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Tymoteusz Doligalski

Internet-Based Customer Value Management

Developing Customer Relationships Online

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Preface

Customers play a particularly important role in the company's operations. They provide companies with cash incomes and other values. The values delivered by customers help companies to deepen their relationships with other market participants, such as shareholders, suppliers, or employees. As a result, customers start to be perceived as a company's asset, the value of which can be measured and maximised. Hence, customer relationship-oriented actions become a condition for the company's development, value increase, and improvement of income level.

Changes in management theory and practice are accompanied by technological and social transformations. Application of modern technologies, including the Internet, gives a new dimension to relationships between customers and companies. In contrast to traditional mass media, the Internet became a space which offers the possibility of multi-sided communication, information search, transaction making, and even value co-creation. Consequently, the role of the Internet in building relationships between the company and customers becomes more and more pronounced, since it helps to acquire tangible benefits, such as decreasing costs or acquiring new customers.

Merging of the two areas customer relationships and the Internet presents an important challenge for companies. Its main purpose is to elaborate stable and profitable customer relationships often on new markets, inaccessible in any other way. Companies willing to engage in such an activity have to display an innovative approach, adjusted to the challenge of building value based on a particularly valuable asset: the customers.

In the monograph entitled *Marketing Theory: Evolution and Evaluation*, Sheth Gardner and Garrett (1988: 5) argue that marketing rests inexorably on two pillars: thorough understanding the consumer needs and behaviour; and critical analysis of opportunities for competitive advantage. The thematic area of this book will be centred mainly on the second pillar. The books seeks to answer the question how customer value to company (customer lifetime value) should be managed on the Internet, and more specifically, how to incorporate the Internet in the process of delivery of proposed value to customer in order to increase their lifetime value and thus increase the value of the company and generate value to the company's shareholders and other stakeholders.

The main goal of this paper is to present the possibilities of Internet-based customer value management and a model describing this process. Problems of current state of knowledge of online customer needs and behaviours, associated with the first pillar, are not the main focus of the paper, for the author's intention is to concentrate on the presentation of the concept in form of a model, and not to describe current tendencies, acquired data or prognoses. This approach stems from the stand taken by Shapiro and Varian in the monograph *Information Rules: A Strategic Guide to the Network Economy*, where the authors stress that they 'seek models, not trends; concepts, not vocabulary; and analyses, not analogies' (Shapiro & Varian 1998).

Compared to numerous publications on the use of the Internet in marketing, this paper attempts rather at describing a managing approach to customer relationships than at presenting a particular tool of e-marketing. Moreover, the deliberations are not limited by branches or sectors—differences in the approach towards customer value management are perceived through the prism of different types of value exchange between the company and customers. The author believes that particular types of value exchange have a greater influence on the differentiation of actions associated with online customer value management than the type of market (B2C/B2B) on which the company operates.

Chapter 1 presents the nature of the customer value management, as well as models and concepts associated with relationship marketing. In Chap. 2, the concept of value to customer and the influence of the Internet on this element were described. Chapter 3 proposes a conceptual model of Internet-based customer value management. Finally, Chap. 4 briefly presents financial aspects of customer value management.

This publication is directed, among others, at:

- Persons responsible for customer relationship development
- Managers of all levels of company management, especially from marketing departments
- Students of widely perceived marketing, management and strategy
- PhD students and academic staff

The author will be grateful for any comments, remarks and polemics regarding the publication.

Warsaw, Poland Tymoteusz Doligalski

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Characteristics of the Concept of Customer Value Management

1

1.1 Introduction

The following chapter aims at characterising the concept of customer value management and presenting chosen models and concepts which help to better understand this approach. The focus will be on characteristics of customer value management, such as perceiving customer relationship as a value exchange, customer orientation, customer lifetime value measurement and customer knowledge management, portfolio approach towards customer relationship, focus on customer-oriented processes, connection of customer relationship-associated actions with company's value, and acknowledging of the customer role in the company's business model. In the following considerations it will be stressed how the Internet influences particular dimensions of customer value management within traditional companies and what form it takes within online companies. Afterwards, a comparison between customer value management and mass marketing, and between customer value management in traditional service companies and online companies will be presented.

The focus of the second part of the chapter will be on models and concepts which on the one hand explain the complexity of relationship marketing and on the other served as a source of inspiration for the conceptual model of Internet-based customer value management presented in a subsequent chapter.

1.2 Characteristics of Customer Value Management

V. Kumar identifies customer management with measurement and maximisation of the customer lifetime value (Kumar, 2008). Blattberg, Getz, and Thomas (2001: 3) provide an extensive definition of customer equity management, perceived by the authors as a 'dynamic, integrating marketing system that uses financial valuation techniques and data about customers to optimise the acquisition of, retention of, and

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selling of additional products to a firm's customers, and that maximises the value to the company of the customer relationship through its lifecycle'.

For the needs of this paper, customer value management will be understood as a managerial approach, in which customers are perceived as the company's asset, the value of which may be measured and increased through organisation of the processes around customer relationships. The features of customer value management are as follows:

- Perception of customer relationships as value exchange,
- Customer orientation,
- Measurement of customer lifetime value and customer knowledge management
- Portfolio approach towards customer relationships,
- Focalisation on customer-related processes,
- Connection of customer relationship-oriented actions with the company's value,
- Perception of the role of customers in the company's business model.

It is worth noticing that probably the most important feature of customer value management—actions aimed at increasing customer lifetime value—was not mentioned, for it comes as a result of customer orientation, focalisation on customer-related processes, and the portfolio approach.

The attempt at characterising customer value management presented in the following part of this chapter synthesises approaches presented by various researchers, who frequently apply different concepts to describe the same phenomena. Consequently, seven features of such concepts were discerned. It should be emphasized that the outcomes are subject to many limitations resulting from the subjectivity of the author's perception. In other words, it is possible to characterise customer value management in a different way, which may lead to other conclusions.

1.2.1 Perception of Customer Relationships as Value Exchange

The substantial element of customer value management, which appears also in traditional approach to marketing, is the value exchange (exchange of values) between companies and customers. In the exchange process, the companies provide customers with a set (proposition, stream, bundle) of benefits (constituent values),[1] receiving in exchange customer-generated values. In order to fulfil the needs of

[1] In marketing literature there is an alternative approach which relates to the concept called *service dominant logic*. According to it, companies do not create "value to customer", but only "value proposition", which can be accepted or rejected by customers. The value is then created by customers themselves during the consumption act.

customers, companies supply them with value, by means of *marketing instruments* (product, price,[2] promotion, distribution) enhanced with the company's brand (reputation, image, credibility, trustworthiness, etc.). *Value to customer* may be perceived as a sum of benefits (constituent values of which the value proposition is comprised) reduced by the price and non-financial customer costs. Value to customer seems a more accurate concept than marketing instruments, for it represent the outcomes of actions carried out by the company from the customer's perspective.

From the company's point of view, value exchange should provide the company with diverse streams of *values from customers*, since they are indispensable to the company's proper functioning. Incomes translate into company's liquidity and profitability, and therefore make it possible to deliver value to other stakeholders. An important category of customer-generated values consists of recommendations given to a third party. On the Internet, a major role is equally played by benefits created by customers for other customers, such as content published on websites. At each stage of company development, different benefits may play the crucial role. E.g. in early phase of product development, the most important element are customer-provided information and later on recommendations and incomes.

1.2.2 Customer Orientation

For better understanding of customer value management, the concept of market orientation and customer orientation should be introduced. J. Naver and S. Slater described *market orientation* (or rather marketing orientation) as one 'that most effectively and efficiently creates the necessary behaviours for the creation of superior value for buyers and, thus, continuous superior performance for the business' (Narver & Slater, 1990). In one of earlier elaborated definitions, Jaworski and Kohli (1993) perceive market orientation through the prism of three sets of activities: 'organisation-wide generation of market intelligence pertaining to current and future customer needs, dissemination of the intelligence across departments, and organization-wide responsiveness to it'. According to the research conducted by Kumar et al., market orientation perceived in such a way leads to the situation where profits increase much more than sales, which results from higher retention of satisfied customers (Kumar, Jones, Venkatesan, & Leone, 2011). Benefits associated with market orientation may be obtained in long term or in short term. The most important benefits are acquired by companies that are the first to employ market orientation. Such companies are able to gain competitive advantage, which is hard to gain by the companies that decide to employ such a *modus operandi* later, for it is likely to become solely a cost of competing (i.e. an action that reduces the risk of bankruptcy). The research has also proved that market

[2] The price represents costs of access to given values, but it is also frequently perceived as a value driver.

turbulence has a positive impact on market orientation benefits and technological turbulence has a diminishing effect (Kumar et al., 2011).

A notion related to market orientation is *customer orientation*, which was described by Brilman (2003: 88) as the conviction that customer's needs and satisfaction are of the greatest importance to the company, and therefore all the company's assets and processes should be subject to the creation of value to customer. K. Mazurek-Łopacińska states that customer orientation relies among others on: listening to customers and incorporating customer-delivered information; providing customers with desired value; building relationships with customers (especially the key customers); involving employees in the creation of increasing value to customers; measuring the level of provided services and customer satisfaction (Mazurek-Łopacińska, 2002: 18).

In the context of online companies, it seems of importance to present the typology introduced by Schindehutte, Morris, and Kocak (2008), which includes technology orientation and entrepreneurial orientation. Within the scope of technology orientation, 'technology and innovation are prioritised over the customer' and the company focuses on disruptive technologies, in hope for creating and dominating new markets. Nevertheless, such an approach may produce a situation when the company 'is too far ahead of the customer or is addressing a problem that does not translate into a substantive customer need'. Entrepreneurial orientation consists of three dimensions: innovativeness, risk taking, and proactiveness.

1.2.3 Measurement of Customer Lifetime Value and Customer Knowledge Management

Another dimension of customer value management is the measurement of customer lifetime value and management of customer knowledge. These actions are of particular importance, since they serve as the basis for various managerial decisions, such as dividing customers into segments to which different value proposition will be delivered. The most commonly mentioned element is *measurement of customer lifetime value* (monetary value of the future benefits for the company acquired through customer relationships, reduced by customer-generated costs), customer profitability (monetary value of the benefits acquired by the company through customer relationships, reduced by customer costs in a given period), satisfaction measurement, and loyalty measurement. The main feature of customer value management is a greater focus on the measurement of effectiveness of customer-related proceedings than on the proceedings associated with other marketing resources, such as brand, product, or distribution channel.

Apart from financial data, information on the structure of the customer portfolio and the number of included customers are of equal importance. These dimensions refer to the number of customers with which the company maintained or is currently maintaining relationships and to the division of past, present and potential customers within customer portfolio. Moreover, the structure of customer portfolio provides information on other characteristics of the company's customers,

including demographic, psychographic, and behavioural data. On the Internet, the information on the level of customer participation in the relationship with the company gain a particular importance. The customers may play the role of passive buyers, company advocates, and co-creators of value designed to fulfil their own needs or the needs of other customers.

Proper customer value management resides in the knowledge of widely perceived customer reactions to the value acquired from the company. Such reactions may contribute to the appearance of satisfaction, loyalty, trust and involvement in relationships with the company. It is also particularly important to include information on the course of customer relationships (continuity and regularity of product purchase or service use). Another important dimension of customer knowledge is understanding customer risks and company risks associated with them (delay or lack of financial incomes, risk of increased costs, risk of information disclosure, etc.).

The Internet has an important impact on customer knowledge acquisition. The use of web analytics in the form of web traffic statistics helps to acquire accurate information on customers' behaviour on a particular website. Such data may be obtained on the spot or with a minor delay. Based on such information the company may identify customer behaviours on a particular website, which is particularly important for optimisation of actions aimed at customer acquisition. Optimisation of such proceedings may take form of budget allocation to the customer acquisition methods that display the highest efficiency in short- or long-term. Optimisation may be focused on the tools of promotion (display advertisement, e-mailing, web positioning, sponsored links), on their shape (content, design, suggested actions), target group, context (e.g. phases entered in search engines), time (working days, holidays), etc.

On the other hand, the Internet-based development of relationships is frequently associated with a lack of direct contact with customers, which commonly become the source of knowledge about customers' needs or problems associated with a given product or service, and which may serve as a basis for innovating value to customer.

A certain solution may be provided by including social media in the dialogue with the customer. Social media may be used to enter into a direct contact with customers, by listening to their suggestions, answering their charges, and solving their problems. Some researches show that social media may be also employed to maintain close relationships with customers as well as to shape their behaviours, especially in the scope of loyalty (*Small* eMarketer, 2010a, 2010b).

Customer knowledge may not be perceived as static. The information on customers acquired by the company results from the implementation of a marketing information system. S. Sobolewska (2010) describes *customer knowledge management* as a complex approach towards the problem of gathering, creation and application of knowledge, which aims at gaining competitive advantage through value to customer. Sobolewska discerns the following stages of the model of customer knowledge management: planning of knowledge-associated resources,

development of customer knowledge, knowledge codification, its diffusion and knowledge application.

1.2.4 Portfolio Approach Towards Customer Relationships

The portfolio approach is another element of customer value management. Portfolio methods are employed in the process of making decisions on the company's assets and were developed in the 1950s by H.M. Markowitz. They rely on conscious development of the asset structure by careful choice of elements and sometimes by further creation of assets themselves. Application of the portfolio approach seems advisable, since different customers provide the company with different values (e.g. incomes, information, recommendations, economies of scale and scope). Therefore, the *selection of customers* who will generate a stream of values desired by the company seems of particular importance. The stream of customer-delivered values desired by the company changes with the company's development, which entails the need of to modify the customer portfolio.

Another important component of the portfolio approach is *customer segmentation*, i.e. division of customers into groups, according to their characteristics and reactions to the company's actions. Customer portfolio segmentation serves as a basis for differentiation of actions aimed at different groups of customers, which on the one hand may contribute to more comprehensive satisfaction of their needs, and on the other—to increasing their value to company.

The use of the Internet for developing customer relationships highlights the differences between customers, for they gain possibility not only to buy products, but to publish online product reviews, promote a company or fight against it. Such behaviours appear also within the scope of traditional market, nevertheless on the Internet they are more pronounced, for they have a wider range.

Frequently, online companies act as intermediaries between two complementary groups of customers (e.g. online auctions, advertising services). In such a situation venture success depends on maintaining a correct proportion between the two groups of customers, which results in a necessity to employ the portfolio approach, consisting in well-considered customer selection which will have an important impact on further development of the relationship. The mechanisms by means of which the company may influence customers from different groups include value to customer and its subcomponent of price.

Customer portfolio segmentation is a particularly important constituent of customer value management, for it serves as a basis for differentiation of actions regarding various groups of customers and therefore enables organisation of managerial processes around particular customer segments (or even single customers). Focalisation of actions on particular customer segments may result in switching from the measurement of product, distribution channel and brand effectiveness to analysis of customer profitability and value.

1.2.5 Focalisation on Customer-Related Processes

Another important feature of customer value management is the focalisation on customer-related processes and not on the instruments that create the marketing mix, which in terms of traditional marketing are used to influence the market. Marketing composition has transformed with the number of instruments it incorporated. In the most popular version, it relies on four instruments (4P—product, price, place, promotion), which in order to reflect a specific character of the service market were extended to seven elements (people, processes, and physical evidence)(Booms & Bitner, 1981). In traditional concept of customer value management, existing instruments are not ignored, but are not in the centre of attention, since the focus is on customer-related processes. This situation is reflected in the models of customer equity, individualised marketing, and delivering value to customers presented in the further part of the chapter.

The set of instruments associated with 4P loses in applicability in the context of developing customer relationships on the Internet. The reasons for such a situation are numerous. Content (articles, broadcasts, transmissions), as well as many online services (related to communication, information management, etc.) are frequently offered for free. Thus the price, perceived as one of the tools for gaining competitive advantage, becomes then irrelevant. Owing to wide availability of websites, the importance of distribution also decreases. In the areas where distribution (place) plays a particularly important role, it often overlaps with promotion. The company's presence in search systems or presentation of its products on the websites of intermediaries may be perceived both from the perspective of place and promotion. Staying in the convention of traditional marketing instruments (4P), online company competition may often be reduced to two instruments: product and promotion (communication).

The role of traditional marketing instruments has also lost in importance in the case of e-commerce. In terms of place—perceived as delivering products to customers—online stores offer similar services, as they co-operate with the same delivery companies. Moreover, they also communicate in a similar manner, to a great extent employing the presence in search results, both in terms of organic results and sponsored links. Competing with price also seems difficult since price differences are not very pronounced. Nevertheless, online sales are associated with an additional dimension, that is—seller's reputation, which is frequently built by various intermediaries (online auctions, price comparison engines) based on customers' opinions. Due to the fact that many companies offer products at particularly low prices and exhibit a reputation which does not significantly differ from the reputation of other competitors, the use of such instruments does not seem to guarantee competitive advantage.

In view of the above, the importance of competing through customer-related processes seems to gain in importance. Such processes, according to Blattberg, Getz and Thomas, include customer acquisition, add-on selling (selling of additional products within the scope of existing relationships), and building customer

loyalty. Other models presented in the following part of this paper are also based on customer-related processes.

1.2.6 Association of Customer Relationship-Oriented Actions with the Company's Value

Customer value management relies strongly on connecting customer relationship-oriented actions with proceedings aimed at creating value to shareholders. This concept was strongly influenced by P. Doyle (2000), who introduced the idea of *shareholder value*, according to which a business should be run to maximize the return on shareholders' investment, which may be measured by the increase in the company's value and rising dividends. Moreover, according to Doyle, shareholder value reflects the effectiveness of marketing actions and investing in customers should be perceived just as investments in other company's assets. It is of particular importance to measure the resulting benefits, such as value to owners (shareholders). Naturally, connecting customer relationship-oriented actions with proceedings aimed at creating value to shareholders does not determine the criteria of maximisation, which may include the company's value, return on invested capital, or profit maximisation while maintaining business continuity and managerial independence.

Below, chosen examples of the influence of customer relationship-oriented actions on financial results and shareholder value will be presented. In the monograph entitled *The Loyalty Effect*, Reichheld utilises the example of the sector of advertising agencies to prove that an increase in revenues acquired from loyal customers is strongly correlated with the productivity index. A similar correlation was observed by the author in the insurance brokerage sector, where the customer retention rate was positively correlated with pre-tax profit margin (Reichheld, 2001). Based on the subsequent research presented in the article *The One Number You Need to Grow*, Reichheld admits that in almost every industry included in the research, there exists a particularly strong correlation between the company's dynamics of growth and the willingness of its customers to recommend the company. Moreover, the author points out that none of the airlines included in the study was able to 'increase growth without improving its ratio of promoters to detractors' (Reichheld, 2003). Moreover, the research on the relation between customer satisfaction and the value to shareholders yielded some interesting results. In the article entitled *Satisfaction and Stock Prices: High Returns, Low Risks* Fornell, Mithas, Morgeson, and Krisham (2006) presented the results of a study on the correlation between customer satisfaction and stock returns. It was proven that the companies of high level of customer satisfaction produce sizable excess returns at the same time displaying low level of risk. The aforementioned studies underline the influence that various elements of relationship marketing have on the company's financial performance or value to customers.

Concentration on company value has accompanied online companies since the beginning. At early stages of development such companies were referred to as

start-ups, and not only they did not generate any revenues, but often did not provide any incomes at all. Nevertheless, they became the centre of interest for many investors, who usually expected them to generate high profits. As a result, the development of such companies started to be perceived through the prism of the value increase. Gupta, Lehman, and Stuart (2004) focused on the valuation of online companies based on the valuation of the customer portfolio. The authors point out that frequently, customers present the sole asset of online companies which may be evaluated, since such companies do not possess any fixed assets and quite often do not generate any profits or revenues.

