belohnt werden.	Global

Appendix XLVIII **Original scale to measure brand citizenship behaviour**
Source: Adapted from ZEPLIN (2006), pp. 193 et seq.

Comparison of bootstrap replications results

To confirm the stability of 200 bootstrap replications, the procedure is run for 500, 1,000 and 1,500 replications for one example (attitude toward the ad variable). A comparison of the results indicates that all values which were significant in case of 200 replications were also significant at the same level in the other runs.

Attitude toward the ad (Ad)		B = 200	B = 500	B = 1,000	B = 1,500
Outer loadings (t-value)					
FRoSTA	Ad_1	159.518***	163.562***	161.389***	172.403***
	Ad_2	87.859***	87.001***	91.605***	90.094***
	Ad_3	177.619***	189.594***	165.580***	172.998***
	Ad_4r	24.527***	21.707***	23.607***	23.074***
	Ad_5r	38.644***	37.365***	36.417***	36.890***
Car brand	Ad_1	92.655***	94.030***	94.764***	94.247***
	Ad_2	114.855***	124.459***	123.985***	126.964***
	Ad_3	94.511***	108.165***	105.141***	108.157***
	Ad_4r	22.857***	20.862***	22.308***	22.361***
	Ad_5r	26.666***	22.982***	25.062***	25.120***
Beck's	Ad_1	77.853***	96.333***	93.696***	91.812***
	Ad_2	84.333***	114.287***	108.424***	105.524***
	Ad_3	121.436***	147.812***	141.227***	143.240***
	Ad_4r	14.404***	18.545***	18.701***	19.200***
	Ad_5r	24.948***	29.071***	31.932***	31.238***
Path coefficients (t-value)					
FRoSTA	$Ad \rightarrow Att_{Ad}$	16.635***	17.524***	16.392***	16.937***
	$Ad \rightarrow Beh_{Ad}$	2.064*	1.998*	1.961*	1.981*
	Ad→CBR	19.969***	19.780***	20.352***	20.632***
	$Att_{Ad} \rightarrow Beh_{Ad}$	18.880***	20.955***	20.372***	19.689***
	$CBR \rightarrow Att_{Ad}$	9.720***	10.502***	10.083***	10.158***
	$CBR \rightarrow Beh_{Ad}$	5.593***	5.999***	5.927***	5.725***
Car brand	$Ad \rightarrow Att_{Ad}$	11.368***	11.017***	11.317***	11.726***
	$Ad \rightarrow Beh_{Ad}$	1.217	1.154	1.176	1.184
	Ad→CBR	13.594***	13.719***	13.439***	13.748***
	$Att_{Ad} \rightarrow Beh_{Ad}$	15.157***	15.925***	15.659***	15.649***
	$CBR \rightarrow Att_{Ad}$	12.750***	11.251***	11.363***	11.878***
	$CBR \rightarrow Beh_{Ad}$	8.411***	8.717***	8.399***	8.324***

To be continued

Attitude toward the ad (Ad)		B = 200	B = 500	B = 1,000	B = 1,500
Path coefficients (t-value)					
Beck's	$Ad \rightarrow Att_{Ad}$	14.189***	15.459***	15.178***	15.262***
	$Ad \rightarrow Beh_{Ad}$	0.595	0.672	0.694	0.683
	$Ad \rightarrow CBR$	11.244***	13.488***	13.406***	13.885***
	$Att_{Ad} \rightarrow Beh_{Ad}$	21.179***	23.442***	23.006***	23.274***
	$CBR \rightarrow Att_{Ad}$	14.601***	17.047***	16.566***	16.599***
	$CBR \rightarrow Beh_{Ad}$	4.819***	5.908***	5.888***	5.871***

Note: A t-value > 3.922 corresponds to a 0.1% significance level (***); a t-value > 1.960 refers to a 5% significance level. If this minimum level is not met, the results are not regarded statistically significant.

Appendix XLIX **Comparison of bootstrap replication results**
Source: Own illustration.

Validation of measurement models (add on)

In addition to chapter E 3, complementary quality evaluations for inherent measurement models are provided in the following. The focus is on sample specific evaluations representing the UGB applications of FRoSTA, the car brand and Beck's.