1.2.7 Perception of the Role of Customers in the Company's Business Model

The consequences of actions associated with customer value management frequently impact various domains of the company's operations, although it is not often mentioned in the literature. B. Dobiegała-Korona (2008) mentions the dominant role of marketing in management, postulating the submission of other company functions and processes to marketing-related activities. Hence, it is important to perceive the role of customer from the perspective of the company's business model. The concept of *business model* refers to a general idea of value creation, which takes into account the dependencies between various groups of stakeholders. Amit and Zott (2010) perceive business model as 'a system of activities that depicts the way a company "does business" with its customers, partners and vendors'. The authors claim that the element that characterises a business model approach is the focus on how the company creates value and not on what it offers, or when or where it acts. It relies on a holistic perspective on the company, which does not take into account particular functions or resources of a company.

Therefore, it seems particularly important to perceive customer relationships through the scope of the company's business model. The companies enlarge their customer portfolios, enter into alliances with other, often competitive, companies, and acquire companies from other levels of the value chain. These actions may aim at creating a so-called ecosystem, i.e. a widely developed business model, in which the customer may easily choose from a wide range of benefits offered by the company, being at the same time isolated from competitive offers. Another element which seems to justify the analysis of online companies through the prism of business models is the industry convergence which may lead to a situation that the Internet will become dominated by a few ecosystems (i.e. Google, Apple, Microsoft, Ebay, Amazon, Facebook) (Simon & Joel, 2011). Similar oligopolistic tendencies may be observed when it comes to the Polish market, where a few major capital groups operate and tend to acquire competitive or complementary entities. As a result, they are able to provide customers with a wide range of complementary benefits.

The idea of business models seems of use also to the analysis of customer relationships in small and medium companies. Due to diversified roles played by customers, companies start to act as complex dynamic systems, including numerous sub-components, which enter in friendly or antagonistic interactions with other systems. Therefore, it seems justified to enhance the analysis of company competition with the concept of virtuous cycles (positive feedback loops). A virtuous cycle appears when the reinforcement of one element has a positive impact on another one, which consequently leads to the reinforcement of the first element (e.g. an increase in the number of the members of a community makes it more recognisable, and therefore helps to acquire new members). Casadesus-Masanell and Ricart (2011) state that companies should aim at reinforcing their virtuous cycles, turn competitors into complements, and weaken virtuous cycles of competitive companies.

1.3 Possibility to Employ Customer Value Management on Various Markets

It seems important to ask in which business contexts customer value management and mass marketing may be applied. In the following part of the paper, the two concepts will be presented in dichotomy, although in practice companies tend to merge these two approaches. When analysing the problem, one should not forget about the distinction between traditional companies that use the Internet as an additional market channel, and the so-called pure players, for which the Internet is the natural operating environment.

Customer value management seems the most applicable when the company has a *direct contact with its customers*, without the participation of intermediaries or suppliers. The use of the Internet in traditional companies helps to enter into direct contact with customers, at least when it comes to communication.

Relationship character of value exchange, being the opposition of transactional character, facilitates customer value management. The character of exchange is influenced by the company's willingness to engage in long-term relationships with customers, as well as by customers' willingness to maintain such a relationship. The influence of the Internet on this element is rather ambiguous. On the one hand, the Internet helps companies to maintain relationships with customers, e.g. throughout social media. On the other hand, accessibility of information and facilitated transactions frequently enforce transactional character of the behaviour of consumers, who, when deciding to buy a high-value product, may each time choose a store which offers the most desired combination of price and reputation (security) level.

Another factor which increases application value of the concept is the possibility of *customer identification*, by which information on customers may be obtained and used to measure customer lifetime value and to modify the delivered value propositions. Such proceedings make it possible for the company to differentiate its customers, take actions aimed at increasing customer value, or, in some cases,

end a relationship. The use of the Internet to a large extent facilitates the process of customer identification.

What is more, the Internet may contribute to *customer differentiation*, i.e. determination of customers who provide the company with cash incomes, who publish company-associated opinions, etc. In online companies—as it was already mentioned—customers possess complementary functions and quite often the success of a given venture depends on maintaining proper proportions between particular customer groups.

Customer value management becomes particularly important in companies that deal with high *customer lifetime value*. It is due to the fact that with low customer value, the management costs may not correspond to possible benefits. The influence of Internet-based development of customer relationships on customer value is not unequivocal. From one point of view, it may entail cost reduction (e.g. through less expensive customer acquisition) and therefore increase customer value. On the other hand, customers encouraged to maintain relationships with the company via Internet gain access to competitive offers, which leads to increasing competitive pressure that may translate into a decrease in prices.

Another element which may be perceived as a vote for customer value management, with special regard to customer value measurement, is *customer bargaining power* (Boyd, Chandy, & Cunha, 2010). It can force the company to supply its customers with additional benefits which lack in economic justification and in consequence may lead to decreasing their profitability. Measuring the efficiency of actions taken within a scope of relationship with a particular customer may initiate the company to change the strategy and sometimes may lead to termination of a given relationship. The Internet tends to increase customer bargaining power in traditional companies. If a relationship with a company does not take a desired turn, customers may publish negative comments regarding the company and thus lead to image-related losses. Moreover, unsatisfied customers may unite in their actions and increase the pressure put on the company. On the other hand, bargaining power of single customers in online companies is relatively low. Apart from the cases described above, customers of online companies are usually not able to demand additional benefits, as it sometimes takes place within the scope of relationships with traditional service companies.

Limitations in the number of served customers may be also perceived as a reason to apply customer value management. If such limitations exist, it becomes very important to shape the structure of customer portfolio through acquiring customers of desired character and terminating relationships with customers who do not generate the value desired by the company. In traditional companies, the use of the Internet in customer relationships may limit the boundaries in terms of the number of served customers. The customers, provided with extensive information via Internet, do not need to enter into direct contact with the company. In the case of online companies, limitations in the number of served customers are usually low, for they are characterised by a considerable scalability (flexibility of action scale).

All the factors taken into account, it may be stated that customer value management seems of particular interest to business-to-business (B2B) markets, except for

uniform product markets and the markets on which value exchange is associated with the participation of intermediaries such as stock exchanges. In the case of business-to-customer (B2C) markets, customer value management seems useful to service sectors on which relationship value exchange prevails and customer identification is of particular importance. The use of the Internet may improve the performance of customer value management, for it makes it easier to identify customers, gather customer knowledge, and deliver individualised value propositions.

The factors that rationalise the use of traditional mass marketing include the lack of direct contact with the customer, value exchange of transactional type, difficulties in customer identification, customer need unification, low lifetime value and bargaining power of customers, as well as limitations in the number of served customers. In such a situation, companies tend to apply managing techniques relying on products, brands, and distribution channels. Nevertheless, such an approach does not mean that some elements of customer value management cannot be used.

It should be noted that the two concepts are linked with other approaches to products and customers. When it comes to mass marketing, the focus is on the concept of product lifecycle. Customer value management, on the other hand, concentrates more on the customer lifecycle.

Indicators such as market share or effectiveness of marketing instruments, applied in mass marketing, in the context of customer value management become replaced by customer value and profitability, satisfaction, loyalty, trust, and involvement. On a mass market, brand or company/brand positioning become the most important means of distinguishing the company from the competitors. When it comes to direct customer relationships, which are emblematic for customer value management, the most important one seems to be flexibility in adjusting value propositions to the customer's needs and expectations. Finally, the role of market research in customer value management decreases, compared to mass marketing, since the acquisition of knowledge of customers is much easier.

Table 1.1 presents various limitations for using customer value management in online companies. In such ventures, customer value management may be applied; nevertheless, compared to traditional service companies, it will be associated with several modifications, due to a different utilisation context.

The following part of this paper will be dedicated to present the most characteristic features of customer value management in traditional (offline) service companies, in which customers (clients) are served by the company's employees (e.g. advertising agencies, law firms) and customer value management in online companies that develop customer relationships without entering in face-to-face contacts with customers (e.g. online services, Internet intermediaries).

In a traditional service company, customers may be acquired in a selective manner, due to limited capacities of the company or knowledge of unsatisfactory profitability of customers of a given type. Afterwards, staying within the scope of customer interaction, the company's employees identify and shape the customer's needs, preferences, and behaviours, provide individualised benefits, and measure

Table 1.1 Factors influencing rationality of the implementation customer value management and mass marketing in online companies and traditional service companies that apply Internet solutions

Factors	Customer value management	Mass marketing	Online companies	Traditional service companies that apply Internet solutions
Contact with the customer	Direct	Through intermediaries	Direct	Higher directness
Value exchange character	Relational	Transactional	Diverse	Facilitated relationship
Customer identification and gathering customer knowledge	Facilitated	Hindered	Facilitated	Facilitated customer identification
Average customer value	High	Low	Diverse	Indeterminate influence
Customer differentiation	High	Low	High	Greater diversification
Customer bargaining power	High	Low	Low	Increased bargaining power
Limitations in the number of served customers	High	Low	Low	Probable decreased limitations

Source: own work

customer profitability. If customer profitability is below expectations, the company may try to improve it or decide to end the relationship. In all these proceedings, the company's employees play a particularly important role. From the perspective of customer portfolio, the most important is to shape its structure in a way that enables acquiring from customers a particular bundle of values (incomes, information, recommendations, etc.) at the same time allowing the company to fully display its capacities.

The nature of online companies imposes a different type of customer value management, thus all the actions are carried out in a different manner. The phase of customer acquisition may be based on a selective approach, which may be associated with the rationalisation of customer acquisition e.g. under the criterion of costs, or differentiation of customer roles, (e.g. content creators and receivers). Usually, in online companies customers do not enter into direct (face-to-face) contact with the company's employees, which results in a necessity to gather customer knowledge in a different way. Such knowledge may be acquired by means of statistics representing online consumer behaviour. In such a situation, the focus is on the user's behaviour associated with a particular website, as well as on the benefits acquired by means of it (incomes, contents). Nevertheless, such knowledge does not directly reflect the customers' needs or preferences, although such information may be acquired by means of social media or through direct interactions with customers. In online companies, the differentiation of value proposition is possible, but it usually takes form of the so-called mass

customisation. It means that value individualisation results from customers' actions or the application of algorithms. Usually, the company's employees do not take part in the process of individualisation. Due to low potential of generating costs displayed by particular customers, online companies rarely decide to end customer relationships. Nevertheless, such a situation may take place when customers do not obey the company's rules and regulations, resulting in deactivation of the customer's account. Just as in the case of traditional service companies, it is particularly important for online companies to shape their customer portfolios, in order to acquire a desired value proposition (incomes, information, recommendations, etc.) from the customers. Online undertakings are associated with a higher scalability, and therefore are associated with lower limitations of capacities. That is why, in the process of customer portfolio augmentation, the focus is more on the maximisation of the number of customers, than on customer portfolio optimisation, while maintaining proportions between the groups of customers that perform different functions. Moreover, the network effect which frequently occurs in such situations, forces online companies to compete through the number of customers.

In this part of the chapter, a dichotomist approach to the matter has been presented. It may be assumed that the majority of companies will tend to combine the two methods. Nevertheless, it will be put in evidence how customer value management is applied in traditional and online companies.

1.4 Limitations of the Concept of Customer Value Management

When describing the concept of customer value management, one should also present its limitations. The limitations presented in the following part refer to the concept itself and are not associated with its practical implementation.[3]

An important limitation is due to *problems associated with customer lifetime value measurement*. According to the economic concept of value, the value of an asset relies on the value which it may generate in the future. Hence, customer lifetime value reflects the future surplus of value, which the customer will generate for the company reduced by the costs they produce, and is perceived as their present monetary value. Such an approach entails two main difficulties. The first one is how to translate non-financial customer-generated benefits (such as recommendations, information, image benefits, etc.) into monetary value. The second difficulty lies in the determination of the course of future value exchange between the customer and the company. The problems of determining customer lifetime value are particularly

[3] Practical implementation of the concept of customer value management in companies operating in Poland, has been investigated by a team led by B. Dobiegala-Korona in the Department of Value Management (previously: the Department of Marketing). C.f. Dobiegała-Korona and Doligalski (2011).

important, as it becomes the cornerstone for all actions associated with customer groups or particular customers.

Another limitation is *ignoring differences in relationships with customers* and therefore exhibiting excessive tendency to generalisations. The roles played by customers in business models are very diverse. In some business models, customers may act as buyers of low-price goods and possess low bargaining power, as well as greater liberty of switching suppliers. In other cases, customers not only purchase high-value goods, but also co-create them and have a considerable bargaining power. Consequently, they are burdened with high switching costs. It seems obvious that the way of customer value management will differ according to the case.

Building customer value is frequently perceived through the prism of *increasing customer satisfaction*, which should lead to increasing the customer's loyalty and therefore augmenting their value. It cannot be argued that such dependencies never appear, but they do not affect the entire customer portfolio and do not appear in all companies. Especially on the Internet, satisfaction is one of many factors that influence customer loyalty.

A similar problem is *the reductionist approach* which manifests in the tendency to investigate the influence of a sole factor on customer value or other value of nominal character. On the one hand, some researchers ignore the influence of other moderator variables. On the other hand, the correlations between an explanatory variable and response variable are frequently perceived as causal relationships, while they may take form of feedback loops. The willingness to continue the relationship with the company, being the essence of loyalty, is frequently interpreted as the premise of customer's willingness to recommend the company. Garnefeld, Helm, Eggert, and Tax (2011) have proven that it may work the other way round—recommending the company to friends and colleagues may contribute to an increase in loyalty of the recommending person.

1.5 Selected Models and Concepts of Relationship Marketing

In this part of the chapter, selected models and concepts of relationship marketing, which help to better understand the idea of customer value management, will be presented. The first sub-chapter will focus on models of relationships between companies and customers. Next, three models of managerial approach to customer relationships will be elaborated on. Finally, the concept of market driving will be discussed and juxtaposed with a competitive idea of servient approach to the fulfilment of customer needs (market driven).

1.5.1 Conceptual Model of Customer Equity Management

The model elaborated by Blattberg et al. (2011) was introduced in the monograph entitled *Customer Equity: Building and Managing Relationships As Valuable Assets*.

The focal point of the model is the so-called customer equity—a notion similar to customer profitability. The authors introduce a complex pattern in which customer equity becomes associated with the key areas of customer relationship, including customer acquisition costs and customer retention rate. Such a representation allows to include the strategic element of the company's proceedings—i.e. customer equity—into its operational actions.

The authors of the model believe that companies may influence customer equity by three types of customer-oriented actions: customer acquisition, customer retention, and add-on selling, i.e. selling of additional products within the scope of existing relationships. The model by Blattberg, Getz, and Thomas may be contrasted with the approaches most commonly described in the literature, in which the company's ability to generate profits depends solely on one type of action. In the monograph *Loyalty Rules*, Reichheld (2001) perceives customer loyalty as the only source of profits and does not elaborate on other activities from the area of customer relationships nor on actions that influence financial ratios (such as customer acquisition). Blattberg, Getz, and Thomas point out that dedication to only one action may lead to decreasing customer equity. Therefore, proper customer equity management relies on the optimal allocation of resources among customer acquisition, retention, and add-on selling. The importance of the model does not stem from this observation itself, but lies in its theoretical grounding. The authors included in the model the key variables associated with the basic actions taken by the company within the scope of customer relationships and showed how they impact customer equity in the long run.

In practice, the use of the proposed model enables optimal allocation of resources among customer acquisition, customer retention, and add-on selling, of course provided that the company possesses the necessary data. Moreover, the model incorporates the concept of customer life cycle and ascribes its subsequent stages with particular proceedings. Finally, the model is characterised by a considerable simplicity of its theoretical ground and analytical flexibility, which means that it may be adjusted to the organisation of any given company. The authors do not limit themselves to the problem of customer relationships, but provide advice on general organisational management aimed at customer equity maximisation. Nevertheless, the model by Blattberg et al. presents also some disadvantages, mainly due to the popular character of the work. The authors utilise the notion of customer equity and provide a complex formula which serves to calculate it, nevertheless in the publication it is difficult to find the definition of the notion. Moreover, the concept of customer equity is not contrasted with any other ratios, such as e.g. profitability of customer relationships.

1.5.2 Conceptual Model of Personalised Marketing

The concept of personalised marketing, elaborated by Peppers and Rogers, has been presented in various publications, including the work entitled *Enterprise One-to-one. Tools for Competing in the Interactive Age* (Peppers & Rogers, 1997).

The model relies on the conviction that the efforts of competing companies should be focused on obtaining the biggest market share and selling products to the largest number of customers. This is because the key to success in modern economy is often seen in building long-term customer relationships, within the scope of which, customers are offered products adjusted to their individual needs. Peppers and Rogers believe that a company, rather than focus on obtaining an important market share, should focus on customer share, and choose scope economies over scale economies. In the model, the customers are described not only as buyers, but also as active participants of the co-creation process, during which they adjust the company's actions to their expectations by the so-called customisation.

Peppers and Rogers distinguish four stages of personalised marketing: customer identification, customer differentiation, customer interaction, and customisation.

Customer identification relies on constant acquisition of customer knowledge, especially of information regarding their needs, character, and preferences acquired by means of every possible contact channel. According to the model, such proceedings should not focus on a particular market segment, as it had been suggested by previous approaches, such as the idea of mass marketing from the 1980s, but they should revolve around particular customers.

Customer differentiation is a subsequent stage of personalised marketing. It helps the company to determine the strategy for asset allocation, and therefore makes it possible to concentrate on the most profitable customers. According to Peppers and Rogers, two main criteria of customer differentiation may be discerned. These are customer needs and customer value to company (customer lifetime value). In this paper the stage of customer differentiation will be referred to as the stage of customer portfolio segmentation.

Customer interaction takes place after customer differentiation. Peppers and Rogers believe that contacts between the company and its customers should contribute to deepening the mutual relationship by constant actualisation of customer knowledge and perceived value of customer to the company. Each contact with the customer should be a continuation of the previous interaction and the dialogue should be continued from the point in which it was previously ended. The authors believe that the profitability of customer relationships may be attained with the use of modern communication channels that are associated with low unit interaction costs and facilitate the acquisition of customer knowledge.

Customisation relies on adjusting certain organisational aspects to the requirements of customers, based on their needs and value to company. Adjustment of company's proceedings to the customer's need may increase not only the level of customer's satisfaction, but also the level of switching costs, which consequently may lead to the development of customer loyalty.

All the four stages of personalised marketing were presented by the authors in the form of a circle graph, which puts in evidence that personalised marketing does not rely on a single performance of all the actions, but on constant, periodic deepening of personalised relationships with customers.

Introduced in 1993 and constantly updated, the concept of personalised marketing in many ways is still innovative. Peppers and Rogers stress the importance of

customer knowledge management, which includes acquiring information from every possible point of contact and employing it in the process of identification of the most valuable customers. The model emphasises the role of customisation, i.e. adjusting of certain aspects of the company's operations to customers' needs and their value to company. The authors do not limit to the area of customer relationships, but provide a range of advice associated with the use of personalised marketing in company management.

It should be pointed out, however, gathering information on buyers, customer segmentation, and offer differentiation have been already employed in mass marketing for particular market segments. Nevertheless, the model introduced by Peppers and Rogers cannot be interpreted as a simple transfer of the general idea to the area of relationships with particular customers. The authors enhanced the model, e.g. by adding the stage of customer interaction, which suggest that the entire process may be particularly long and difficult.

The authors have taken into account technological changes that have been taking place in recent years, especially in the field of telecommunication technology, owing to which the model is currently commonly applied in implementation of customer relationship management systems.

An important advantage of the concept elaborated by Peppers and Rogers is its contribution to the development of the theory of marketing, as well as its applicable value, particularly important to modern companies. It should not come as a surprise, for both authors hold academic degrees, being at the same time renowned consultants in the field of customer relationships.