Consumer-brand relationship (actual customers, aCBR)		FRoSTA	Car brand	Beck's
Item level				
Factor loading $\Lambda > 0.7$ ($\Lambda > 0.4$)	aCBR_1	0.735	0.726	0.771
	aCBR_2	0.889	0.853	0.861
	aCBR_3	0.826	0.742	0.834
	aCBR_4	0.887	0.855	0.878
	aCBR_5	0.854	0.723	0.852
	aCBR_6	0.828	0.868	0.839
	aCBR_7	0.690	0.584	0.585
	aCBR_8	0.849	0.827	0.859
t-value > 3.922***	aCBR_1	37.113***	23.483***	45.825***
	aCBR_2	107.346***	49.468***	85.294***
	aCBR_3	52.233***	27.124***	71.747***
	aCBR_4	85.865***	55.391***	89.120***
	aCBR_5	69.613***	19.173***	59.231***
	aCBR_6	56.017***	59.548***	68.170***
	aCBR_7	27.415***	12.945***	20.070***
	aCBR_8	66.898***	43.472***	64.066***
Construct level				
Kaiser Criterion $EV_1 > 1$; $EV_2 < 1$	EV_1	5.526	4.859	5.119
	EV_2	0.659	0.748	0.791
AVE > 0.5		0.676	0.605	0.664
Com. Reliability > 0.7		0.943	0.924	0.940
Fornell/Larcker		✓	✓	✓

Appendix L **Quality evaluation for consumer-brand relationship measurement model (actual customers)**
Source: Own illustration.

Consumer-brand relationship (potential customers, pCBR)		FRoSTA	Car brand	Beck's
Item level				
Factor loading $\Lambda > 0.7$ ($\Lambda > 0.4$)	pCBR_1	0.824	0.777	0.754
	pCBR_2	0.876	0.882	0.856
	pCBR_3	0.869	0.837	0.834
	pCBR_4	0.909	0.870	0.819
	pCBR_5	0.657	0.614	0.528
	pCBR_6	0.908	0.866	0.879
t-value > 3.922***	pCBR_1	28.014***	27.639**	14.781***
	pCBR_2	29.981***	61.546***	17.674***
	pCBR_3	28.028***	35.324***	18.250***
	pCBR_4	54.378***	44.765***	14.672***
	pCBR_5	8.639***	14.016***	5.777***
	pCBR_6	49.927***	49.689***	34.245***
Construct level				
Kaiser Criterion $EV_1 > 1$; $EV_2 < 1$	EV_1	4.286	3.959	0.3719
	EV_2	0.641	0.779	0.778
AVE > 0.5		0.714	0.661	0.620
Com. Reliability > 0.7		0.937	0.920	0.905
Fornell/Larcker		✓	✓	✓

Appendix LI **Quality evaluation for consumer-brand relationship measurement model (potential customers)**
Source: Own illustration.

Attitudinal effects (Att)		FRoSTA		Car brand		Beck's	
		UGB	ad	UGB	ad	UGB	ad
Item level							
Factor loading $\Lambda > 0.7$ ($\Lambda > 0.4$)	Att_1	0.946	0.963	0.951	0.966	0.952	0.930
	Att_2	0.950	0.965	0.945	0.963	0.960	0.936
	Att_3	0.936	0.953	0.931	0.942	0.948	0.928
t-value > 3.922***	Att_1	166***	243***	175***	246***	209***	138***
	Att_2	153***	222***	135***	238***	238***	157***
	Att_3	170***	194***	138***	158***	195***	150***
Construct level							
Kaiser Criterion $EV_1 > 1$; $EV_2 < 1$	EV_1	2.672	2.768	2.669	2.753	2.727	2.602
	EV_2	0.198	0.142	0.201	0.166	0.159	0.219
AVE > 0.5		0.891	0.922	0.888	0.916	0.909	0.867
Com. Reliability > 0.7		0.961	0.973	0.960	0.971	0.968	0.952
Fornell/Larcker		✓	✓	✓	✓	✓	✓

Appendix LII **Sample specific quality evaluation for attitudinal effects measurement model**
Source: Own illustration.

Attitudinal effects (aggregated, aAtt)		FRoSTA	Car brand	Beck's
Item level				
Factor loading $\Lambda > 0.7$ ($\Lambda > 0.4$)	aAtt_1	0.966	0.971	0.935
	aAtt_2	0.972	0.966	0.944
	aAtt_3	0.958	0.951	0.937
t-value > 3.922***	aAtt_1	257.499***	288.481***	141.732***
	aAtt_2	364.033***	224.969***	179.107***
	aAtt_3	253.136***	186.758***	166.139***

To be continued

Attitudinal effects (aggregated, aAtt)		FRoSTA	Car brand	Beck's
Construct level				
Kaiser Criterion $EV_1 > 1$; $EV_2 > 1$	EV_1	2.752	2.777	2.618
	EV_2	0.156	0.145	0.207
AVE > 0.5		0.931	0.927	0.881
Com. Reliability > 0.7		0.976	0.974	0.957
Fornell/Larcker		✓	✓	✓

Appendix LIII **Sample specific quality evaluation for aggregated attitudinal effects variable**
Source: Own illustration.

Behavioural effects (Beh)		FRoSTA		Car brand		Beck's	
		UGB	ad	UGB	ad	UGB	ad
Item level							
Factor loading $\Lambda > 0.7$ ($\Lambda > 0.4$)	Beh_1	0.866	0.890	0.906	0.943	0.877	0.873
	Beh_2	0.918	0.922	0.907	0.944	0.913	0.910
	Beh_3	0.901	0.922	-	-	0.812	0.809
t-value > 3.922***	Beh_1	78***	99***	98***	157***	101***	82***
	Beh_2	123***	138***	101***	165***	116***	141***
	Beh_3	76***	89***	-	-	45***	38***
Construct level							
Kaiser Criterion $EV_1 > 1$; $EV_2 < 1$	EV_1	2.406	2.505	1.647	1.791	2.266	2.248
	EV_2	0.382	0.310	0.353	0.209	0.468	0.460
AVE > 0.5		0.802	0.831	0.822	0.890	0.754	0.748
Com. Reliability > 0.7		0.924	0.936	0.902	0.942	0.902	0.899
Fornell/Larcker		✓	✓	✓	✓	✓	✓

Appendix LIV **Sample specific quality evaluation for behavioural effects measurement model**
Source: Own illustration.

Behavioural effects (aggregated, aBeh)		FRoSTA	Car brand	Beck's
Item level				
Factor loading $\Lambda > 0.7$ ($\Lambda > 0.4$)	Beh_1	0.903	0.932	0.874
	Beh_2	0.933	0.933	0.913
	Beh_3	0.924	-	0.821
t-value > 3.922***	Beh_1	107.872***	140.179***	87.155***
	Beh_2	163.079***	144.107***	140.457***
	Beh_3	88.400***	-	44.820***
Construct level				
Kaiser Criterion $EV_1 > 1$; $EV_2 > 1$	EV_1	2.507	1.739	2.235
	EV_2	0.324	0.261	0.480
AVE > 0.5		0.846	0.869	0.757
Com. Reliability > 0.7		0.943	0.930	0.903
Fornell/Larcker		✓	✓	✓

Appendix LV **Sample specific quality evaluation for aggregated behavioural effects measurement model**
Source: Own illustration.

Web2.0 experience (Web) – original scale		FRoSTA	Car brand	Beck's
Item level				
Factor loading $\Lambda > 0.7$ ($\Lambda > 0.4$)	Web_1	0.467	0.405	**0.359**
	Web_2	0.543	0.600	0.668
	Web_3	0.668	0.667	0.724
	Web_4	0.776	0.825	0.758
	Web_5	0.821	0.760	0.720
	Web_6	0.614	0.690	0.536
t-value > 3.922***	Web_1	6.945***	4.193***	5.007***
	Web_2	8.608***	8.806***	13.222***
	Web_3	13.503***	8.341***	19.862***
	Web_4	25.750***	19.948***	23.349***
	Web_5	30.659***	15.640***	19.607***
	Web_6	9.631***	10.211***	7.081***

To be continued

Web2.0 experience (Web) – original scale		FRoSTA	Car brand	Beck's
Construct level				
Kaiser Criterion $EV_1 > 1$; $EV_2 < 1$	EV_1	2.797	2.799	2.509
	EV_2	0.955	0.989	**1.107**
AVE > 0.5		**0.437**	**0.450**	**0.413**
Com. Reliability > 0.7		0.816	0.825	0.801
Fornell/Larcker		✓	✓	✓

Appendix LVI **Quality evaluation for original measurement model of Web2.0 experience variable**
Source: Own illustration.