1.5.3 Conceptual Model of Delivering Value to Customer

The literature provides several models of delivering value to customers. Such models fall in the category of process-oriented marketing concepts, which usually take form of a sequence of actions enabling creation and delivery of value to customers.

Szymura-Tyc reports that the management of value-creation and value-delivery process was for the first time identified with marketing by Drucker, who believed that 'the concern and responsibility for marketing must (. . .) permeate all areas of the enterprise' (Baker, 2003; Szymura-Tyc, 2005: 66). In the model of delivering value to customers presented below, all the subsequent stages permeate and organise the work of all areas of a given company. It is believed that the notion of value delivery system was first coined by Lanning and Michaels, who, in a work entitled *A Business is a Value Delivery System*, proposed a three-stage model of such a process (Michael, 1988). The model described by Szymura-Tyc (2005) is composed of four levels: defining, shaping, communicating, and delivering value to customer.

On the first level, *defining value to customer* takes place. This stage consists in determining particular value propositions and target groups, to which the proposed value will be delivered.

Creating value to customer is the next stage of the value delivery process. Its main goal is to optimise and coordinate the company's actions aimed at increasing offered value or decreasing costs incurred by customers. At this stage the company makes decisions concerning its brand, image, customer relationships, customers' role in the value co-creation process, etc.

The stage of creating value to customers is followed by the stage of *communicating value to customer*. Communication involves informing customers on the value offered by the company, shaping customers' expectations and creating new needs. The main goal of communicating is to properly influence customers' perception of the value offered by the company, gaining their trust and encouraging them to purchase.

The final stage, *delivering value to customer*, includes distribution, sale, and customer service. The company's capacity of proper value delivery largely depends on the effectiveness of marketing channels which play an important role in the entire process.

1.5.4 Concept of Market Driving and Market Driven

In order to better understand the idea of Internet-based customer value management, it seems important to present two competitive approaches towards customer relationships (Jaworski, Kohli, & Sahay, 2000). The first one (market driven) consists of identifying, understanding, and reacting to customers' (or other market players') needs within an existing market structure. The latter (market driving, driving markets) implies influencing the market structure and the behaviours of market players in a direction that enhances the competitive position on the market. Niestrój (2005) states that the first approach relies on maintaining servient relationship with customers, aiming at the best possible fulfilment of well-identified needs of customers, as well as at gaining their liking and loyalty. Market driving approach, on the other hand, relies on creating new customers by shaping new needs and generating demand. Thus, in the second approach, customers are perceived as a product of market proceedings, and not as the point of departure for marketing actions.

For better understanding, it seems worthwhile to compare the two concepts[4] (see Table 1.2). It may be said that the two approaches are based on the same element: the idea of change. Nevertheless, they differ in the entity which is subject to change. In the market driving approach, modifications are associated with customers, who change their needs and preferences under the influence of the company. Therefore, effectiveness of proceedings concerning market creation depends on the company's persuasive abilities and customers' flexibility. In the market driven approach, it is the company that must display flexibility in order to provide the customer with

[4] An example of the market-driven approach may be provided by the 1-to-1 concept elaborated by Peppers and Rogers (1997).

Table 1.2 Comparison of the market driven and the market driving approach

	Market driving	Market driven
Element subject to change	Customer	Company
Customer's needs	Undefined	Recognised
Type of action	Strategic	Tactic, operational
Level of action	Market	Customer relationship, market
Communication model	Push	Pull, push
Loyalty-building factor	Imposing new standards, uniqueness, supplier switching costs	Satisfaction
Innovations	Disruptive	Incremental
Risk	Non-adjustment of the offer to customers' needs	Ignorance of market changes
Financial benefits	Higher	Lower

Source: own work

value that will satisfy their well-defined needs. Thus, it is indispensable for the companies that employ the customer driven approach to be able to adjust the market proposition to the customer's needs. Obviously, in practice, such a dichotomy rarely appears. Companies that introduce new products to the market usually are aware of customers' needs. On the other hand, even if the company maintains a servient relationship with its customers, it still encourages purchasing behaviours, forms customers' loyalty and sometimes even educates them, and by that to a certain extent makes its customers change their behaviours or preferences.

It may be noted that the two approaches differ also in the manner of perceiving customers' needs. As has been already mentioned, the market driven approach relies on satisfying customers' needs that have been previously recognised. A company that employs the market driving strategy, however, tries to makes its customers aware of the needs they have not recognised before (or even to create new needs), or to find new ways of fulfilling already existing needs.

Market driving is a *strategic* action, for it requires long-term planning, influences the principles of the company's functioning, demands the use of more elaborate supplies (including knowledge), involves high-level risk, and yields results only after a certain time (Vlašić, Troilo, & Kohli, 2010). The market driven approach, on the other hand, may take a *tactic or operational* form, depending on the nature of customer relationship. Yet, differences in the scope of action are much less pronounced. The actions aimed at market driving focus on a market perceived as a group of customers or, within some approaches, as a group of other entities, including intermediaries, complementary goods producers, regulators, etc. Servient proceedings, on the other hand, are frequently aimed at particular customers, although in the case of unified needs, they may be equally applied on a mass scale.

Some differences may be also found in *communication strategies*. In the model representation, market-driving companies rely on the so-called push approach,

i.e. involve in direct actions that aim at influencing potential customers and encouraging them to purchase products, change their perception of the company, etc. (Kumar, Scheer, & Kotler, 2000; Kumar & Shah, 2004). Informing potential customers on the value proposition seems indispensable, for otherwise they might stay unaware of the existence of new solutions. The companies displaying servient approach towards customers are usually bound to the so-called pull communication, in which it is the customer who initiates the contact with the company.

In market-driving strategies, *customer loyalty* may be gained e.g. through providing unique benefits, which are inaccessible by competitors. Another way to maintain long-lasting high-level incomes is to make a given solution become a market standard. In such a situation, not only customer loyalty is produced, but also potential customers are bound to apply it. Any resignation from using a given solution is associated with high-level switching costs. When it comes to the market-driven approach, loyalty of customers stems from fulfilling their needs and making them satisfied. Nevertheless, in the case of more complex relationships, adjusting to customers' needs may also be associated with imposing switching costs. The cost of finding a new supplier and the time needed by the new company to adjust to the customer's needs, combined with uncertainty which accompanies the process, may discourage the customer from searching for new solutions.

Distinctness between the two approaches may be also found on the level of *innovations*. Market-driving actions are usually based on disruptive innovations. Kumar et al. described this situation as an important leap in value to customer, resulting from the use of an innovative technology or the use of a marketing system based on unique business processes (Kumar et al., 2000). In the case of market-driven approach, innovations are usually of incremental nature. It is related with the fact that a customer chooses a company the offer of which best correlates with their needs and sometimes even expects the company to adjust its offer to their requirements. Vlašić points out that managers of market-driving companies, more frequently than it is in the case of other companies, hold academic degrees (Vlašić, 2011). It may suggest that market-driving innovations are formed on the basis of knowledge which has not been yet commercialised and popularised on the market. Incremental innovations, typical for the market-driven approach, frequently have their origin in customer knowledge, acquired in the course of everyday interactions with customers.

Both strategies generate different kinds of *risk*. In the case of market creation and development, it may happen that the solutions proposed by the company, despite their technological innovativeness, will not correlate with customers' needs. Servient approach to customers' needs is associated with a completely different risk: focusing on customers' needs, companies may fail to notice changes taking place on the market, and therefore risk to stick with obsolete solutions. Such a situation does not have to necessary become a problem for the company's present customers, since they receive benefits tailored to their needs, but can make it difficult to acquire new customers. Hamel distinctly elaborates on the tyranny of experience, customers, and markets, which tend to fully engage managers' attention

(Hamel, 1996). However, that over-attachment to the applied solutions may also exist in the case of market-driving-oriented companies.

The studies quoted in this paper prove that ventures funded on the market-driving approach are more likely to obtain considerable *financial benefits* than market-driven companies. It should not come as surprise, as it seems obvious that a higher level of risk taken by companies usually translates into higher rewards. Nevertheless, such results may not fully represent the actual state of the matter. It is possible that they were conducted only among the existing companies, which have taken risk of market driving and survived, which as itself may be perceived as a considerable success. Exclusion of companies that took the risk of market driving and failed may interfere with the research results.

Moreover, it should be noted that the comparison presented above is of a highly dichotomic character, while in practice companies usually employ chosen elements of the two approaches simultaneously. According to Kumar et al. (2000); Vlašić et al. (2010), the two strategies are complementary and should be employed jointly, giving the company the possibility to compete on customer preferences in the short term, and compete over customer preferences in the long term.

As it has been already signalised, Jaworski et al. (2000) define market driving proceedings in terms of influencing the market structure and the behaviours of market players in a direction that enhances the competitive position on the market. In this rather general definition, 'market players' should be understood as end-customers, institutional receivers, suppliers, and competitors. In other approaches appears the element of shaping market structure, as well as preferences and behaviours of the company's stakeholders (Schindehutte et al., 2008). Markides describes market driving actions as 'establishing distinctive strategic positions that are critical to shifting market share or creating new markets' (Hills & Sarin, 2003).

Hills and Sarin have conducted a short survey among over one hundred marketing research workers on the substance of market driving actions. The obtained results can be classified from three perspectives: value building, change and leadership. In the scope of *value building*, there were opinions that new markets can be created by introducing innovative solutions and identifying customers' needs that have not been previously recognised; through 'developing a way of business that is so seductively effective that others in the category can't resist doing the same'; and through 'creating the future'. The second category was *change* in composition of players in the market, in the nature of competition, and in rules of competition. *Leadership* was the last of the discerned areas. The answers included such statements as the necessity to 'lead markets into unfamiliar territory', or to lead new way (Hills & Sarin, 2003).

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Influence of the Internet on Value to Customer

2

2.1 Introduction

The purpose of this chapter is to discuss the influence of the Internet on the value to customer. In the first part the notion of value to customer and its determinants will be presented. These determiners include: value offered to customers by companies, price levels, and non-financial customer costs. As a part of relationship with customers, companies provide them with the value proposition in exchange for the stream of customer-generated values. Classification of the both types of values will be presented in this chapter.

The focus of the subsequent part of the chapter will be on factors which influence Internet-based value proposition, that is: product virtualisation, value co-creation, perception of experience as a value to customer, and network effects. As the summary of the chapter, five strategies of Internet-based competition through value to customers will be discussed.

2.2 Value to Customer in the Context of Exchange

2.2.1 Concept of Value to Customer

According to Kotler and Keller (2009: 5), marketing is a societal process by which individuals and groups obtain what they need and want through creating, offering and freely exchanging products and services of value with others

The value exchange between the company and the customer was described by Miller and Lewis (1991). They state that a value exchange model should not focus solely on the economic aspect, but incorporate all kinds of values (economic, social, psychological, etc.). Similarly, Bagozzi (1975) affirms that value exchange, apart from material values, includes also nonmaterial and symbolic values.

The perception of the relationship between the customer and the company as an exchange process draws from the sociological theory of exchange. According to

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Homans, the founder of the exchange theory, social behaviour is an exchange of material and nonmaterial goods, during which a person aims not only at the profit maximisation, but also seeks the state of balance between their costs, inputs, and profits, and the profits of other participants (Szacki, 2002: 838–841).

In recent publications, the problem of value exchange is perceived also through the prism of the so-called value networks, i.e. networks between companies, which enable information flow and privileged relationships, by means of which cooperation on the process of creation and delivery of value to customers becomes possible (Szymura-Tyc, 2006: 47). The problem was equally analysed by Porter, who formulated the notion of value systems, i.e. systems including a wide repertoire of actions that integrate value chains of many companies (Porter 2006: 16, 204). It should be also noted that value exchange involves all the company's stakeholders (Miller & Lewis, 1991). Nevertheless, in this paper, the problem of value exchange will be perceived solely from the perspective of the relationship between the company and the customer.

In the exchange process, the companies provide customers with a set (proposition, stream, bundle) of benefits (constituent values),[1] in exchange receiving customer-generated values. Customers supply the company with such values as incomes, recommendations, information, etc.

It is believed (Miller & Lewis, 1991: 66) that the notion of value to customer was introduced by Drucker in the work entitled *The Practice of Management,* published in 1954 (Drucker, 1993:54). From that moment on, the notion of value to customer, both in literal as well as in similar forms, started to appear in publications on marketing and management (Payne & Holt, 2001). It is worth mentioning, that the term *customer value* may be interpreted in several ways, e.g. as value to customer (customer perceived value or customer received value) and as the customer's value to company (value of the customer, customer lifetime value) (Smith & Colgate, 2007).

The linguistic ambiguity is also reflected in the term's definitions. Woodruff perceives value for customer as 'customer's perceived preference for, and evaluation of, those product attributes, attribute performances, and consequences arising from use that facilitates [. . .] achieving the customer's goals and purposes in use situations' (Smith & Colgate, 2007). It is a very extensive definition, since it relies on both pre- and postconsumption benefits. Values for customer may be of emotional or cognitive nature, and may be associated with product attributes, use and consequences (Smith & Colgate, 2007). Hoolbrook provides a rather abstract definition of value for customer, perceived as 'interactive, relativistic preference and experience' (Smith & Colgate, 2007). Nevertheless, Smith and Colgate (2007) state that this definition captures some of the key characteristic of value for

[1] As already mentioned, there is an alternative approach which relates to the concept called *service dominant logic*. According to it, companies do not create "value to customer", but only "value proposition", which can be accepted or rejected by customers. The value is then created by customers themselves during the consumption act.

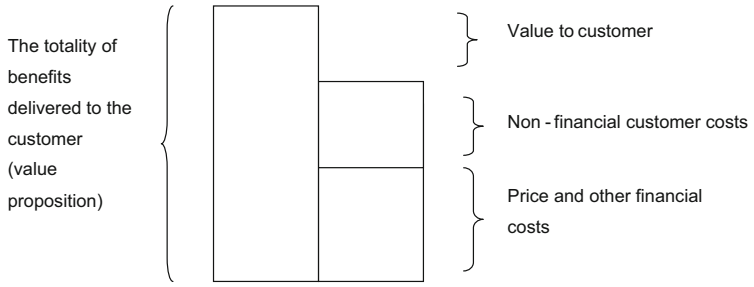

Fig. 2.1 Value to customer as a division of benefits delivered to customers. Source: own work

customer, for it is perceived uniquely by a given customer; it is contextual, for it depends on the product, the consumer and situation; and it is dynamic, for it changes over time. Value for customer is a perceived value, since customers care only for the value they perceived and not the value that they have actually acquired (Szymura-Tyc, 2006: 76).

The notion of value for customer is similar to the notion of utility applied in microeconomics. "Utility" means the capacity of a given good to fulfil one's needs and may be perceived in terms of subjective pleasure or usefulness that a person derives from consuming a good or service (Samuelson & Nordhaus, 1994). The notion of utility does not include, however, the costs of product purchase and refers solely to the benefits that may be gained by customers after purchasing the product.

In this paper, the value to customer is perceived as benefits obtained by the customer from the company through an exchange process, reduced by the price paid by the customer and incurred transaction costs (Szymura-Tyc, 2006: 57). The price associated with the exchange is the determiner of the value division between customers and the company (see Fig. 2.1). The customer incurs also non-financial costs.[2] The category of non-financial costs borne by the customer includes transaction costs (costs associated with entering into transaction, e.g. costs of information acquisition and processing, costs of transaction starting and monitoring, and costs of execution of obligations) and other costs associated with consumption or its consequences (e.g. loss of prestige). Non-financial customer costs may be equally perceived from the perspective of perceived risk, time spent on acquiring given value or effort put in the proceedings (e.g. the necessity to relocate, negative emotions).

Therefore, value to customer may be perceived as a sum of benefits (constituent values) reduced by the price and non-financial customer costs. The inclusion of non-financial customer costs in the model of value to customer is important, for it gives a wider perspective on the criteria of the customer decision making process, which is particularly important on the Internet, where the exchange frequently takes

[2] For simplification, other financial costs associated with value acquisition will not be taken into account.

non-monetary form. A definition formulated in such a way implies that the company may increase the final value to customer by augmenting delivered benefits, or by decreasing prices or reducing non-financial costs. Moreover, sometimes the company may increase prices without any harm to the level of value to customer, provided that it is able to reduce non-financial costs generated by them. Such a dependency was observed in the case of online auctions, where the sellers of higher reputation, seen as the number of positive comments made by their past customers, frequently offer products for higher prices (Obłój & Obłój, 2006). A detailed description of this phenomenon may be found in the chapter on price strategies.

Simplicity may be perceived as one of the main advantages of such an approach towards value to customer. Nevertheless, it does not facilitate measuring the exact level of value delivered to the customer, since (as it was already said) value for customer is subjective, contextual, and changes with time. Consequently, it should be stressed that changes introduced in the value proposition delivered to customers and price modifications may lead to various changes in the final value to different customers.

Some elements of the aforementioned model of value to customer have been empirically proven. The research conducted by Chen and Dubinsky proved that the valence of online shopping experience is positively correlated with the perceived customer value (the correlation was 0.31). On the other hand, product price was negatively associated with perceived customer value and the correlation amounted to −0.39 (Cai & Xu, 2004).

It seems justified to present an alternative approach, in which value to customer is presented as the ratio of the acquired benefits to costs a buyer incurs (Payne & Holt, 2001). An argument for application of this model is the presentation of offers from the perspective of relationship between quality and price, typically employed in modern economy. On the other hand, this approach cannot be applied for assessment of free products, therefore it will not be utilised in this paper. If the approach is used to assess the value to customer of an online article and which provides the reader with a certain benefit and is available for free which is associated with low transaction costs (time spent on a few clicks), it will come into evidence that the value for customer is disproportionately high, which results from properties of dividing by small, close to zero numbers.

A related concept is value proposition. According to to Payne and Frow (2014), it is an organisation's offering to customers, representing a promise of benefits of value that customers will receive during and after the usage experience. It identifies both product and experiential benefits and costs (or sacrifices) that result from the relationship between customer and organisation.

2.2.2 Categorisation of Constituent Values to Customer

The categorisation of constituent values, perceived as benefits resulting from the relationship with the company and altogether constituting the entire value proposition, seems of particular importance. Just as in the case of the definition of the

notion, categorisations of values to customers are numerous and may be employed in the company's offer analysis. Hence, it seems logical to apply various categorisations, based on the sector in which a given company operates.

The simplest categorisation of values to customer includes functional and symbolic values. Functional values are associated with the basic use of the product for fulfilment of the basic customer need. Symbolic values reflect, manifest or influence customer's lifestyle, views, or personality. More elaborate classification incorporate also emotional and social values.

Dobiegała-Korona elaborated a different categorisation of values delivered to the customer by means of modern marketing (Dobiegała-Korona & Doligalski, 2004: 15):

1. Value of purpose—capability to fulfil the customer's needs or solve their problems;
2. Value of form—proper shape, ergonomics, size, style, colour, functionality, and equipment;
3. Value of time—availability of product or service in time convenient for the customer;
4. Value of place—delivery of products to a place convenient for effectuating purchases;
5. Value of property—convenient transfer of property rights;
6. Value of communication—providing customers with information and knowledge about a product, place and terms of acquisition, as well as the ability to receive customer's feedback regarding their needs, preferences, and reactions to the company's marketing actions;
7. Value of brand experience—delivery of sensory, emotional, cognitive, behavioural, and relationship values that complete functional values.

The categorisation presented above served as a basis for a classification of constituent values (benefits) offered to customers by means of the Internet. There are no significant differences between the two approaches, nevertheless, a separate classification of constituent values delivered via Internet to a greater extent underlines the specificity of this medium:

1. Value of purpose;
2. Value of communication;
3. Value of convenience;
4. Value of experience;
5. Value of individualisation;
6. Value of affinity;
7. Value of time;
8. Value of security.