Innovativeness (Inno) – original scale		FRoSTA	Car brand	Beck's
Item level				
Factor loading $\Lambda > 0.7$ ($\Lambda > 0.4$)	Inno_1	0.919	0.862	0.899
	Inno_2	0.921	0.858	0.885
	Inno_3	**0.095**	**-0.117**	**0.088**
	Inno_4	0.417	**0.205**	**0.396**
	Inno_5	0.888	0.889	0.877
t-value > 3.922***	Inno_1	104.626***	21.816***	83.436***
	Inno_2	127.476***	22.448***	75.710***
	Inno_3	**1.285**	**0.946**	**1.060**
	Inno_4	5.923***	**1.556**	5.111***
	Inno_5	89.266***	45.488***	77.434***
Construct level				
Kaiser Criterion $EV_1 > 1$; $EV_2 < 1$	EV_1	2.757	2.715	2.645
	EV_2	**1.217**	**1.245**	**1.163**
AVE > 0.5		0.533	**0.465**	0.505
Com. Reliability > 0.7		0.818	0.731	0.800
Fornell/Larcker		✓	✓	✓

Appendix LVII **Quality evaluation for original measurement model of innovativeness variable**
Source: Own illustration.

Validation of determinants of UGB attitude (add on)

In addition to the exploration of determinants of UGB attitude in chapter E 4.3, the results of further significance tests regarding the individual samples (FRoSTA, car brand, Beck's) are presented in the following.

UGB-brand fit	FRoSTA			Car brand			Beck's		
	Low	Mod.	High	Low	Mod.	High	Low	Mod.	High
Mean rank	186	367	492	144	224	309	284	483	647
Chi-Square	181			87			224		
df	2			2			2		
Asymp. Sig.	0.000			0.000			0.000		

Appendix LVIII **Multi-group comparison regarding UGB attitude and UGB-brand fit (Kruskal-Wallis H test)**
Source: Own illustration.

UGC attitude	FRoSTA			Car brand			Beck's		
	Weak	Mod.	Strong	Weak	Mod.	Strong	Weak	Mod.	Strong
Mean rank	143	358	540	129	300	420	Not applicable		
Chi-Square	285			164					
df	2			2					
Asymp. Sig.	0.000			0.000					

Appendix LIX **Multi-group comparison regarding UGB attitude and UGC attitude (Kruskal-Wallis H test)**
Source: Own illustration.

UGB awareness	FRoSTA		Car brand		Beck's	
	Aware	Unaware	Aware	Unaware	Aware	Unaware
Mean rank	483	326	419	281	599	411
Mann-Whitney U	24,401		9,916		23,727	
Wilcoxon W	184,296		146,942		312,147	
Z	-8.271		-6.375		-7.324	
Asymp. Sig. (2-tailed)	0.000		0.000		0.000	

Appendix LX **Multi-group comparison regarding UGB attitude and UGB awareness (Mann-Whitney U test)**
Source: Own illustration.

Passive UGB participation	FRoSTA		Car brand		Beck's	
	Not read	Read	Not read	Read	Not read	Read
Mean rank	59	86	37	36	50	58
Mann-Whitney U	1,681		348		1,070	
Wilcoxon W	3,059		2,118		1,598	
Z	-3.571		-0.092		-1.172	
Asymp. Sig. (2-tailed)	0.000		0.926		0.241	

Note: "Not read" refers to FRoSTA blog usage less than monthly.

Appendix LXI **Multi-group comparison regarding UGB attitude and passive UGB participation (Mann-Whitney U test)**
Source: Own illustration.

Brand usage	FRoSTA			Car brand			Beck's		
Customer type	Potential	Actual		Potential	Actual		Potential	Actual	
Mean rank	249	378		270	323		361	444	
Mann-Whitney U	20250			36159			29212		
Wilcoxon W	25606			76062			33583		
Z	-5.864			-3.750			-3.005		
Asymp. Sig. (2-tailed)	0.000			0.000			0.003		
Extent of usage	None	Weak	Heavy	None	Weak.	Heavy	None	Weak	Heavy
Mean rank	249	347	435	270	330	318	361	421	465
Chi-Square	59.822			14.372			14.987		
df	2			2			2		
Asymp. Sig.	0.000			0.001			0.001		

Appendix LXII **Multi-group comparison regarding UGB attitude and brand usage (Mann-Whitney U and Kruskal-Wallis H test)**
Source: Own illustration.

Consumer-brand relationship	FRoSTA			Car brand			Beck's		
	Weak	Mod.	High	Weak	Mod.	High	Weak	Mod.	High
Mean rank	283	454	572	240	366	513	380	512	555
Chi-Square	142			112			63		
df	2			2			2		
Asymp. Sig.	0.000			0.000			0.000		

Appendix LXIII **Multi-group comparison regarding UGB attitude and consumer-brand relationship (Kruskal-Wallis H test)**
Source: Own illustration.

Innovativeness	FRoSTA			Car brand			Beck's		
	Weak	Mod.	High	Weak	Mod.	High	Weak	Mod.	High
Mean rank	324	374	462	275	333	366	398	483	521
Chi-Square	32			20			29		
df	2			2			2		
Asymp. Sig.	0.000			0.000			0.002		

Appendix LXIV **Multi-group comparison regarding UGB attitude and innovativeness (Kruskal-Wallis H test)**
Source: Own illustration.

Opinion leadership	FRoSTA			Car brand			Beck's		
	Weak	Mod.	Strong	Weak	Mod.	Strong	Weak	Mod.	Strong
Mean rank	315	372	413	272	304	349	375	461	365
Chi-Square	16			9			27		
df	2			2			2		
Asymp. Sig.	0.000			0.014			0.002		

Appendix LXV **Multi-group comparison regarding UGB attitude and opinion leadership (Kruskal-Wallis H test)**
Source: Own illustration.

Web2.0 experience	FRoSTA			Car brand			Beck's		
	Little	Mod.	High	Little	Mod.	High	Little	Mod.	High
Mean rank	314	353	463	280	301	354	383	449	482
Chi-Square	36			9			14		
df	2			2			2		
Asymp. Sig.	0.000			0.011			0.001		

Appendix LXVI **Multi-group comparison regarding UGB attitude and Web2.0 experience (Kruskal-Wallis H test)**
Source: Own illustration.

Validation of structural UGB effectiveness model (add on)

In addition to chapter E 5, sample specific quality evaluations of the total and partial UGB effectiveness models are displayed. Tables also show significance tests regarding UGB application specific sample differences.

T: Total UGB effectiveness	FRoSTA		Car brand		Beck's	
UGB/ad → CBR						
	UGB	**Ad**	**UGB**	**Ad**	**UGB**	**Ad**
Path coefficient > 0.1	0.387	0.366	0.418	0.188	0.206	0.314
t-value > 3.922***	11.208 ***	10.405 ***	10.396 ***	4.981 ***	5.576 ***	10.212 ***
Effect size f² > 0.02 low; > 0.15 mod	0.200	0.173	0.161	0.013	0.044	0.102
R² > 0.19 low; >0.33 mod	0.414		0.303		0.193	
Q² > 0	0.282		0.186		0.123	

UGB/Ad/CBR → Att									
	UGB	**Ad**	**CBR**	**UGB**	**Ad**	**CBR**	**UGB**	**Ad**	**CBR**
Path coefficient > 0.1	0.29	0.29	0.35	0.22	0.20	0.36	0.19	0.29	0.40
t-value > 3.922***	8.65 ***	9.84 ***	11.13 ***	5.22 ***	5.22 ***	9.15 ***	6.44 ***	10.3 ***	14.9 ***
Effect size f² > 0.02 low; >0.15 mod	0.13	0.22	0.18	0.04	0.05	0.16	0.05	0.11	0.25
R² > 0.19 low; >0.33 mod	0.591			0.416			0.463		
Q² > 0	0.544			0.386			0.406		

UGB/Ad/CBR/Att → Bev												
	UGB	**Ad**	**CBR**	**Att**	**UGB**	**Ad**	**CBR**	**Att**	**UGB**	**Ad**	**CBR**	**Att**
Path coefficient > 0.1	-0.01	0.11	0.20	0.64	0.10	-0.05	0.27	0.65	0.09	-0.03	0.14	0.68
t-value > 3.922***	0.3 ***	4.4 ***	7.0 ***	19 ****	3.7 **	1.7	8.5 ***	20 ***	3.5 **	1.1	5.0 ***	25 ***
Effect size f² > 0.02 low; >0.15 mod	0.00	0.26	0.09	0.66	0.03	0.04	0.17	1.00	0.02	-0.00	0.04	0.67
R² > 0.19 low; >0.33 mod	0.749				0.758				0.642			
Q² > 0	0.628				0.654				0.476			

Appendix LXVII **UGB application specific quality evaluation for total UGB effectiveness model**
Source: Own illustration.