Value of purpose is associated with the company's capability to fulfil customers' needs in conformance with their expectations. In fact, the application of the Internet

in customer relationships does not have a significant impact on the goal value, since customers' needs to a large extent remain the same. The exception may occur when a company creates or shapes customers' needs, as well as when the development of the Internet contributed to the appearance of new customer needs, or changed the existing ones.

Value of communication is provided by companies to the customers both in traditional and Internet-based relationships. In the second case, however, the role of communication increases significantly, which results from the lack of direct contacts between the company and the customer. Compared to traditional model of communication, the role of customers is of greater importance. Communication is not limited to two-sided information exchange between customers and the company's employees. Communication takes a three-sided form, since the customer communicates also with other customers (consumers, users), which may have an important impact on their purchase decisions. Possibilities of faster actualisation, however, are accompanied by customers' expectation, who believe that the obtained information are up to date. Just as in traditional economy, communication may be associated with informative functions, but may also serve as a means of customer education.

The place value, which appears in traditional economy and which is associated with the necessity to travel a certain distance, loses its importance and becomes replaced with *value of convenience*. This category is comprised of a series of benefits of the possibility to initiate and then continue the relationship with a company without any significant problems. Value of convenience may be perceived through the prism of lowering non-financial customer costs (transaction and other non-financial costs).

Moreover, the Internet offers companies a possibility to build customer relationship based on customer *experience*. Evoking desired experience in customers may rely on providing values of aesthetic, entertainment, or education kind, as well as on involving customers in actions in which they show interest. Therefore, experience value corresponds to form value presented in the precedent classification.

The application of the Internet in customer relationships gives a wider range of possibilities of adjusting value propositions to customers' individual needs. *Individualisation* may take form of in-depth or superficial modification of value proposition (c.f. mass customisation).

The category that has significantly gained in importance with the increasing role of the Internet is *value of affinity*, which stems from the growing facilitation of entering into interactions with other users. Benefits related to becoming a member of various consumer groups may include e.g. knowledge of product use, identification with a group, and development of interpersonal bonds.

The change of the role of time among other benefits offered to customer seems of particular interest. *Value of time* has a very important meaning in customer relationships. It must be guaranteed in order to avoid customer dissatisfaction, nevertheless provision of time value does not have to necessarily satisfy the customer. It stems from the fact that a properly functioning website or fast response of customer service department are expected by the customer, which, when

delivered, do not increase their satisfaction. Competing through value of time may help to gain an important market position, especially when it comes to complex processes, such as product development and market introduction.

Compared to traditional economy, the role of *value of security* increases significantly on the Internet, which results from an increased level of customer perceived risk (Schlosser, White, & Lloyd, 2006). Internet solutions, such as the possibility to pay by credit card, do not necessarily involve a higher risk than offline transactions, nevertheless they are perceived as more dangerous. Hence, security value, which results from minimisation of customer perceived risk becomes one of the benefits that the company must take into consideration while designing value proposition.

The values that are particularly difficult to transmit via Internet are *prestige* and *luxury*. It results from the fact that usually online products and services display a democratised character and are not associated with limited access, typical for prestigious and luxury goods. It is particularly visible in advertisement exchange, where the goods are offered for free in exchange for the possibility to display advertisements. The boundary of high fees, typical for luxury goods, in this case does not exist. The integration of luxury branding within the Internet is possible, nevertheless companies seem sceptical of such proceedings (Okonkwo, 2008). Products and services associated with the Internet are usually utilitarian in their character, therefore present an opposition to luxury goods, which deliver higher value for a much higher prices.

Attempts at assigning value categories to particular kinds of products are associated with a high risk of mistake. It may be noted, however, that the values of purpose goal, communication, security, and convenience dominate in complex goods, the purchase of which is associated with considerable customer involvement. These constituent values are of equal importance to institutional customers. When it comes to low-involvement products and products reflecting a given lifestyle or customer's beliefs, experience and affinity values become dominant elements of the value proposition.

It seems interesting to present another approach to categorisation of Internet-based benefits. Joo discerned following key components of customer value in e-business: economy, convenience, speed, personalisation, community, emotion, and trust. Anckar et al. proposed another classification of benefits delivered by an online grocery store. The authors discerned: competitive prices, broad and specialised assortment, superior shopping convenience, and superior customer service (Joo, 2007: 53; Ratchford, 2009).

2.2.3 Pricing Strategies on the Internet

Price level is one of the determinants of non-financial customer costs. In this part, various aspects of pricing strategies on the Internet will be described. These are: factors influencing price levels on the Internet, specific character of delivering free-of-charge products and services, dependencies between seller's credibility and offered prices, dynamic price differentiation, and algorithmic trading.

Ratchford enumerates *factors influencing price levels on the Internet*. According to the researcher, greater price transparency leads to reduction of prices (Ratchford, 2009). Price transparency makes it easier to compare prices, which is associated with low costs of price comparison in different shops, aggregation of sellers in one place (e.g. as one online auction), and availability of mechanisms that compare prices offered by various sellers. Another factor that helps to reduce prices is a large number of available suppliers, who, when it comes to national transactions, cannot compete by company localisation. Marginal role of company localisation as a source of value to customers contributes to increasing of importance of price as a competitive factor.

Some factors may contribute to price augmentation: diversified level of reputation exhibited by sellers, switching costs, and the necessity to pay fees to intermediaries, such as online auctions or price comparison services. Moreover, material products are also associated with delivery costs.

Switching costs, in the case of online stores, may be associated with trust invested in a given store, customers' habits or reluctance to bear costs of learning how to shop in other stores, etc. High switching costs may result in higher costs of customer acquisition and higher prices offered to customers on subsequent stages of the relationship developed with the company. Such type of strategy in form of price differentiation was employed by Amazon.com, which in 2000 started to offer lower prices for DVDs to new customers than to existing ones (Stone, 2000). When the case became publicised, the company abandoned the idea, arguing that it was merely a random price test, in which no customer demographic data were used. Moreover, Amazon.com returned its customers the overpaid sum, which on average amounted to USD 3.10.

Despite of increased price transparency, Internet is equally associated with important *price differentiation*. According to Ratchford, it results from differences in sellers' reputation, costs of finding offers by customers, and differences in offers themselves. Differences in search costs incurred by customers are associated with their cognitive aptitudes, experience in using the Internet, etc.

A popular price strategy employed on the Internet consists in offering services or products *without any charge*. In a monograph entitled *Free—The Future of a Radical Price*, Ch. Anderson presents five situations in which such actions are undertaken: direct cross-subsiding, operations as multi-sided platforms, employing the freemium model, offering demonstrative versions of products, and operations on nonmonetary markets (Anderson, 2009).

Direct cross-subsidies appear when a customer receives some products for free but has to pay for other ones. On the Internet, this *modus operandi* is frequently employed by online stores, which offer free delivery, usually when the price of goods exceeds a certain level. In such a situation, money gained by the seller should easily cover the price of the delivery.

Free benefits may be also offered by *multi-sided platform*, a company generating profits based on at least two groups of customers (Anderson calls it a three-party system). In the case of online portals, the first group consists of users who benefit from free services, such as articles, e-mail accounts, search engines, etc. The other

group is comprised of advertisers, who pay for the possibility to reach the portal's users with their promotional messages. In such a situation, the free value strategy aims at acquiring customers of a given profile, who will serve as a basis for the company to acquire benefits from the other group (i.e. advertisers).

Another method consists in offering basic benefits for free and charging users for more attractive ones. This strategy is frequently referred to as the *freemium strategy*, the name of which was coined from two words—free and premium (Heires, 2006; Niculescu & Wu, 2011). From the company's perspective, such type of strategy may seem particularly attractive, since it gives a possibility to acquire a considerable number of free users, and help to make the company's brand more recognisable. Moreover, it may generate revenues, or even profits, if a company is able to encourage the customers to use the premium solutions. Unfortunately, in practice, the model relying on the assumption that premium users will be able to support regular customers does not always work out. The main problem is to elaborate a set of premium solutions for which the customers benefiting from free solutions will be willing to pay. Another factor that makes it difficult to employ such a strategy is customers' unwillingness to pay for online contents and services. Anderson admits that in the freemium model, only 5 % of customers pay for the services, the remaining 95 % being free customers. That means for every user who pays for the premium version of the site, 19 others get the basic free version (Anderson does not provide any examples for, nor sources of this statement). The freemium strategy is frequently used by social networking services, such as Fotka.pl. The majority of the offered features is for free, except for an additional service called "the star". It gives the possibility to distinguish a user's profile with a star symbol and to make use of some additional functionalities. According to Rafał Agnieszczak, the founder of the website, only about 1 % of its users decided to purchase the star package, generating about 30 % of the total income of the company. The remaining income comes from advertisers.[3]

A similar model of offering certain benefits for free relies on providing *demonstrative versions of products*. In the case of books it may be associated with the possibility to read only some of its pages, in the case of music—to listen to the beginning of musical compositions, and in the case of software—to use a time- or functionally-limited versions of the product. This strategy is employed mainly to help customers choose products best tailored to their needs. To a certain extent, this method is similar to the freemium strategy, nevertheless one may find several important differences between those two approaches. Demonstrative versions of products, just as free samples used on traditional markets, are meant to promote paid services and thus encourage customers to buy full versions of products. From the point of view of consumption, demonstrative versions do not present any important value. In the freemium model, free benefits are often characterised by considerable attractiveness and are able to satisfy the needs of many customers.

[3] Information provided by Fotka.pl on 2012.04.18.

Furthermore, in the freemium model, it is the premium customers that support free users, who may employ the company's services without the necessity of paying.

The strategy of free benefits may equally manifest on the so-called *nonmonetary markets*, i.e. markets that allow value exchange which is not associated with monetary exchange nor cross-subsidies. This strategy is employed e.g. by authors publishing their works, or other types of contents, on the Internet and offering free access for other users. In exchange, they gain such benefits as reputation, feedback or recommendations. Publication of free contents may equally stream from altruism, which motivates users to quasi-anonymously edit Wikipedia entries or to use the processing power of their computers to help develop a given project. According to Anderson, nonmonetary market may be also based on labour exchange: in order to gain access to particular contents, users have to do some kind of work, e.g. solve Captchas. Another example of nonmonetary market may be provided by piracy, i.e. a situation when digital products are used illegally, with infringement to copyrights.

An element which seems particularly important from the perspective of online pricing strategy is the *correlation between the seller's reputation and prices*. In the article *Diminishing Returns from Reputation: Do Followers Have a Competitive Advantage?*, Obłój and Obłój presented how the sellers' reputation can influence the price of their transactions on internet auctions. The authors measured the level of reputation by analyzing all feedback received by the seller. Reputation perceived in that way may increase the level of mutual trust. The study showed that the sellers with higher reputation could sell their product at higher prices. Nevertheless, the final increase in price associated with the seller's high reputation started to diminish. It may mean that investing in reputation can bring benefits, but the benefits related with reputation increase slower than the reputation itself (Obłój & Obłój, 2006). The results of the research seem to prove the conclusions from the model of value to customer, according to which customers take into consideration not only the price of a product, but also non-financial costs, such as the risk associated with the lack of trust for the seller. Earning customers' trust, which results in decreasing of non-financial costs, allows to increase the product price while maintaining the same value to customer.

In the article entitled *The Digitization of Word of Mouth*, Dellarocas comes to similar conclusions. The author compares various research on the feedback mechanism employed by the eBay auction website, which aims at limiting information asymmetry of the potential customers. The presented research shows that the seller's reputation has a positive influence both on the product's price and likelihood of purchase. Even though more detailed conclusions of the presented research often seem to be contradictive, one of the most frequently appearing opinions is that the impact of the seller's reputation is bigger in the case of products associated with higher risk or with higher price. However, the question of the probable influence of customers' negative opinions still raises controversies. Some researchers quoted by the author believe that they can have a negative influence on the price of transaction, other think that such a correlation appears only in the case of second hand products. Finally, there are researchers who do not believe in existence of such an

interconnection. Moreover, Dellarocas calls into question the effectiveness of eBay's feedback mechanism, since over 99 % of the opinions are positive (Dellarocas, 2003). This problem seems to be more universal, as the dominance of positive assessment can be observed also in the case of a Polish online auction—Allegro.pl (Allegro.pl: http://www.allegro.pl/, viewed, 2014).

The results suggesting an equivocal influence of sellers' reputation on prices of transactions correlate with the conclusions reached by Bapna, Jank, and Shmueli (2008). The authors took into consideration many more parameters, such as for example auction duration (bidding time). It was observed that in auctions with high-rated sellers these are the longer auctions that enable to achieve higher price levels. On the other hand, low-rated sellers may achieve higher price levels by short auctions. In the case of high-rated sellers, there is a positive correlation between the auction duration and the price level. These results may be explained by means of transaction cost theory: a longer lasting auction gives better access to information, and therefore enhances the decision-making process.

A similar observation on the lack of immutable correlation between the price and the seller's reputation was equally made by Liu, Wei and Chen, who conducted a research on a Chinese online marketplace Taobao.com. The results proved that high reputation sellers attract experienced consumers, who by nature are more price sensitive. On the other hand, low reputation retailers are more likely to charge higher prices, targeting less experienced or more naive customers. Consequently, the correlation between seller's reputation and price of the offered goods is different than it was showed by the results of the researches quoted above. What is the reason of differences in pricing strategies exhibited by various online shopping services? Search costs associated with shopping at Taobao.com may be higher because of different information architecture, different availability of search tools, and overwhelming number of offers. Hence, the assumption that transactional costs on electronic marketplaces are significantly lower in this case does not seem valid (Liu, Wei, & Chen, 2009).

An interesting innovation in the scope of pricing strategies is the so-called *group buying* (collective buying), which relies on offering given products at prices that are often 50 % off the original retail prices. In the recent years, such kind of shopping has gained in popularity, which in consequence led to the appearance of many companies that started to imitate the original group buying model introduced by Groupon.

Such undertakings operate as multi-sided platforms. They serve two groups of customers: consumers, willing to purchase products or services at attractive prices, and companies offering goods. Value proposition offered to customers includes the possibility to buy a narrow range of goods at significantly reduced prices. In order to take part in such a promotion, the customer has to constantly monitor the list of current promotions and make fast, almost impulsive, decisions. Nevertheless, it is not necessarily associated with higher transactional cost, at least in the case of customers, who start to perceive offer monitoring as a kind of ritual, for the participation in which they are awarded with a possibility to buy goods at attractive prices. The situation seems more complex when it comes to the other group of

customers—the merchants. They can benefit from discount voucher service by price discrimination (differentiation) and advertising (Edelman, Jaffe, & Kominers, 2011). In this context, price discrimination means the possibility to offer much lower prices to the consumers who up to now have not been interested in the company's products or services. Discount voucher services may equally help to advertise the seller's products. Usually, customers buy goods at 50 % of their actual price. Another 25 % of the standard price is the fee charged by the service. Consequently, the company sells its goods for 25 % of the standard price. Hence, the question on profitability of such undertakings seems particularly justified.

Such kind of promotional actions are of greater use to the companies with dominant fixed costs, in which variable costs associated with servicing of particular customers are not pronounced. Attractiveness of such kind of actions increases if the company has at its disposal unemployed productive forces, the costs of which—due to high level fixed costs—it has to bear, regardless of the situation. Such is the case of services that require an expensive infrastructure, e.g. hotels, cinemas, cruises, or swimming pools. In a reverse situation, when variable costs prevail, the attractiveness of such actions decreases. The research proved that a large number of restaurant owners were not satisfied with such type of promotion (Dholakia, 2010), since the majority of customers acquired in such a way was characterised as disloyal and unwilling to purchase products not included in promotion (i.e. high-profit products). The research also showed that the promotion was profitable for 66 % and unprofitable for 32 % of respondents. Moreover, the percentage of merchants who reported that the promotion was unprofitable was the highest among restaurants and amounted to 42 %.

According to the respondents, promotional campaigns of such kind are aimed at customers who display transactional approach and are unwilling to engage in a long-lasting relationship with a company. Group buying, however, may be used to sell additional product at standard prices (cross-selling), especially by companies without a recognizable brand.

Furthermore, the use of Internet and new technologies in marketing enables *dynamic price discrimination*, i.e. charging customers with different prices for the same products, the level of price being set automatically, based on such variables as product availability, customers' interest, the amount of time to use the offer, or the price level of competitive offers.

Dynamic price discrimination is usually employed in the case of easily defined goods, with high level of standardisation, which lose in value with time (e.g. airline tickets, travels, hotel services). A typical example may be provided by airline tickets, the price of which depends on the number of seats left and time of departure, and by online auctions, on which the price level is conditional upon offers to purchase.

On financial markets, a phenomenon similar to dynamic price discrimination exists. It is the so-called *algorithmic trading* (high frequency trading), which consists in using algorithms to place sell and buy orders, mainly for shares and derivatives, in specified conditions. In practice, it is mainly used for making ultrafast transactions (sources mention one million operations per second), which,

according to some researchers, may lead to increasing market instability and therefore entail unexpected market crashes (Hendershott, Jones, & Menkveld, 2011; Matusiak, 2012).

An interesting example of using algorithmic trading may be provided by Amazon.com. The company sells books, but it also gives a possibility to other entities to sell books, mainly used, by means of its platform. In order to increase value to the sellers, the company utilises dynamic price discrimination by employing various kinds of algorithms. In April 2011, a blogger described an interesting situation: a book on insect biology entitled *The Making of a Fly* was offered by one of the sellers for USD 23 million (exactly USD 23 698 655.93), while another user wanted to sell it for about USD 18 million (exactly USD 18 651 718.08) (Eisen, 2011). Why was the price so high? A new book was offered by two sellers, who determined the price according to the offer made by the competitive seller. One of them probably set the price to reflect 98 % of the price offered by the competitor, the other—to reflect 127 % of the price of the first one. With each iteration, the prices increased until they reached the level described above. After that, the price was probably manually corrected to the level of about USD 100. One should also ponder on the pricing strategies employed by both sellers. Offering products at a slightly lower price than the competitor seems understandable. The strategy used by the other seller seems more interesting. The possibility to offer products at a higher price may be associated with a higher level of reputation. In this case it cannot be seen as a key factor, since both sellers exhibited a similar reputation level (i.e. how the seller was rated by buyers). Therefore, it seems even more justified to ask how high the level of reputation must be in order to encourage customers to pay a price which is 27 % higher. It seems plausible to assume that the seller with the higher price did not have the book, which he was willing to sell, and the 27 % higher price was designed to cover the costs of buying the book from the competitor and other arising costs (delivery, etc).

2.2.4 Transaction Costs of a Customer on the Internet

One of the determinants of value to customer are the non-financial costs, including transaction costs and other non-financial, consumption-associated expenses arising after conclusion of a transaction.

According to Williamson, transaction costs are comparative costs of planning, adaptation and supervision of tasks assigned to various governance structures. Transaction costs may be described as costs relative to concluding a transaction (Williamson, 1985), however does not include the price of the good being purchased (in the case of buying), but the sum of monetary and non-monetary costs, which have to be incurred in order to conclude the transaction. It should be stressed that transaction costs appear on both buyer's and seller's side.

The customer's participation in the purchase process is related to following types of transaction costs: *the costs of need identification*, which are relatively low in the case of the purchase of a convenience product, but significantly increase e.g. when

it comes to identification of the needs of a company in the scope of an IT system. Another stage consists in *translating customer's needs into product parameters*. The next stage are *the search costs* associated with the search for information on products able to satisfy the needs and on suppliers offering such products. After selecting a supplier or a group of suppliers, the customer has to incur communication *and negotiation costs*. If the transaction is structured as a purchase of valuable goods, associated with high risk and being of importance to the customer, they are more willing to bear *transaction security costs*, e.g. manifesting in hiring a lawyer or taking out insurance. The next group of costs are *the ordering costs*, which include both financial (e.g. commissions on payment) and non-financial fees (e.g. identifying the supplier's transactional solutions and adjusting to them). Subsequently, the customer has to incur *the reception cost*, associated with transport, but also with verification, whether they have received the expected benefits. Their absence may generate additional *costs of enforcing the value*, expected by the customer, but not received from the supplier. Additionally, *the costs of product learning* and the costs of adjustment of the product to the users' needs may appear.

The transaction costs incurred before effectuating the transaction, i.e. the costs of preparation and the cost leading to execution of the transaction, are referred to as *the coordination costs*. Finally, the costs appearing after conclusion of the transaction, related to execution of the terms of the transaction, are called *the motivation costs* (Williamson, 1979). It is assumed that the coordination costs appear as a product of bounded rationality (e.g. stemming from information asymmetry) and the motivation costs appear as a manifestation of opportunism.

Williamson (1985) discerned two behavioural assumptions, influencing the transaction costs, i.e. bounded rationality and opportunism. *Bounded rationality* consists in making non-optimal decisions, being a result of limited information possessed by customers, taking into consideration solely short-term aspects, acting under the influence of emotion, etc. *Opportunism* is a condition of self-interest seeking with detriment to the other party.

The transaction cost level is also influenced by such factors as asset specificity, uncertainty and transaction frequency. *Asset specificity* is defined as the necessity to make particular investments or actions, which are applicable solely in relation with one particular supplier. *Uncertainty* is the degree to which the subject can not anticipate the results of actions made by itself or by other subjects. According to Williamson, uncertainty has the strongest influence on the transaction costs and *transaction frequency*—the weakest (Williamson, 1985).

In the majority of studies related to the subject of transaction costs, the authors tend to employ the notion of "uncertainty", nevertheless in the following part of this paper, the notion of customer risk associated with a relationship with a company will be used. It describes all the possible undesired situations which may occur as an effect of maintaining a relationship with a company. From the customer's perspective, Internet-based company relationships display a higher level of risk than relationships founded on direct contact. It does not come as a surprise, since a higher risk is equally perceived in the case of other impersonal marketing channels,

Table 2.1 Classification of perceived customer risk, according to its source

Perceived risk facet	Description
Cognitive complexity risk	Making of non-optimal decisions resulting from impossibility to analyse and assess available information (*vide* bounded rationality)
Company risk	Losses resulting from the company's dishonesty or neglect
Technological risk	Losses resulting from malfunctioning or improper use of a particular technology
Third party risk	Losses resulting from the actions performed by the third party, such as cyber criminals
Risk of choosing a wrong standard	Losses resulting from limited functionality caused by technological limitations of the applied standard

Source: Own work

such as catalogue sales, mail order, or telephone sales (Forsythe, Liu, Shannon, & Gardner, 2006).

It should be also noted that the customer's risk related to a relationship with a company through Internet is frequently regarded as the risk associated with the purchases effectuated by the customer via Internet. In fact, product purchase is just an element of a broadly perceived customer's Internet activity. Apart from buying products, customers use the Internet to communicate, browse information, find amusement and also to perform more complex actions, such as financial asset management, ticket booking or learning. In many cases, the customer becomes involved in a value co-creation process. Higher involvement in the relationship with the company increases the probability of an unwanted situation occurring, i.e. a raise of the customer's risk.

In the following table, the risks associated with Internet-based relations with a broadly perceived environment are classified according to their possible causes (Table 2.1).

2.2.5 Customer-Generated Values

In the value exchange process, the company provides the customer with a set of values (benefits), receiving in exchange customer-generated values (c.f. Fig. 2.2). In this paper, values offered the company by customers fall into two categories. The first category includes values delivered directly to the company, such as incomes; values for other customer groups; data, information and knowledge; value co-creation-oriented actions; economies of scale. The second category is comprised of values that are generated also by other—current or potential—customers, such as recommendations, observational learning, or benefits of network effect.

One of the most important benefits provided by the customer to the company are *cash incomes*. They have an influence on the company's profitability and liquidity and help the company to generate values for remaining stakeholders, such as employees, suppliers, and shareholders.

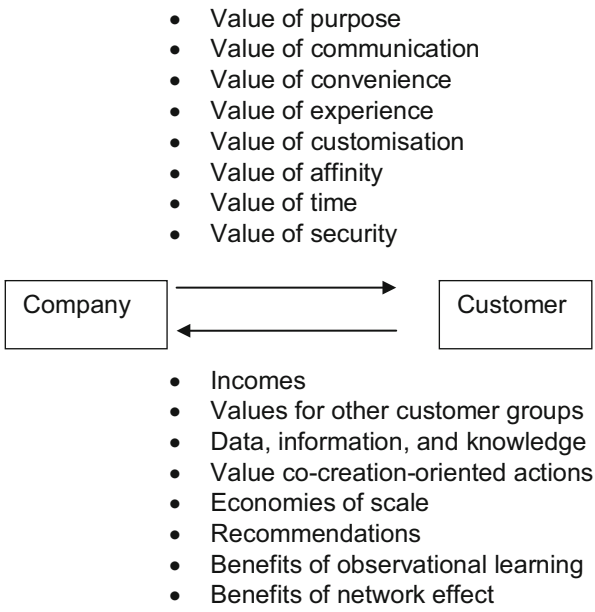

Fig. 2.2 The scope of value exchange between the company and the customer on the Internet. Source: own work

Apart from cash incomes, customers deliver additional benefits by making use of free services offered by the company and thereby increasing *values for other customer groups* (e.g. advertisers), which use paid services offered by the company, revolving around the free customers. A model of value creation for the company based on two groups of customers is frequently observed in modern economy in form of the so-called multi-sided platforms.

Another customer-generated category of values are *data, information, and knowledge* transferred to the company. Apart from data that have to be transferred in order to enter into transaction, the company receives information on the customers' needs and preferences, previous product-brought experience, etc. Information and knowledge acquired from customers may contribute to creation and implementation of innovations. In the recent years, the idea of co-operation with customers for the development of innovations has gained in popularity and became the subject of numerous publications (Ulwick, 2002).

Moreover, customers may *actively participate in the value co-creation process*. Value co-creation takes place when customers adjust value proposition to their own needs (c.f. mass customisation), or to the needs of other users. In this case, benefits for the company include savings associated with actions undertaken by customers, who define their own needs, translate them into product parameters, and take the risk of losses which may arise from wrong product decisions.

Customers who purchase the company's products not only generate cash incomes, but also contribute to the creation of *economies of scale*. Such economies are especially produced when in the totality of product manufacturing costs, fixed costs prevail. Hence, an increase in production helps to divide fixed costs between a constantly increasing number of products and thereby contributes to diminution of

unit costs associated with product manufacturing. Economies of scale are typical for the industrial sector, but they also appear in e-business undertakings.

Another important type of value delivered by the customers are *recommendations*. Owing to recommendations, the information on the company's offer reaches potential customers by means of informal communication channels. It should be noted that if recommendations are spontaneous and are not a result of the so-called viral marketing, they help to acquire new customers or promote the company's image without generating additional costs for the company. Obviously, the company does not control content of such type, which may be also negative and harmful to the company's image, as well as contribute to increasing customer acquisition costs.

A category similar to recommendations are *benefits of observational learning*. Observational learning relies on changing the behaviour of a customer under the influence of the action or consequences of actions taken by other consumers, without the knowledge of their motivations. When it comes to customers of online stores, observational learning may take place based on the analysis of the most frequently purchased products, or products bought together with a given item (Chen, Wang, & Xie, 2011). Image benefits associated with observational learning appear when a company strengthens its image by informing other customers that it cooperates with a particular entity. It is common for the institutional market, on which the company's potential and credibility are assessed through the prism of the customers it services.

Another category of values generated by customers are *benefits of network effect*, i.e. a situation in which value for customer increases with the number of customers served by the company. Such a phenomenon frequently appears e.g. in the online auction sector, for which the size and quality of the customer portfolio is the main determiner of the value to buyers and sellers. Customers that decide to use a product associated with network effects increase its attractiveness for other potential customers.

2.2.6 Types of Internet-Based Value Exchange Between the Company and the Customer

For the purposes of this paper, the author distinguishes three types of Internet-based value exchange between the company and the customer: initial exchange, advertising exchange, and monetary exchange.

Initial exchange is employed by traditional companies that use the Internet to enter in contact with customers and then develop the relationship in a traditional manner, without the use of the Internet. The main goal of this type of exchange is to provide potential and current customers with information on the company and its products and to ensure efficient communication. Apart from communication, the company also supplies customers with security benefits by developing its image of a trustworthy entity and by that minimising the customer-perceived risk of entering into relationship. By reduction of transactional costs, customers increase their value

to the company. Reduction of transactional costs results from better knowledge of the company's offer, self-selection of potential customers, and more effective use of the communication channels e.g. by placing orders via e-mail. Additional benefits that may be gained by the company are the loyalty of customers, who become used to the provided products and services, and the knowledge of the company's brand.

Within the scope of *advertising exchange*, the company provides customers with free contents (articles, audio and video files) or services (e-mail accounts, search engines, possibility to publish contents). In exchange, the customers become recipients of the advertisements broadcast by the company, thereby increasing value for the other group of the company's customers—the advertisers. This model is commonly employed on the Internet, mainly by content publishing companies (e.g. online editions of newspapers), sites enabling content publishing (e.g. youtube.com), or search engines (e.g. google.com).

Monetary exchange relies on providing customers with benefits in exchange for monetary incomes they generate. Such a type of exchange is used by online stores and other entities delivering paid services in form of content (e.g. newspaper archives, music files) or services (banks, brokerage houses, hosting companies). It is equally employed by e-commerce platforms acting as intermediaries, drawing profits from commissions (e.g. online auctions).

Many entities combine various forms of exchange. Online portals supply customers with free products and services (advertising exchange), at the same time offering benefits for which customers have to pay (services related with internet access and telecommunication, services associated with selling other products or services).

The aforementioned types of exchange exist also in traditional economy. The most common one is the monetary exchange. In traditional economy, advertising exchange appears less frequently, employed e.g. by media companies, or entities that offer free services for the possibility to broadcast advertisements. Such is also the case of initial exchange, which in traditional economy is based on such communication tools as newspaper advertisements. In the communication process, these tools are employed to encourage customers to enter into contact with the company, in order to develop the relationship.

2.3 Product Virtualisation

The focus of the following part of the chapter will be on factors shaping value propositions offered to the customers, associated with product virtualisation, value co-creation, introducing experience as a value to customer, and network effects. The first factor that has an impact on the shape of value propositions offered to the customers is the product (or service) virtualisation. It includes two processes, namely product digitalisation and product enrichment in information.

2.3.1 Product Digitalisation

Product digitalisation can be defined as the process of complete or partial transformation of a material product into a digital one, i.e. 'changing atoms to bits'. This process may be effectuated in various ways. In the case of airlines, for example, digitalisation concerns only a part of the product, that is the ticket, which ceases to exist in a traditional material form, transforms into a digital information ad becomes a part of information system. Services relating to computer hardware, as well as aircraft services, require the existence of material infrastructure. However, some components of the product, such as drivers, i.e. computer software assuring the correct functioning of the device, does not exist in material form.

Fully digitalised products (also referred to as e-products or digital products) are characterised by non-existent marginal costs. This means that the costs of product manufacturing are incurred only once, and the costs of creation of successive copies of the product are non-existent (or close to zero). Digitalised products may be easily diffused by means of the Internet, which helps to reduce customer-encountered transactional costs (such as time and effort). Full digitalisation may also mean a complete transformation of a product. Such is the case of musical compositions which were previously inseparably connected to data storage devices (CDs, cassettes, etc.). Digital music recording, e.g. in the form of mp3 files, helps to completely detach the value to customer from traditional storage devices. At the same time the digitalised product cannot be used without a proper material infrastructure allowing to provide the customer with the given value.

A notion frequently applied in a similar context is the one of e-service (digital service) which can be defined as service rendered in a fully automated manner, by means of information technologies (without human intervention), consisting in data sending and receiving (e.g. via Internet), carried out remotely, by an individual request of the ordering party, and responding to their specific order or demand (web.gov.pl, 2011). As examples of e-service are online banking, online auctions, online payment systems, search engines, online games, Internet tools (e.g. for tasking), online statistics, Internet portals, and online newspaper editions.

2.3.2 Product Enrichment in Information

Another type of virtualisation is the product (or service) enrichment in information. The product does not necessary have to change its physical form, but can be provided with information which will increase its value. The enrichment in information is the most common type of product transformation. It enables the companies to introduce new services which satisfy customers' needs in a more effective way. This strategy is employed e.g. by delivery companies, which give their customers the possibility to trace the current position of their consignments.

Quite frequently, product digitalisation and enrichment in information appear jointly (Fig. 2.3). The internet store Amazon.com virtualises its products, mainly by enriching them in information. Besides usual information on products, Amazon.

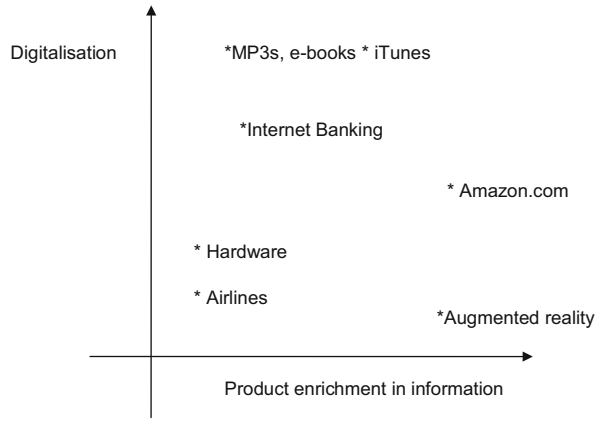

Fig. 2.3 Possible uses of product virtualisation. Source: own work

com gives access to product reviews and customer product evaluations. Moreover, based on the analysis of the customers' behaviour and product choice, the Amazon webpage displays the information about related products, such as for example other products purchased by the customers who bought a given product

Amazon.com virtualises its products also through digitalisation. The majority of the offered items are in material form, but some products become partially digitalised: in the case of books, Amazon.com provides scans of the most important pages (i.e. covers, list of contents, indexes, etc.) and in the case of music, it allows to listen to the beginning of musical compositions. Even though the functionality of such digitalised product is considerably limited, it can still be of much assistance in the product evaluation process and making the final choice. It is worth noticing that products characterised by limited functionality or reduced benefits for the customer exist also in the scope of traditional economy, *vide* free samples of products. Moreover, Amazon.com offers e-books—digitalised versions of traditional books, to which the users gain access after purchasing a reader offered by the company.

Interesting new possibilities of enrichment of traditional products in information appeared with the development of augmented reality. The main goal of this technology is to add information and meaning to real objects or places (Educause, 2005). Augmented reality enables to enhance the images coming from a video camera or other device (e.g. MRI) with information displayed on a computer screen, mobile phone, special glasses or on a car's window-pane. The technology is believed to be first introduced by the Boeing company. The mechanics working for the company wore head-mounted displays on which the images of the plane parts that they had before their eyes were accompanied by information on how to fix them, without the need for consulting a manual (Greenemeier, 2009; Memi, 2006). Augmented reality can be employed in various contexts, for example serve as a base for positioning tools (information on the itinerary are superimposed on an actual image), hydrology and geology search tools, architecture visualisation systems (possibility to see a full visualisation of an edifice on a mobile telephone's screen, while visiting its ruins) and for entertainment applications (Pardel, 2009).

The notion similar to augmented reality, although associated with a more extensive meaning, is the so-called *Internet of things* (Internet of everything). The phenomenon relies on connecting objects of everyday use, which usually have nothing to do with computers, to the Internet (Fleisch, 2010). Objects may communicate with each other e.g. by means of radio waves (e.g. by applying the NFC standard and/or RFID protocols). Fleisch presents various domains in which Internet of everything may be applied, including: object localisation; acquiring sensor data such as temperature, brightness, humidity, vibration, and speed of a given object; product safety in the scope of originality and localisation; data transmission (e.g measuring a tire pressure); addition of contents and meanings (just as in the case of augmented reality), which in consequence may help to create a fully virtual, interactive environment. According to Chui et al. Internet of things gives a possibility to optimise automated systems, processes, resource consumption, and to elaborate complex autonomous systems (e.g. automatic braking systems or automotive autopilots (Chui, Löffler, & Roberts, 2010). A commonly quoted example of a product that makes use of Internet of things are the running shoes with a built-in sensor that tracks the run and sends information to a mobile phone. The development of the phenomenon and its social dimension are equally very interesting. According to the Economist, around the year 2000, Internet of things started to be perceived as a technology that would revolutionise everyday life by enabling immediate product localisation, which in consequence could lower theft rates, increase security, increase the efficiency of resource management, lower costs, etc. (Babbage, 2010). Just as in the case of other technological solutions (e.g. mass customisation), the idea of Internet of things did not gain wide popularity, because of considerable technical problems (e.g. limited number of free IP addresses), problem of privacy, and controversies around security of sensitive data, especially important documents and credit card numbers.

2.4 Customer Value Co-creation

One of the most frequent phenomena, marking Internet-based relations between companies and customers, is customer value co-creation, which seems crucial from the perspective of companies' strategy. The problem was broadly elaborated by Prahalad and Ramaswamy in the monograph entitled "The Future of Competition". The authors prove that the customer value co-creation process is the most important factor of competition in the modern economy (Prahalad & Ramaswamy, 2004).

The concept of value co-creation is very broad. It includes both the situation in which customers co-create value which they will receive themselves and the situation in which they create benefits for other users. In the first case, customers' actions stem from a broadly perceived value proposition individualisation. In other words, customers get involved in actions aiming at obtaining benefits adjusted to their needs and expectations (mass customisation). In this case, value exchange can be described as one-to-one. The customer directly participates in the value exchange with the company. As a result, the customer receives an individualised

value proposition. The participation of other customers is not necessary. Inclusion of the Internet and IT in the scope of the process, made it possible to offer customised benefits on a large scale, and helped to coin an oxymoronic notion of "mass customisation".

Other user-oriented value co-creation, on the other hand, may take various forms, such as publication of product reviews (e.g. on the websites of online stores), interactions with other users (e.g. social networks), content creation and publication (e.g. Wikipedia), co-operation in software development (e.g. the open-source movement). In this case, it is normally a large customer group which co-creates value for another numerous group and the customers-receivers obtain a uniform (not customized) value proposition. Thus the exchange can be described as all-to-all. This strategy is applied e.g. by Amazon.com, which enables its customers to read product reviews published by other users, and by online auction services, where the sellers present their offers and the buyers choose the ones which they find the most interesting.

2.4.1 Mass Customisation

According to Piller, mass customisation refers to manufacturing products and services, which meet the demands of each individual customer, but which still can be produced and delivered with mass production efficiency (Piller, n.d.). Kleemann and Voss (2008) notice that mass customization refers to "the isolated activity of individual customers as directed toward one unit of the product, not to the collective activity of many individuals as directed toward general product type". According to one of the first definitions of the phenomenon, formulated in 1993 by Pine, mass customisation consists of development, production, marketing and delivery of customised products and services at an affordable price and in a variety and customisation wide enough to satisfy almost every customer (de Holan, Piller, & Salvador, 2009). It is worth noticing that mass customization does not necessarily mean creation or modification of a product according to the customer's needs. Offering a wide range of products and communicating with customers in a personalised manner, which aims at providing customers with goods corresponding to their needs, are also included in the idea of mass customization. For example, such is the case of Amazon.com.