P_1: Split re UGB application	FRoSTA			Car brand			Beck's		
UGB → CBR									
	UGB			UGB			UGB		
Path coefficient > 0.1	0.558			0.542			0.453		
t-value > 3.922***	20.033***			18.541***			15.073***		
R^2 0.19 low; > 0.33 mod	0.312			0.294			0.205		
Q^2 0	0.210			0.182			0.137		
UGB/CBR → Att									
	UGB	CBR		UGB	CBR		UGB	CBR	
Path coefficient 0.1	0.472	0.311		0.336	0.356		0.423	0.356	
t-value > 3.922***	12.688***	8.575***		9.833***	8.766***		15.092***	11.739***	
Effect size f^2 > 0.15 mod; > 0.30 high	0.294	0.130		0.108	0.142		0.251	0.179	
R^2 > 0.33 mod; > 0.67 high	0.483			0.369			0.442		
Q^2 > 0	0.428			0.325			0.397		
UGB/CBR/Att → Beh									
	UGB	CBR	Att	UGB	CBR	Att	UGB	CBR	Att
Path coefficient > 0.1	0.075	0.222	0.601	0.111	0.243	0.605	0.053	0.143	0.711
t-value > 2.576**; > 3.922***	2.471 *	6.827 ***	20.471 ***	4.149 ***	7.230 ***	19.365 ***	2.017 *	5.167 ***	23.269 ***
Effect size f^2 > 0.02 low; > 0.15 mod	0.006	0.085	0.522	0.025	0.117	0.744	0.006	0.048	0.889
R^2 > 0.33 mod; > 0.67 high	0.645			0.697			0.690		
Q^2 > 0	0.514			0.570			0.513		

Appendix LXVIII **Quality evaluation for partial UGB effectiveness model in terms of UGB applications**
Source: Own illustration.

P_2: Split re UGB awareness	FRoSTA				Car brand				Beck's			
UGB → CBR												
	Unaware		Aware		Unaware		Aware		Unaware		Aware	
Path coefficient > 0.1	0.548		0.361		0.491		0.478		0.426		0.325	
t-value > 2.576**; > 3.922***	17.417***		3.664**		15.374***		5.317***		14.519***		3.788**	
R^2 0.19 low; > 0.33 mod	0.301		0.130		0.242		0.228		0.181		0.106	
Q^2 0	0.202		0.075		0.137		0.134		0.117		0.065	
UGB/CBR → Att												
	Unaware		Aware		Unaware		Aware		Unaware		Aware	
	UGB	CBR	UGB	CBR	UGB	CBR	UGB	CBR	UGB	CBR	UGB	CBR
Path coefficient 0.1	0.49	0.274	0.351	0.366	0.286	0.365	0.234	0.484	0.411	0.351	0.481	0.349
t-value > 2.576**; > 3.922***	12 ***	7 ***	4 ***	5 ***	7 ***	9 ***	2.6 **	5 ***	12 ***	10 ***	6 ***	5 ***
Effect size f^2 > 0.15 mod; > 0.30 high	0.300	0.098	0.162	0.179	0.071	0.067	0.049	0.298	0.231	0.171	0.383	0.203
R^2 > 0.33 mod; > 0.67 high	0.456		0.350		0.318		0.397		0.414		0.462	
Q^2 > 0	0.404		0.277		0.267		0.130		0.374		0.368	
UGB/CBR/Att → Beh												
	Unaware			Aware			Unaware			Aware			Unaware			Aware					
	UGB	CBR	Att	UGB	CBR	Att	UGB	CBR	Att	UGB	CBR	Att	UGB	CBR	Att	UGB	CBR	Att
Path coefficient > 0.1	0.1	0.2	0.6	0.0	0.2	0.4	0.2	0.1	0.7	0.1	0.5	0.5	0.1	0.2	0.7	0.1	0.1	0.7
t-value > 2.576**; > 3.922***	3.1 **	8 ***	19 ***	0.6	2.9 **	5 ***	5 ***	4 ***	23 ***	0.7	5 ***	6 ***	2 *	6 ***	20 ***	1	1	11 ***
Effect size f^2 > 0.02 low; > 0.15 mod	0.0	0.1	0.8	0.0	0.1	0.2	0.1	0.2	1.0	0.0	0.5	0.6	0.0	0.1	0.9	0.0	0.0	0.9
R^2 > 0.33 mod; > 0.67 high	0.737			0.362			0.704			0.753			0.696			0.666		
Q^2 > 0	0.597			0.251			0.575			0.035			0.515			0.497		