In the article *The Four Faces of Customisation*, published in *Harvard Business Review* in 1997, Gilmore and Pine identified several types of customisation, based on the level of customisation of the product itself (i.e. its essential features) and on the number of modifications in the product's representation (i.e. its superficial design elements) (Gilmore & Pine, 1997). It should be noted that the classification elaborated by the authors seems to be still actual and applicable. However, it can be modified with other dimensions, such as the level of involvement in the customisation process demonstrated by both the customer and the company (Fig. 2.4).

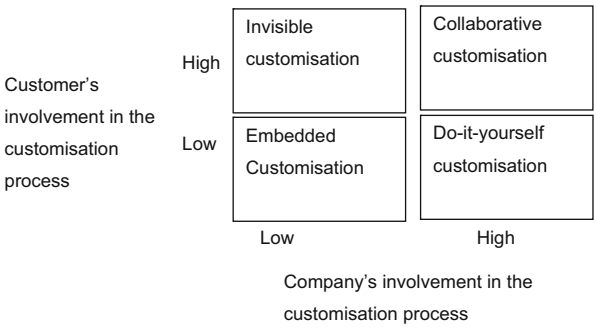

Fig. 2.4 The categories of customisation. Source: Own work (cf. Gilmore & Pine, 1997)

Collaborative customisation appears when both the customer and the company become highly involved in the customisation process. This is the case of, for example, the Dell company. The company's customers have to make a certain effort in order to identify and then communicate their needs. Basing on the customer's specification, the company has to produce a fully-operating computer. In the case of *invisible customisation*, the customer may be unaware of being provided with solutions adjusted to their personal profile. This strategy is employed by Amazon.com whose recommender system analyses products viewed by the customer and then recommends them other related products. In a similar manner, YouTube displays on its main page videos that are similar to the films watched previously by the user. Customers do not put any effort in the process of customisation, since it takes place, based solely on their buying behaviour. *Do-it-yourself customisation* takes place when the company offers a non-diversified product, i.e. all the customers receive the same value proposition, which they adjust it to their individual needs. This is the case of some operating systems, in which it is possible to adjust colours, sounds, etc. One of the most interesting types of the phenomenon is the *embedded customisation*. Neither the customer, nor the company take part in the process, but the product itself provides the customer with differentiated benefits. Such is the case with Adidas 1, a running shoe which adjusts the stiffness of its sole to running or walking conditions (de Holan et al., 2009).

Mass customisation combines the characteristics of both industrial and service undertakings. The main advantage of industrial projects is low price resulting from the large production scale, while the main advantage of service projects is the individualisation of the value proposition offered to the customer. For the needs of the following part it will be assumed that industrial projects are characterised by a higher proportion of fixed costs, and service undertakings by a higher proportion of variable costs.[4] Variable costs typical for service ventures and resulting from value individualisation are usually passed on to the customers. Such costs include, among others, the amount of work put in identification of the customer's needs, translating needs into desired product features, and learning of a new virtual environment in

[4] In some kinds of services, such as hotels, airlines, or cruises, fixed cost prevail.

which the process will take place. Moreover, customer-borne transactional costs equally include all kinds of risk associated with possible mistakes committed during the product designing process. The company may partially reduce variable costs incurred by customers, e.g. by active customer assistance or by providing customers with risk decreasing instruments (such as the possibility to return the product). The customisation-related costs incurred by the customer may be a barrier in entering into relations with the company. The process of non-individualised mass product creation does not require such efforts from the customer. However, if the company and the customer succeed in starting a relation based on value customisation and the benefits delivered by the company meet the customer's expectations, the amount of labour invested by the customer and their satisfaction with the product are likely to start the customer's loyalty, since the amount of labour invested by the customer becomes an element of switching costs, and by that increases the customer's loyalty.

Broadly speaking, a project based on mass customisation is associated with a broad market, is characterised by a high proportion of fixed costs and it imposes the variable costs of value co-creation on customers. The fact of operating on a broad market enables the company to manufacture products on a large scale, which translates into low product price, similar to the price of mass products. Therefore, the company employs the diversification strategy elaborated by Porter. On the other hand, owing to low prices of its products, the company may win the position of cost leader. Porter believes that the two generic strategies should not be combined, since it can result in getting "stuck in the middle" (Porter, 2004). However, the examples of such companies as Amazon.com or Dell as well as some theoretical studies prove that this hybrid strategy can be successful. Divergence of opinions on that matter may be caused by a massive technological development, which has taken place from the beginning of the 1980s, when *Competitive Advantage* by Porter was published for the first time. The popularisation of information and telecommunication technology enabled to combine the advantages of the large project scale, normally associated with low product prices, and with production elasticity, which gives possibility to individualise the value proposition offered to the customer. Hence, the employment of information and telecommunication technology has increased the quality of new products, compared to the traditional ones. In the latest publications, Porter admits that the two strategies (i.e. diversification and cost leadership) may be used jointly, e.g. when a company, as a sole market competitor, has access to an important technology (Porter, 2004).

An interesting observation on mass customisation was made by Salvador, de Holan, and Piller in the article entitled *Cracking the Code of Mass Customisation*. The findings presented by the authors are a result of an almost 10-year research conducted among 238 manufacturing plants in 8 countries. One of the most important conclusions of the study was that all the surveyed companies tuned customers' diversified needs into an opportunity to create value, rather than a problem to be minimised by means of mass production. In order to benefit from all the opportunities offered by mass customisation, it should be perceived not as an

independent business strategy, but as a 'set of organisational capabilities that can help a company better align itself with its customers' needs'.[5]

Salvador et al. discerned three fundamental areas of mass customisation: solution space development, robust process design, and choice navigation. Each of the areas was assigned with a so-called fundamental capability. The fundamental capability for solution space development is to identify the product attributes along which customer needs diverge. For robust process design, the fundamental capability relies on reusing or recombining existing organisational and value-chain resources to fulfil a stream of differentiated customer needs. In the area of choice navigation, the fundamental capability consists in supporting customers in identifying their own solutions while minimising complexity and the burden of choice.

2.4.2 Value Co-creation Oriented at Other Customers

Value co-creation founded on the idea of all-to-all exchange is a concept that constantly gains in popularity and which is associated with the creation of various online services and notions that revolve around the concept itself. Probably the most widely spread idea is the one of Web 2.0. It may be described as a type of Internet ventures, which rely mainly on content created by the users and their interactions.

The notion of Web 2.0 is connected with the idea of *crowdsourcing*. The creator of the term, Howe (2006), states that crowdsourcing represents the act of a company or institution taking a function once performed by employees and outsourcing it to an undefined and generally large network of people in the form of an open call. The notion of *peer production* (or common based peer production) is quite similar and also relates to the process of value co-creation by a network of people (Benkler, 2006). Another concept associated with this particular type of value co-creation is *wikinomics*, defined by its authors, Tapscott and Williams (2006), as operations based on four ideas: openness, peering, sharing and acting globally. Another notion of the same category is *open innovation*, i.e. the conviction that the company's innovation should spring from sources external to the company, such as cooperation with other companies, as well as with single customers or customer communities (Chesbrough, 2003).

One should not forget about the notion of *collective intelligence*, defined as the ability of virtual communities to leverage the knowledge and expertise of their members, through large-scale collaboration and deliberation (Jenkins, 2006). It seems to be close to the idea of wisdom of the crowds coined by Surowiecki (2004: 72). According to the author in order to become 'wise' a 'crowd' has to satisfy four conditions:

[5] The classification of capabilities and their exemplification was taken from de Holan et al. (2009).

- Members of the group should be diversified in knowledge and abilities,
- Actions of the group members should be independent (people's opinions are not determined by the opinions of those around them),
- Decentralisation by means of which the members of the group are able to specialise,
- Aggregation, which enables to turn private judgements into collective decisions.

Rheingold (2002) introduced the notion of smart mobs, which—by means of information technology—cluster temporarily around information and goals of mutual interest, on the basis of the so-called adhocracy.

Apart from the undoubted benefits of the collective cooperation presented by many authors, some researchers believe that it has also some serious flaws. Such is the case of Mackay (2003), who in the book *Extraordinary Popular Delusions and the Madness of Crowds* presented various situation in which the collective intelligence has failed—e.g. the creation of speculative bubbles. It is of particular interest that the problem described by Mackay is still valid, even though the book was first published in 1841. In turn, Keen, the author of *The Cult of the Amateur: How Today's Internet is Killing Our Culture* (2007) points out that the sea of amateur content makes it more difficult to access the most vital information.

Lanier is even more severe in his judgement. In an essay entitled *Digital Maoism* (2006) he states that collective decision making process on the Internet makes banal contents prevail over the more ambitious ones, or at least over those which require more attention and involvement. Lanier provides the example of Digg, an online service which classifies various information based on its users' vote. On the website, the information on a student ice-cream eating contents was voted more important than the information on a serious earthquake in Java.

From the perspective of the project's success, it is necessary to acquire or build particular assets and capabilities. It presents the greatest challenge when it comes to co-creation of all-to-all type. In the first case (one-to-one value exchange), the success depends largely on the cooperation between the company and the customer, while in the case of all-to-all ventures, it is frequently necessary to involve a larger group of customers in order to make the final value proposition attractive for other users.

The concept of value-co creation by customers is broad and relates to various types of customer's participation. From the customer's point of view, the values delivered by users may be referred to as investments, and the values received from the company may be perceived as benefits. The customer's investments include resources, interaction, communication and actions. Creation of value to customer may take place at different levels of the customer's involvement, based on the investments made by them and by other customers. Figure 2.5 presents various types of investments made by customers in the Internet-based value co-creation process.

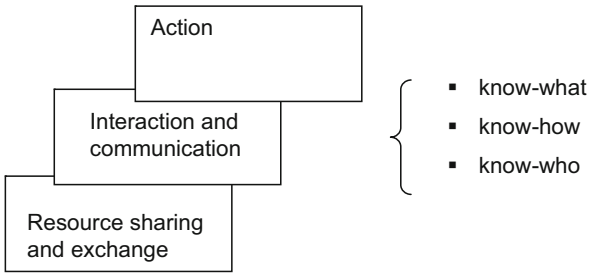

Fig. 2.5 Various kinds of investment put by the customer in the Internet-based value co-creation process. Source: own work

2.4.2.1 Value Co-creation Through Resource Sharing and Exchange

Value co-creation may be carried out through sharing or exchanging resources being at the customer's possession. Such is the case of projects based on the idea of distributed computing, which consists of using the combined processing power of computers belonging to the people participating in the project to solve a particular problem. Probably the best known undertaking of such a kind is the project SETI@home. The creators of the project describe it as a scientific experiment that harnesses the power of Internet-connected computers to analyse radio telescope data in the search for Extraterrestrial Intelligence. The project is executed by the Space Sciences Laboratory at the University of California, Berkeley.[6] A similar experiment was launched by Stanford University: the project Folding@home investigates the protein folding process. It is worth noticing that Folding@home uses processing power provided not only by personal computers, but also by Sony Playstation 3 gaming consoles.[7] The range of projects drawing from the idea of distributed computing is quite remarkable. The IBM company created a platform called World Community Grid, designed to host various research projects, such as AIDS and children's cancer treatment or clean energy.[8]

Popular online ventures that combine the ideas of resource sharing and exchange are peer-to-peer networks, which give their users a possibility to download every file available in the network. They are mainly used for free acquisition of music and videos.

In the cases described above, participants of the programs shared files. However, many online ventures are based on the idea of sharing products. They make possible adding value to products by exchange, as well as enable users to communicate and enter into interactions. A good example of such a project is a Polish website podaj.net, where the users may exchange used books, films and computer games for free. Every user of podaj.net makes a list of products to offer. When another user becomes interested in and then receives a particular item from the list "the seller" obtains a point, for which they can "purchase" items from other users. According to the data obtained from the website, from almost 8000 registered users, over 120 000

[6] Official program site: Seti@home, http://setiathome.ssl.berkeley.edu.

[7] Official program site: Folding@home, http://folding.stanford.edu.

[8] Official platform site: World Community Grid, http://www.worldcommunitygrid.org.

book exchange transactions were conducted (Podaj.net, n.d.). On-line auctions also employ such model of operating, even though, in this case the value is created by a transactions, and not by a product exchange.

Another facet of the phenomenon is the so-called crowdfunding, i.e. acquisition of financial resources via Internet from a large audience (the "crowd") where each individual provides a usually very small amount (Belleflamme, Lambert, & Schwienbacher, 2011). According to Belleflamme et al., crowdfunding may be geared both towards consumption and investment. The authors provide the example of a film, which was co-funded by fans and then distributed through standard (paid) channels. In return, the crowdfunders obtained exclusive access to some film-related content. The second type of crowdfunding is equally interesting, but appears less frequently: the crowdfunders do not draw direct benefits from consumption, but by funding a given company or initiative have influence on managerial decisions and sometimes obtain shares in profits (Belleflamme et al., 2011).

2.4.2.2 Value Co-creation Through Interaction and Communication

Another type of ventures oriented towards value co-creation are the online services that rely on interaction and communication. Such ventures will be presented according to the dominant type of knowledge they employ. In this paper, the division will be as follows:

- Know-what knowledge (views, preferences);
- Know-how knowledge (ability to find solutions, logic);
- Know-who knowledge (knowledge of particular people who possess knowledge or chosen through different criteria).

Know-what knowledge is similar to information. This category frequently includes knowledge enriched with a certain element of subjectivity, typical e.g. for views and preferences. The subjectivity stems from evaluation of information, based on third party opinions, own experience, etc. This type of knowledge, just as the other two, is elaborated by people. It may be reduced to the form of data, but compared to information or data it is much more difficult to classify or browse in search for elements of particular characteristics. Building of know-what knowledge by users is the domain of Wikipedia. The main assumption of this undertaking is that its creators will publish knowledge that is objective and based on facts. Know-what knowledge of a subjective character, typical for views and preferences, is employed by such ventures as Digg.com, which publish links to the websites interesting from the perspective of their users.

Subjective know-what knowledge is also the key element of *social shopping* services, which combine features of social networking services and informediaries. There are many kinds of such services, nevertheless their most important functions are: aggregation of reviews and evaluations of products made by users, search for products based on information provided by users, and facilitation of shopping by displaying lists of shops offering given products. Even though the notion of social shopping has gained popularity only in recent years, the idea has been employed for

many years. Such is the case e.g. of Amazon.com, which already since 1995 has been employing subjective knowledge of its customers, manifesting as product reviews and comments (Ante, 2009)

There also exist more elaborate models of employing subjective know-what knowledge, such as the so-called *prediction markets*, on which the probability of future events become the object of transaction. In other words, their participants predict the outcome that a given event will have in the future. Market predictions fall into various categories, such as economy (e.g. stock indexes), politics (e.g. winning the elections by a given political party), or science (e.g. finding cure for cancer within the next 5 years). For correct answers, users are rewarded in a way characteristic for a given service (e.g. with a number of points), and in the case of incorrect predictions bear some consequences (e.g. lose points). The final result of operations on a prediction market is to indicate the result of a future event, or to determine its probability. The effectiveness of such markets, i.e. the accuracy of prediction, has become the subject of numerous studies, which are often based on complex econometric models (Gjerstad, 2004; Wolfers & Zitzewitz, 2006).

The employment of the prediction movement allowed, e.g. to elaborate the most accurate prognosis of the results of the CDU party in 2005 elections to Bundestag. The party won 35.2 % of votes, the prognosis of the prediction market was 38.5 %, while according to the research on the electoral preferences, CDU should have obtained 40 % of votes. The discrepancies resulted from asking different questions: the prediction market question was how other people would vote, while the survey question was how a given respondent would vote (Hackhausen, 2006). According to research conducted by Berg et al., prediction markets are more likely to yield more accurate results than surveys of electoral preferences. The study concerned the split of votes among the Democratic Party and the Republican Party in the years 1988–2004. The prognoses of the prediction markets were more accurate in almost three in four cases. Moreover, prediction markets significantly outperformed the polls in every election when forecasting more than 100 days in advance (Berg, Nelson, & Rietz, 2008).

An interesting example of an undertaking based on the idea of prognostic markets is Hollywood Stock Exchange—an online service which gives the possibility to buy, for play money, "shares" in movies, actors, or directors, treated as business ventures. The value of a venture depends on how much money ticket sales will generate. Shares are the object of transactions carried out by the users and are subject to supply and demand. Hence, the price of shares reflects predicted incomes that a movie will generate. According to *Businesweek*, Hollywood Stock Exchange is one of the methods that film companies employ to prepare advertising campaigns. Moreover, aggregated predictions of the service's users help to determine the winners of the Academy Awards, with an accuracy rate of over 90 % (King, 2006).

Numerous online ventures employ various kinds of knowledge provided by their users. Such is the case of services enabling content publication and opinion exchange (e.g. blogs, online forums), and other types of platforms, which communicate with their users by providing answers to questions they ask.

An interesting example of the employment of know-how knowledge are the so-called *ideagoras*. By means of this notion, Tapscott and Williams, the authors of *Wikinomics*, describe markets on which ideas, innovations and people of exceptional qualifications meet (King, 2006). One of the most frequently quoted examples of such a venture is InnoCentive, a platform designed to connect companies willing to pay for solutions to their problems and specialists willing to find such solutions. Such a solution enables companies to make use of a global network of specialists, without the necessity to hire anyone (King, 2006). The statistics associated with this undertaking are rather interesting: the number of registered solvers amounts to 250,000. Until July 2009, the number of challenges posted on the website was 1,044, 50 % of which have been solved. Almost USD 5.3 million from the total declared pool of USD 24.2 million were awarded to researchers. Overall, about 294 thousand submissions were posted, which means that the number of proposed solutions to a given problem amounted to 282.[9] These data prove that the venture has a particularly high scientific potential, which may be successfully used by other companies. Large discrepancies between offered and awarded amounts, taking into consideration a 50 % efficiency of solutions, may mean that the most prized, but also the most difficult problems have not been solved. According to *Der Spiegel*, InnoCentive successfully employs the idea of open innovation on a global scale—an important part of solutions was posted by Russians and Indians (Schmundt, 2005). Other ventures, based on the idea of co-creating open innovations by researcher communities are, for example, Nine Sigma (www.ninesigma.com), Innovation Exchange (www.innovationexchange.com), or One Billion Minds (www.onebillionminds.com) which employs the potential of students. Such services rely on both know-how knowledge and actions initiated by their users.

Know-who knowledge may be defined as the knowledge of particular people who have at their disposal particular information, abilities or capacities. Such a kind of knowledge may be gained by becoming a member of a particular community. It is frequently employed by social networking services, which enable its users to create a community around a particular issue. Their users enrich such services with their acquaintances (i.e. their social graph), but they may also meet new people. The services equally employ mechanisms based on different kinds of knowledge, e.g. discussion forums, nevertheless it is the aggregated capital of know-who knowledge in the form of a social network which translates into the number of the service's users, that helps one service to gain advantage over the other ones, by means of network effects

[9] State as of 2009.07.14, according to *InnoCentive at a Glance*, http://www.innocentive.com/about-innocentive/facts-stats, viewed 01.12.2010. More current data have the same structure, nevertheless they lack in certain financial information.

2.4.2.3 Value Co-creation Through Customers' Actions

The last of the discerned ways in which customers may co-create value are undertakings based on the actions of the customers (users) themselves. Probably one of the best known initiatives of such kind is the open source movement. The source code of open source software is available for everybody, hence every user may modify it and adjust to their own needs. The most common examples of the movement are Linux operating system, Firefox browser, and OpenOffice spreadsheet.

The open source principle may be also used to develop Facebook applications. Applications are additions to the basic functionalities of the service, have access to its data and may be employed by other users. The most commonly designed Facebook applications are quizzes and games, but they do not limit solely to the entertainment sphere.[10]

The idea of open source has equally been adopted by the automotive industry. The name "OScar" combines two words: 'OS' (open source) and 'car' and refers to a project, the main goal of which is to co-create full technical documentation of a car. Based on such a documentations, the users may assemble a car without any necessity to pay licence fees—according to its creators, OScar must be simple, multifunctional, modular, and easy to assemble (The Oscar Project, 2014).

Value co-creation through action is not limited to software. The website threadless.com gives its customers a possibility to submit their own T-shirt projects. The projects are then assessed by the community gathered around the website. If a project gains positive votes, it may be put in production and the author may be provided with financial benefits (www.threadless.com).

2.4.2.4 Value Co-creation Oriented on Other Users: Success or Failure?

In the preceding part, categories and examples of undertakings based on value co-creation oriented on other users were presented. As it is usually practiced, only successful ventures of such type were used as examples. Such a presentation does not fully reflect the actual state of the matter, since it does not include undertakings that failed. Business ventures, especially those based on value co-creation, are characterised by a high level of risk, therefore it is difficult to predict which of them will succeed. On the other hand, quite frequently, successful undertakings based on value co-creation are able to change the rules of competition in many sectors.

It is extremely difficult to determine if a given community co-created undertaking will gain popularity. The statement that open source software may compete against software developed by corporations appeared, in the early 90s, as very risky, just as did the belief that an encyclopaedia which is comprised solely of text content created by amateurs may become more popular that the Encarta encyclopaedia developed by Microsoft.

[10] A website dedicated to app development for Facebook http://developers.facebook.com/, viewed 01.12.2010.

One may ask why, if communities have been able to create or at least develop so many successful undertakings in the above mentioned areas, such solutions are not employed in other domains. Why, for example, there is no popular search engine based on the open source movement? In fact, everything depends on the product's specificity. The process of search engine development requires elaborated infrastructure, synchronisation of actions, and therefore requires action hierarchy. Products created by means of open source movement are characterised by particularly dispersed actions and a great number of independently functioning software distributions (versions). Such is also the case of Wikipedia—it does not require advanced synchronisation, since edition of one entry usually does not influence any other entries. For a search engine, the key element is an algorithm which will rank websites and determine the order of their appearance in search results. Functions of such an algorithm have a large influence on the Internet user behaviour, especially on their purchase decisions. The persons responsible for creation of the algorithm would probably act under a great pressure of various groups, which would hamper the creation of an optimal solution even more.

If the difficulty of community co-created products lies solely with the problems associated with technological complexity, it may be asked why products displaying much lower technological complexity, such as information aggregators like Reddit.com or Digg.com, have not become an alternative for traditional mass media. Theoretically, the image of reality created based on information that other people classified as important should be of great use to almost everyone. In practice, such aggregators give a twisted picture of reality. Perhaps, the main flaw of such services is associated with their open character which enables users to vote for information that are strange, funny or shocking. On the other hand, online services co-created by communities, even if they cannot replace traditional media as providers of current information, have gained an important competitive position in the so-called opinion sector. It may be proved e.g. by the popularity of Huffington Post, a service where the content are created both by regular users and important political, business or traditional media figures.

It seems interesting to notice that the undertakings which may be perceived as designed to embrace all the possibilities offered by the Internet, terminate their activity. In this context, it seems justified to provide the example of the Zubka company, a recruitment undertaking based on the know-who knowledge of its users. If a user put forward a winning candidate they were awarded, depending on the level of pay offered by the employer. According to Guardian, it amounted to 80 % of the fee paid by potential employers to the company (Johnson, 2007). A similar manner of operation was adopted by GoldenFinger, a program elaborated by the Goldenline, a Polish counterpart of LinkedIn. The service helps to develop professional relations, hence it is frequently used by recruitment companies to publish their employment offers and directly contact potential employees. The *modus operandi* of GoldenFinger to a large extent reminded the one of Zubka. If a user of Goldenline proposed the candidature of a given person to a position advertised in the service and the given candidate was employed, the person who

proposed them was awarded with money.[11] Eventually, both services have ceased to provide the aforementioned services

Failures of undertakings based on social media affect also the biggest companies, such as Google. The company launched a venture called Google Knol which was designed as an alternative for Wikipedia. While the main goal of Wikipedia is to provide objective, factual know-what knowledge, Google Knol aggregated articles presenting various points of view on a given matter. The service was launched in 2007 and attracted a lot of critical comments. Google was accused of trying to take over the functions that up to date had been the domain of Google-independent Wikipedia (Riley, 2007; Lane, 2007). During the first five months of activity, Google Knol aggregated over 100,000 articles. At the end of the year 2011, the company announced that as part of the 'spring cleaning' it would close some projects, including Google Knol (Hölzle 2011).

The success of such ventures relies mainly on their users. By exhibiting opportunistic or undesired behaviours they may limit the level of benefits for potential customers, and therefore increase the risk of a venture.

2.4.2.5 Customer Competition and Co-operation in Value Co-creation

The ventures that are based on customer value co-creation may be categorised according to various customer interactions, which can differ in the level of competition and cooperation. By adopting such a criterion the following models may be discerned:

- Model of competitive market
- Model of non-competitive market
- Model of competitive community
- Model of non-competitive community

The categorisation of undertakings based on customer value co-creation based on the criterion of customer co-operation/competition is presented in Fig. 2.6.

For the purposes of this study, "a market" will be defined as a place where two groups of subsidiaries meet in order to enter into a transaction or perform a transaction-like action. A member of one group may be at the same time a member of other group, while entering into other transaction, but from the point of view of a particular transaction, they are ascribed to one of the parties.

According to the *model of competitive market*, the platform becomes a place of interaction of two groups of customers with different needs, which become satisfied in the course of exchange. The model assumes that the increase in the number of members of one group has a negative influence on their benefits, since it increases competition. On the other hand, the increase in the number of members of the other, complementary, group enhances the benefits for the group, since the number of

[11] The sub-site of Goldenline.pl dedicated to the GoldenFinger program: http://www.goldenline.pl/goldenfinger/info, viewed 2012.03.15.

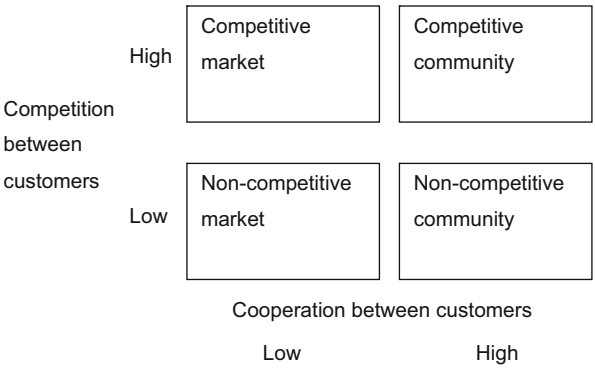

Fig. 2.6 Classification value co-creation ventures, based on customer competition and cooperation

persons with which one can enter into a transaction becomes greater. Such is the case of online auctions: from the seller's perspective the most beneficial situation is when the number of buyers increases and the number of sellers becomes lower. This phenomenon may be explained by the concept of multi-sided platforms (Evans, 2003; Silverthorne, 2006). Moreover, members of two groups tend to cooperate, e.g., by giving notes and comments to sellers with which the users have entered into transaction. This kind of activity is beneficiary from the point of view of other members of the community, as it facilitates the choice of subjects exhibiting a desired combination of trustworthiness and price level. Such a model of value co-creation may be also applied for social lending websites, ideoagoras such as Innocentive and crowdsourcing websites, e.g. iStockphoto which enables buying and selling photographs for commercial use.

In *the model of non-competitive market*, the platform becomes a place where the needs of the both sides become fulfilled. For some reasons, however, the members of the same group do not compete against each other. The lack of competition may result from the digital character of goods being the subject of the exchange. The fact of using a digital product by one user does not diminish the benefits for other persons using the same good. Therefore, non-competitive consumption products in the model of non-competitive market may be perceived as public goods, which frequently appear in publications on economy (Stiglitz, 2000). A plausible example may be provided by peer-to-peer platforms which give a possibility to share various files. Just like in the case of competitive markets, a transaction is conducted by two sides: those who upload and those who download files. From the point of view of benefits provided by a given file, competition between the users does not exist. Nevertheless, the element of competition appears when it comes to data transfer speed, since it may be negatively influenced by the increase in the number of users.

A *competitive community* is a community of people brought together around a particular idea. It comprises of only one group of customers who at the same time compete and cooperate with each other. Such a situation occurs in communities the members of which share knowledge and information, but which is not deprived of the element of competition, such as a rating system. An example may be provided by a Polish website onephoto.net. The members of the community may comment on

the photographs uploaded by other users (the element of cooperation) and rate them in order to create a photo ranking (the element of competition).

An example of the *non-competitive* and cooperation-oriented *community* may be given by Wikipedia, the open source movement and its automotive counterpart—the Oscar Project. The members of the community work together on a common project and the element of competition scarcely appears. It may however arise when the users compete against each other for reputation or experience gained while developing a common project. In the case of Wikipedia, the improper element of competition becomes evident when members of the community delete entries elaborated by other users and replace them with their own articles. Further examples of non-competitive community are social networking sites, such as Facebook or LinkedIn.

2.5 Online Customer Experience

The increasing role of customer experience in marketing activities is due to the fact that it is becoming more and more difficult to compete based solely on the development of products or services. Nowadays, product attributes or benefits associated with the delivered services do not assure competitive advantage, for they may be easily copied and improved by other companies. Moreover, innovations introduced by the company may pass unseen, or become wrongly interpreted by customers. This is why customer proximity strategies become increasingly interesting for the companies. These strategies may be exemplified by the so-called experiential marketing, i.e. a marketing trend, in which customer experience is perceived as the main field of competition for companies.

Despite many opinions that the inclusion of the customer experience in marketing activities is an innovation of recent years, publications on the role of customer experiences in consumption started to appear in early 80s (Holbrook & Hirschman, 1982). Furthermore, the notion of consumption experience also appears in the works of Keynes, Marshall, and Smith (Frow & Payne, 2007). In 1955 Abbot stated that *what people really desire are not products, but satisfying experiences. Experiences are attained through activities* (Palmer, 2010). What is more, the role of customer experience in marketing was recently stressed by Pine and Gilmore, the authors of the book entitled *Experience Economy: Work Is Theatre & Every Business a Stage*, in which they state that an experience becomes successful when it is perceived by the customer as unique, worth remembering and possible to repeat over and over again. According to the authors, the company's employees become actors and every business—a stage. They provide one of the best known examples of experience marketing: Disney theme parks, where the employees are referred to as "Imagineers" (i.e. imagination engineers), a term which perfectly describes the scope of their activities. Comparing the relationship between the customers and the company to a play and seeing company's employees as actors has also a theoretical foundation. The concept was introduced in 1956 by an American sociologist, Goffman, in a monograph entitled *The Presentation of Self*

in Everyday Life (Goffman, 1959). In the context of customer value co-creation, Prahalad and Ramaswamy not only stress the importance of customer experience in business competition, but also postulate the creation of experience networks, i.e. infrastructures aimed at successful value co-creation through experience individualisation (Prahalad & Ramaswamy, 2004: 97).

The concept of customer experience management appears in various business handbooks. It is frequently presented as a revolutionary approach, a true breakthrough in the relationships between the company and the customer (Schmitt, 2003). Nevertheless, some authors argue that the books of this type are published to support the credibility of the author and to sell their consultancy services rather than to promote dissemination of any deeper understanding of experiential approaches (Tynan & McKechnie, 2009). Holbrook, the author of several publications on the role of experience in consumption wrote a four-part review of such handbooks, under a revealing title *The Consumption Experience—Something New, Something Old, Something Borrowed, Something Sold* (Holbrook, 2006), in which he accused the authors of non-verification of theories and far-fetched generalisations.

Regardless of the concept of customer experience management, emotions have long been used in advertising. Emotion-laden advertisements not only help to remember the promotional message, but also tend to limit the effectiveness of thought processes, and therefore decrease the ability to formulate counterarguments. According to Kwarciak, a proper emotional setting increases product attractiveness and may contribute to the creation of a bond between the customer and the product (Kwarciak, 1999: 94). Sometimes, experiential marketing is associated with the so-called sensory marketing, i.e. marketing that engages not only the customer's sight and hearing, but also other senses.

Frow and Payne (2007) believe that it is necessary to consider two perspectives of customer behaviour. The first one suggests that the customer is primarily engaged in goal-directed activities, such as searching for information, evaluating available options and making purchase decisions. The other approach emphasises emotions and contextual, symbolic and nonutilitarian aspects of consumption. In the case of the relationships with institutional customers, the focus should be on the rational approach, while an emotional perspective may be important e.g. in the leisure industry. When it comes to experiential goods and leisure products, acknowledging customer experience becomes particularly important.

In the context of experience, perceived as a value to customer, the notion of 'flow' is frequently applied (Huang, 2006). It was originally coined by Csikszentmihalyi (2000) in the paper entitled *Beyond Boredom and Anxiety*. The author defines flow as the state in which people are so involved in an activity that nothing else seems to matter.

2.5.1 Internet as a Tool for Creating Customer Experience

The Internet enables to reach customers with *multimedia messages*. Usually, such a message combines image, animation, video, and sound. Although a multimedia message appeals to only two senses, it may be perceived as an efficient tool of attracting and retaining customer's attention.

Moreover, the Internet provides the possibility of *customer interaction*, i.e. it helps to replace a one-sided company's monologue directed at the totality or a part of the market with a multi-sided egalitarian dialogue between the company and its customers, as well as between the customers themselves. Customer interaction may additionally result in customer value co-creation, that is active participation in the process of creating value propositions. The level of customer interaction may be determined by the degree of customer's integration with the company and other customers.

The perception of the Internet as a place where customer experience begins, helps to conduct *mass-scale* activities. Customer experience is formed based on a technical infrastructure, which usually generates high fixed costs. Consequently, in the case of mass-scale activities, the cost of experience delivery not only decreases, but even gets to zero. Nevertheless, quite frequently online marketing requires additional physical infrastructure, which may produce additional costs.

Internet users are not willing to read long written messages, which was proved by a study conducted by IBM in early 80s among computer users. It was then, that the *paradox of the active user* was formulated (Fu & Gray, 2004; Nielsen, 1998): new product users do not read manuals but try to configure the product by themselves, which costs them more time than if they used the manual. Hence, as it was point out by Nielsen, products should not be built for an idealised rational user, but designed for the way the customer actually behave in a given situation. On the Internet, a thoroughly chosen composition of interactive and multimedia elements may become a more efficient way of communication than long written descriptions.

2.5.2 Functions of Experience in Value Proposition

Experiences delivered to the customers have three major functions: building satisfaction, product/service promotion, and the function of basic product, for which the customer has to pay (c.f. Table 2.2).

Shaping of customer experience may have a *promotional function*. Properly chosen experience delivered to a potential customer may induce them to purchase a given product. Moreover, delivering experience to a smaller consumer group may be more a effective kind of promotion than reaching a larger group of potential consumers with a conventional promotional message. This kind of promotion is usually employed in the case of the so-called experience goods, i.e. the goods the

Table 2.2 The role of experience in value proposition

Functions of customer-delivered experience	Description	Example
Product/service promotion	Using experiences delivered to the customers as an element of promotion of a given product or service	Traditional (non-digitalised) experience goods, movies, clothes, fast moving consumer goods
Building satisfaction	Increasing positive customer experience associated with contacts with the company	High-involvement products, continuous services
Core product	Experience becomes a value for which the customer is willing to pay	Digitalised experience goods, sports betting, gambling, erotic websites

Source: own work

quality of which may be ascertained immediately upon consumption.[12] Such products are impossible to describe using parameters that would be sufficient to make a potential customer buy a product, as it happens in the case of the so-called search goods. The group of experience products include leisure products and services, such as travel and catering services, but also sport-related products. As the research shows, the presence of multimedia and additional product information, such as reviews from other customers, increase the likelihood of purchase for search goods and experience goods, especially the latter (Huang, Lurie, & Mitra, 2009). Such a type of promotion is equally employed in the case of fast moving consumer goods of a relatively low value, bought on impulse and designed for young people.

Product websites, i.e. online services dedicated to describing one particular product, may be perceived as an online exemplification of this strategy. The main goal of product websites is to promote a given product, usually by associating it with a particular atmosphere and involving customers in various product-oriented processes, and therefore providing them with experience that they will associate with a given brand or product. Frequently, information on particular features of products are omitted or displayed in a way that will not distract the customers from the experience in which they participate. Another example of including customer experience in promotional activities is advergaming, i.e. inclusion of promotional contents in video games.

Experience-based *satisfaction building* relies on supplying customers with positive experience and at the same time reducing the negative ones. The company may not provide any additional experiences, except of those which stem directly from the co-operation with the customer. The most important element of the strategy is to provide benefits that are most important for the customers and reduce the stimuli

[12] Experience goods are frequently contrasted with search goods, the utility of which may be evaluated based on product features and characteristic; and with credence goods, the quality of which may be ascertained only based on opinions provided by a third party (e.g. a physician).

that may entail negative emotions. The idea seems rather simple, nevertheless it is often described with complex customer satisfaction models, which show which factors may contribute to the creation of positive and negative experiences.

This concept seems particularly useful in the case of products or services that are of considerable importance for the customer and require frequent contacts with the company (e.g. corporate services). Experience-based satisfaction building is employed e.g. by Amazon.com. The company makes sure that each contact with the company increases customer satisfaction, but at the same time it does not provide the customers with experiences that are not directly linked with the scope of its operations.

Customer experiences may come in addition to products or services, but they may equally play the role of the *core product*. The concept relies on offering customers the place where they will be able to engage in an activity that will provide them with the desired experiences. Such a strategy is commonly employed for digitalised experience goods, i.e. products or services delivered via Internet, the value of which may be assessed only after or upon consumption. This is the case of online games, gambling services or erotic websites.

The process of delivering experiences as basic products carried out via Internet entails various consequences. If the value proposition is free of physical elements, the importance of physical localisation of a given venture decreases or even completely disappears. Nevertheless, it is still limited by particular legal and social conditions, such as communication or customer preferences, as well as by legal aspects of delivering particular products or services (e.g. sports betting). Marginal importance of the physical localisation of ventures helps to conduct them on a global scale. It is equally associated with the cost structure typical for such ventures. Ventures characterised by high share of fixed costs and low variable costs that are based on the basic product strategy tend to generate incomes when conducted on a large scale. That is why these kinds of activities are usually of international or global character.

2.6 Network Effects

2.6.1 The Nature of Network Effects

In the modern economy, one of the factors that have the most important impact on the creation of value for customer are the so-called network effects (also referred to as network externalities). This term refers to a situation in which value for a customer becomes dependent on the number of users of the given product (Wang, Chen, & Xie, 2010).

Network effects appear most frequently in the case of products and services related with the Internet or based on telecommunication/IT technologies. The products that use the network effect are, among others, various communication tools (telephone, fax, online messengers), tools enabling interaction between users (online auctions, discussion forums, social networking services), and programs that

use a given standard (software, memory storage devices, cassettes, photographic films).

Among all the benefits delivered to customers through products, one can discern the so-called *network-independent benefits* (the benefits that are not dependent of the network and appear as the result of the use of the product itself, and not as the result of interaction with other users) and *network benefits* which appear as the result of interactions with other users and produce the network effect.