Appendix LXIX **Sample specific quality evaluation for partial UGB effectiveness model in terms of UGB awareness**
Source: Own illustration.

P_2: Split re UGB awareness	FRoSTA			Car brand			Beck's		
	Mean	Z value	Sign.	Mean	Z value	Sign.	Mean	Z value	Sign.
UGB → CBR									
Aware	109	-16	0.000	198	**-0.445**	**0.656**	134	-11	0.000
Unaware	292			203			267		
UGB → Att									
Aware	115	-15	0.000	164	-6	0.000	262	-11	0.000
Unaware	286			237			139		
UGB → Beh									
Aware	148	-9	0.000	122	-14	0.000	226	-4	0.000
Unaware	253			279			175		
CBR → Att									
Aware	269	-12	0.000	268	-12	0.000	198	**-0.364**	**0.716**
Unaware	132			139			203		
CBR → Beh									
Aware	229	-5	0.000	301	-17	0.000	112	-15	0.000
Unaware	172			101			289		
Att → Beh									
Aware	101	-17	0.000	105	-16	0.000	241	-7	0.000
Unaware	300			296			160		

Appendix LXX **Comparison of UGB application specific sample differences for partial UGB effectiveness model in terms of UGB awareness (Mann-Whitney U test)**
Source: Own illustration.

P_3: Split re active participation	FRoSTA					
	UGB → CBR	UGB → Att	CBR → Att	UGB → Beh	CBR → Beh	Att → Beh
Path coefficient > 0.1	0.495	0.329	0.317	0.230	0.240	0.281
t-value > 2.576**; > 3.922***	5.540***	2.440 *	2.072 *	1.721	1.580	2.210 *
Effect size f^2 > 0.15 mod; > 0.30 high	-	0.117	0.104	0.046	0.064	0.075
R^2 0.19 low; > 0.33 mod	0.245	0.313		0.372		
Q^2 0	0.118	0.223		0.242		

Appendix LXXI **Quality evaluation for partial UGB effectiveness model in terms of UGB participation**
Source: Own illustration.

P_4: Split re brand usage	FRoSTA				Car brand				Beck's			
UGB → CBR												
	Potential		Actual		Potential		Actual		Potential		Actual	
Path coefficient > 0.1	0.636		0.510		0.561		0.512		0.378		0.443	
t-value > 2.576**; > 3.922***	10.637***		14.505***		14.747***		14.665***		5.100***		14.060***	
R^2 0.19 low; > 0.33 mod	0.404		0.260		0.315		0.262		0.143		0.196	
Q^2 0	0.277		0.171		0.203		0.153		0.074		0.127	
UGB/CBR → Att												
	Potential		Actual		Potential		Actual		Potential		Actual	
	UGB	CBR	UGB	CBR	UGB	CBR	UGB	CBR	UGB	CBR	UGB	CBR
Path coefficient 0.1	0.372	0.425	0.479	0.301	0.352	0.397	0.286	0.376	0.405	0.485	0.423	0.338
t-value > 2.576**; > 3.922***	3.6 **	5 ***	13 ***	9 ***	6 ***	7 ***	7 ***	7 ***	6 ***	6 ***	14 ***	10 ***
Effect size f^2 > 0.15 mod; > 0.30 high	0.169	0.222	0.256	0.128	0.145	0.190	0.052	0.157	0.314	0.451	0.243	0.157
R^2 > 0.33 mod; > 0.67 high	0.520		0.467		0.439		0.333		0.548		0.420	
Q^2 > 0	0.463		0.410		0.383		0.287		0.501		0.375	
UGB/CBR/Att → Beh												
	Potential			Actual			Potential			Actual			Potential			Actual		
	UGB	CBR	Att	UGB	CBR	Att	UGB	CBR	Att	UGB	CBR	Att	UGB	CBR	Att	UGB	CBR	Att
Path coefficient > 0.1	-0.1	0.3	0.5	0.1	0.2	0.6	0.1	0.3	0.5	0.1	0.2	0.7	0.0	0.3	0.6	0.1	0.1	0.7
t-value > 2.576**; > 3.922***	0.9	2.5 *	5 ***	2.6 **	5 ***	19 ***	1.9	6 ***	10 ***	2.0 *	6 ***	10 ***	0.0	3 **	6 ***	2.3 *	4 ***	24 ***
Effect size f^2 > 0.02 low; > 0.15 mod	0.0	0.1	0.3	0.0	0.1	0.6	0.0	0.2	0.5	0.0	0.1	1.0	-0.0	0.1	0.4	0.0	0.0	1.0
R^2 > 0.33 mod; > 0.67 high	0.513			0.656			0.666			0.720			0.641			0.686		
Q^2 > 0	0.421			0.510			0.529			0.586			0.517			0.502		

Appendix LXXII **Application specific quality evaluation for partial UGB effectiveness model in terms of brand usage**
Source: Own illustration

P_4: Split re brand usage	FRoSTA			Car brand			Beck's		
	Mean rank	Z-value	Sign.	Mean rank	Z-value	Sign.	Mean rank	Z-value	Sign.
UGB → CBR									
Actual customer	104	-17	0.000	143	-10	0.000	248	-8	0.000
Potential customer	297			258			153		
UGB → Att									
Actual customer	271	-12	0.000	137	-11	0.000	228	-5	0.000
Potential customer	130			264			173		
UGB → Beh									
Actual customer	293	-16	0.000	273	-13	0.000	276	-13	0.000
Potential customer	108			128			125		
CBR → Att									
Actual customer	117	-14	0.000	174	-5	0.000	109	-16	0.000
Potential customer	284			227			292		
CBR → Beh									
Actual customer	137	-11	0.000	107	-16	0.000	109	-16	0.000
Potential customer	264			294			292		
Att → Beh									
Actual customer	262	-11	0.000	290	-15	0.000	285	-15	0.000
Potential customer	139			111			116		

Appendix LXXIII **Comparison of UGB application specific sample differences for partial UGB effectiveness model in terms of brand usage**
Source: Own illustration.

Validation of interaction effects (add on)

In addition to chapter E 5.3, quality evaluations for the main effects models regarding two examined moderators are provided in the following.

P_5: Fit	FRoSTA		Car brand		Beck's	
Main model: UGB/Fit → CBR						
	UGB	Fit	UGB	Fit	UGB	Fit
Path coefficient 0.1	0.466	0.135	0.425	0.198	0.252	0.158
t-value > 2.576**; > 3.922***	10.117 ***	2.752 **	11.102 ***	4.588 ***	6.379 ***	3.677 **
Effect size f^2 > 0.02 low; > 0.15 mod; > 0.30 high	0.203	0.017	0.177	0.040	0.046	0.019
R^2 > 0.33 mod; > 0.67 high	0.309		0.312		0.136	
Q^2 > 0	0.207		0.193		0.084	

Appendix LXXIV **Quality evaluation for UGB-brand fit main model**
Source: Own illustration.

P_7: Web	FRoSTA		Car brand		Beck's	
Main model: UGB/Web → CBR						
	UGB	Web	UGB	Web	UGB	Web
Path coefficient 0.1	0.535	0.088	0.522	0.072	0.314	0.158
t-value > 2.576**; > 3.922***	17.566 ***	2.845 **	16.638 ***	2.275 *	8.524 ***	4.718 ***
Effect size f^2 > 0.02 low; > 0.15 mod > 0.30 high	0.388	0.010	0.370	0.007	0.108	0.025
R^2 > 0.33 mod; > 0.67 high	0.318		0.289		0.142	
Q^2 > 0	0.213		0.176		0.089	
Q^2 > 0	0.219		0.184		0.100	

Appendix LXXV **Quality evaluation for Web2.0 experience main model**
Source: Own illustration.

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