When it comes to the products and services enabling communication, interaction or sharing resources with other users, in the set of all the benefits delivered by the company, the network benefits will prevail. This situation is typical for online messengers, social networking services, file exchange websites, etc. The products characterised by a similar level of network and network-independent benefits are, for example, blogs (network-independent benefits are generated by authors and network benefits are generated by readers, by means of comments), text editors (non-network benefits: possibility to edit texts; network benefits: compatibility with other programs based on the same standard), and mobile phones (network benefits: communication with other users; non-network benefits: alarm clock, calendar, camera, etc.). In some Internet-based ventures non-network benefits prevail. This is the case of online stores, in which the selling process is effectuated without participation of other customers, as well as information websites, where the informative content is created by the editorial staff (in this case, network benefits are associated with comments posted by users). It is a purely subjective matter to determine the ratio between the types of benefits, due to the specific nature of value for customer. For some Internet users, comments posted on blogs and information, as well as reviews on the websites of online stores, may present a dominant value.

Extending products or services with the network element may be perceived as an action aiming at increasing value for customer. In this context, the case of Kindle, an e-book reader, should be mentioned. It enables reading of digital editions of books purchased on Amazon.com, and by that provides network independent benefits, which are not influenced by other users. Nevertheless, the company enriches the product with network benefits. In the book text the readers may find underlined passages, which were marked as important by other Kindle. In this way, the company provides additional information, unavailable in the case of traditional books, and therefore increases value to customer (Fig. 2.7).

Products that are in a lesser extent associated with the Internet are also characterised by variable participation of the two kinds of benefits. In the case of cameras, where the network effect concerns above all memory cards or photographic films, the customer relies mostly on network-independent benefits, such as low costs or quick access to photos.

For the needs of the study described below, Srinivasan, Lilien, and Rangaswamy (2004) put products on a scale that reflects the importance of network effects among other benefits. The products with the lowest ranking include electric toothbrush, because its changeable head has a standard design and can be provided by various manufacturers, answering machine, since it relies on the fixed telephony standard, and cameras that use 35-mm films. The products with the highest level of network

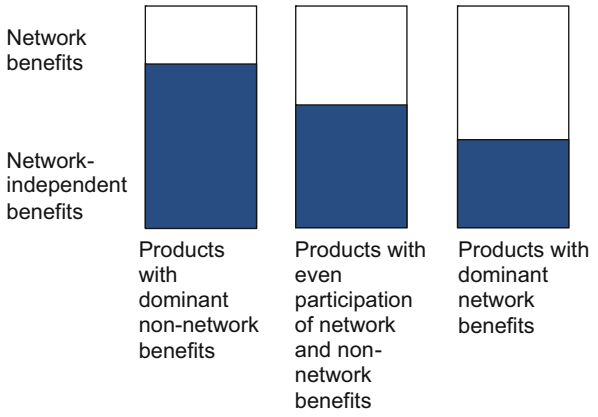

Fig. 2.7 Product categorisation based on the dominance of network or non-network benefits. Source: own work

externalities are operating systems for personal computers, PDA devices and fax machines.

Further analysis allows to discern two aspects of the phenomenon, i.e. direct and indirect network effect. The *direct network effect* arises when a customer benefits directly from the increasing number of the product's users and from new possibilities that it opens. The *indirect effect* arises when there is a positive relation between the customer's benefit because of complementary products and the increasing number of users (Srinivasan et al., 2004).

It is of equal importance to mention the distinction between unilateral and bilateral (multilateral) network effects. A *unilateral network effect* takes place when, within the network users have the same needs and perform similar functions. An addition of a new customer increases benefits to all the users of the network, as in the case of telephony or web messengers. A *bilateral network effect* is associated with multi-sided markets. It exists when there is a division between users, depending on the role they play. Hence, the fact that a user joins one group can have a positive influence on the benefits of the other group's members, but at the same time can decrease the benefits of the group they have joined.

2.6.2 Multi-sided Platforms

Usually, companies build relationships with customers, who, in exchange for products and services they purchase, provide the company with revenues and other values. It is the basic model of exchange between the company and customers. Some companies operate as multi-sided platforms (on multi-sided markets) and in the value exchange process need to get two or more distinct groups of customers (bilateral, two-sided network effect) (Silverthorne, 2006). There are many examples of multi-sided platforms. Internet portals create value for both their customers and advertisers. In the case of online auction services, relationships are built with buyers, but also with sellers. Operating systems developers need to

cooperate with companies that produce software compatible with their system, but also with hardware producers and regular users. Evans and Schmalensee (2007) refer to the companies operating on multi-sided markets as 'catalysts', which suggests that such companies enable, or at least facilitate, entering into transactions, and thus limit market failures. Evans, Hagiu, and Schmalensee, in the context of companies operating on multi-sided markets, equally employ the notion of software platforms, by means of which two groups of customers may enter into interaction (Evans, Hagiu, & Schmalensee, 2006; Hagiu and Yoffie (2009).

According to Evans (2003) multi-sided platforms have the following features:

- *There exist at least two separate groups of customers*. One group may be comprised of online auction sellers, the other—of buyers. However, that customers are not permanently ascribed to one group. Customers who sell products via online auctions may be at the same time buyers. Nevertheless, from the point of view of one transaction a customer may be either a buyer or a seller.
- *There exists a multi-sided (bilateral) network effect between the aforementioned groups of customers*. The increase in number of customers from one group causes benefits for the other group. The attractiveness of a selling in online auction increases with the number of buyers, but a similar situation does not take place when it comes to an increase in number of sellers. It should be noted that sometimes only one group benefits from network benefits. The increase of the number of advertisers does not necessarily lead to the increase of value for readers or viewers, and sometimes may even diminish their number.
- *There exists an intermediary who services the above mentioned customer groups and benefits from multi-sided network effects*. Buyers and sellers could conclude transactions without the help of an intermediary, i.e. online auction service. They do not do it, however, due to transaction costs. An intermediary reduces transaction costs and internalises external effects, and by doing so allows buyers and sellers to draw benefits from network effects.

The majority of benefits offered to customers by online auctions fall in the category of network benefits and result from interactions with the second group of users. Online auctions also provide network independent benefits, in the creation of which the second group of users does not take part. This category includes customer service, ensuring transaction safety, providing customers with useful tips etc. (see Fig. 2.8).

One of the most important problems, from the point of view of the management of companies that operate as multi-sided platforms, is how to allocate benefits and means between the two customer groups.

In many publications, the problem is reduced to the question of price management. In such an approach, the price becomes a mechanism that regulates access to particular benefits. The main goal of a company operating on a one- and multi-sided market is to generate benefits, such as profit or the company's value. Maximisation of benefits for the owners of multi-sided platforms in the first place usually requires

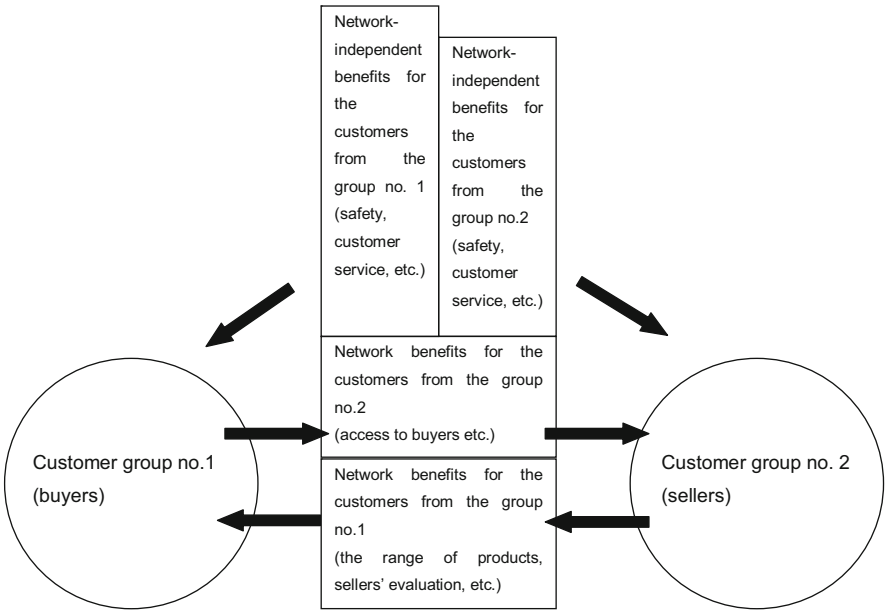

Fig. 2.8 The value exchange in a multi-sided platform on the example of online auction buyers and sellers. Source: own work

reaching a certain balance, or at least proportion, between the both groups of customers. Therefore, there arises a necessity to regulate the number of customers in each group, which frequently requires very elaborate actions.

A balance can be reached not only by means of pricing instruments. Apart from price regulation, companies may increase or decrease value for customer, e.g. by offering additional warranties or by organising lotteries for loyal customers. Companies may also influence the number of customers from a particular group by promotional campaigns or education, as it was done by e-Bay, which in the 1990s organised training courses for potential sellers (Yoffie & Kwak, 2002).

Online auction service may invest in acquisition of sellers or buyers only, it may divide the expenses between the two groups, or distribute them in any other manner. When it comes to pricing policy, there also exist many different possibilities. Both customer groups may be burdened with transaction fees. The company may also require payments from only one group, and subsidise the other group, e.g. through contests with prizes.

Given the fact that, among all the mechanisms of regulation of the number of customers from complementary groups, promotional campaigns as well as offering additional benefits are the most difficult to identify (provided that company data are unavailable), in the following part prices will be perceived as a regulatory mechanism.

In practice, price strategies employed by a company are usually asymmetrical. In other words, it often happens that one of the groups is burdened with costs, and the other benefits from free services or at least from their limited costs.

Online auctions often burden the sellers not only with sales fee, but it also require payments for putting up the products for sale. On the other hand, buyers are not charged by the company. Microsoft charges game developers for the possibility to create games for Xbox. By purchasing game consoles, final users also generate incomes for the company, although some researchers claim that the company incurred losses on the sale of consoles to users by pricing them below production cost (Silverthorne, 2006). The same strategy is employed by Apple for iPhone applications: the company charges both the users and the companies that develop software available in the App Store (Enrolling in Apple Developer Programs, n.d.). On the other hand, developers of software operating in other systems often do not need to pay licence fees.

Online portals subsidise their users by providing them with free, yet frequently expensive to develop, contents, burdening advertisers with the costs that arise. Price comparison services charge online stores, to which they direct customers that use their services for free. Shopping malls receive incomes in the form of rent from the shop owners, without charging customers for the visit and while usually providing them with free parking lots.

Therefore, it seems important to ask what kind of premises should be taken into account when determining the strategy of the relationship development with both groups of customers while aiming at income maximisation. For it does not seem correct to operate in analogy to the classic situation and maximise benefits for each group separately. According to Evans and Schmalensee (2007), it seems justified to decrease prices for the customers that are important to initiate a transaction, i.e. customers that are perceived by complementary customers as attractive business partners. It is also suggested that a company should:

- Subsidise the most price-sensitive group of customers
- Charge the group of customers who are the most dependent on the size of the other group[13]

In order to apply such a solution, the company must be aware of the price sensitivity of both groups and know how sensitive one group is to a change in size of the other one. Moreover, this approach relies on the assumption that the most price-sensitive group is the least sensitive to the change in the other group's size. E.g. in the case of newspapers, if the change of the newspaper price has a greater influence on the number of readers than a similar change in the price of advertisements has on the size of incomes (simplifying the matter), the publishing house should subsidise readers and charge advertisers with higher fees.

[13] A conclusion shown in a presentation on Google strategies prepared by Faber Novel, which is available at: http://www.fabernovel.com/sites/default/files/Google_14Q_en.pdf, viewed 2012.03.15.

Hagiu (2004) presents a different method of determining the *pricing policy*. The most important criterion is the time of consumption of a given product, which is associated with varying demand. When the consumption period is relatively short (as in the case of videogames, movies, and books), the demand becomes more varied. The products offered for a given platform become less and less subsidiary, hence the competition decreases. It allows the producers to raise prices, and thereby increase their acceptance to be charged with higher fees by the platform company. Hagiu believes that such a situation takes place in the case of videogames, which are characterised by a relatively short lifecycle and the variety of which is rather high. Console manufacturers earn the majority of their profits from game publishers. On the other hand, the life cycle of other application software is much longer and diversification of the users' needs—much lower. Therefore, operating system vendors make the largest share of incomes on users and do not charge software developers.

When analysing pricing strategy, it should be also mentioned what kinds of activities are subject to fees. Usually, customers are charged for access to a given service, or for every single use. Credit card owners are charged once a year for the ability to use a credit card and usually do not have to pay additional fees for every transaction effectuated by this means of payment. On the other hand, companies that accept payments by credit card have to pay a commission for every transaction (facility use fee) and are burdened with some fixed charges (access fee) (Evans & Schmalensee, 2007).

2.6.3 Competing by Means of Network Effect

In the scope of network effect the notion of customer portfolio is replaced by the notion of customer network, due to the dynamic character of relationships between customers. In this context, Bob Metcalfe's law, according to which the value of a network is proportional to the square of the number of its users (Briscoe, Odlyzko, & Tilly, 2006), is often quoted. The law states that if the users' number doubles, the network's value quadruples. Metcalfe's law was formulated in regard to the value of a telecommunication network, but it can be also applied in respect of other data exchange systems, including websites falling into the 'social media' category. Opponents accuse Metcalfe of excessive simplification in assuming that all network users contribute in the same manner (Briscoe et al., 2006). The user's value will depend largely on the development of the network itself. In the initial period, customer acquisition is significantly more difficult than when a network reaches its critical mass. Therefore, the users acquired earlier are of greater value to company than the subsequent ones. Similar correlations can be noted in the case of product marketing that does not use the network effect. Usually, pioneer customers are more important for a company than following customers, because not only do they purchase products, but provide their colleagues with information about given goods, etc.

According to Shapiro and Varian, pioneer companies that enter markets on which network effects are particularly pronounced can count on the so-called benefits of the first move. It is a possibility to gain a considerable number of customers (a customer base) in a short period of time, which is likely to restrict market access for competition. Therefore, a company should aim at reaching critical mass, as it can become a serious barrier to potential rivals. In such situation, two effects can appear: the lock-in effect which prevents customers from leaving the company due to the lack of satisfactory alternative solutions, and the lock-out effect, which consists of eliminating competition from the market (Shapiro & Varian, 1998: 168). Eventually, it leads to the situation when due to a significant number of customers using one solution, the costs of switching suppliers increase and the particular solution becomes a market standard. The popularity of Microsoft Windows operating systems can serve as an example of the said effect. With the increasing number of Microsoft operating system users increased the number of computer programs designed for these particular operating systems, which entailed an increase in the number of customers, etc. The study results presented in the following section reveal however that the situation described by Shapiro and Varian does not always take place. Quite frequently, it's a successor company that gains a leader position, and not the pioneer company.

In the article *Does Quality Win? Network Effects Versus Quality in High-Tech Markets*, Tellis, Yin, and Niraj (2009) disagree with the aforementioned theory. The authors conducted a research to determine which of the two—precedence in offering a product (service), or product's quality—are the critical drivers of success for the network effect-dominated markets. The problem is important not only from the point of view of marketing strategies, but also from the point of view of economy, as it concerns a much discussed issue: whether the market is always effective (in this case: whether a product offering the highest value always becomes the market leader), or quite the contrary—is it subject to hysteresis, i.e. does the balance and structure of the market depend on the prior events. Therefore, the predominant value of a product does not necessarily have to translate into market predominance.

Opinions on the subject are divided. Katz and Shapiro claim that the markets that are driven by network effects show a tendency to get locked-in with outdated standards or technologies (Tellis et al., 2009). Krugman doubts whether markets aim at the best possible solutions and whether historical events on the market have an influence on its future shape (outcome of market competition) (Tellis et al., 2009). On the other hand, some authors claim that network effects do not protect markets from competition, hence making them efficient (Tellis et al., 2009).

Tellis, Yin & Niraj's research was conducted on various product categories related to personal computers, mainly software. The authors assessed the quality of products resorting to ratings and reviews from professional journals. The study yielded the following results concerning markets with the presence of network effects:

- Change of market leader usually takes 3.8 years.
- New quality leader becomes market leader averagely not longer than after 1–2 years.
- Quality is a stronger determinant of market share than network effect.
- Network effects do not make market inefficient.

The most important element of the above-mentioned research is, possibly, the correlation between quality and network effects. According to the authors, the two variables do not diverge but converge, since the network effect enables the quality leader to gain the market leadership in a considerably shorter period of time. The authors note that such a situation takes place when customers notice the difference in quality of the products, a network effect occurs and switching costs are not excessively high.

In the case of two-sided network effects, the analysis should not be limited to the problem of choice between quantity and quality customers, but also include the problem of the order of customer acquisition. It may be stated that customers who display lower sensibility to a delay in transactions or to lack of interactions with the customers from the other group should be acquired in the first place. Such an answer seems satisfactory for intermediary services. The acceptance of a delay in transactions of a company that sells products via online auctions usually exceeds the patience of customers willing to purchase goods. This observation might be extended to the most of relationships between companies and individual customers.

The situation becomes more complicated in different situations or when it comes to acquisition of business customers. The problem is particularly pronounced for programming platforms which co-operate with two groups of customers: users and developers of software compatible with a given platform. Contrarily to the presentation of offers on an intermediary website, software development entails considerable costs. Moreover, such ventures are associated with an important risk, since it is never certain whether customers will decide to choose a given platform, which is indispensable for using the developer's software. On the other hand, delaying the decision may lead to a situation where the competitors will take the developer's place.

Such a problem was encountered by Palm, which in 1997 introduced a small personal computer—PalmPilot. At the time, the company was not able to convince software developers to create programs for this platform. Therefore, it decided to develop software on its own. Thus, by offering network-independent benefits, the company acted in a way typical for one-sided companies. Subsequently, after acquiring a certain number of customers, Palm was able to invite some companies to cooperation. Hence, it transformed from a one-sided to a multi-sided company (Evans & Schmalensee, 2007).

An interesting strategy of persuading software developers to cooperate was employed by Nintendo. In 1983 the company introduced a gaming console with a built-in protection feature against games that were not licensed by the company. In such a manner, the company increased games' quality level, on one hand by eliminating mediocre titles, and on the other, by acquiring some exclusive titles

from several renowned developers. Nevertheless, at the stage of console introduction, Nintendo cooperated solely with four software producers, employing a strategy similar to the one elaborated by Palm, i.e. production of its own games. Moreover, the company was selling the consoles below production costs, aiming at the acquisition of a greater market share. Such proceedings were conform with the company's pricing policy, which consisted in burdening software developers with royalties, which amounted to 20 % in respect to the revenues from selling games (Evans & Schmalensee, 2007). Sony was also accused of subsidising its game consoles. Michael Dell commented on the situation as follows: "When Sony cuts the prices on their PlayStations, their stock price goes up. Every time I cut prices, my stock price goes down. If you don't understand why that happens, you don't understand the console business" (Kim, 2004).

2.7 Strategies of Internet-Based Value Propositions

In order to summarise this chapter, five strategies of Internet-based value propositions will be presented. The strategies will be based on the aforementioned methods of increasing value for customer (increasing benefits, reducing prices, reducing non-financial costs) and will take into account the phenomena that influence the value proposition for the customer (virtualisation, value co-creation, experience as a value to customer, and network effects).

In traditional economy, companies are often faced with the problem of relating the level of benefits with the level of prices. Usually, companies that offer lower value charge lower fees than the companies that offer value of higher level. In the case of the Internet, employing such a strategy does not seem justified. On the Internet, the strategy of providing important value for high prices is not usually applied (Kim, 2004). In traditional economy, it is usually related with products of high quality or of a recognisable brand. Internet-based brands, however, seem to be of more egalitarian character. Moreover, many online companies provide their customers with free services, which makes impossible to associate the quality with the price.

Online competition may be perceived through the prism of five strategies of increasing the value to customer, that is: strategy of efficiency, free benefits, complete customer solutions, unique benefits and value co-creation. It should be stressed that these strategies may be implemented simultaneously, since they have all been grouped on different basis.

2.7.1 Efficiency Strategy

In the efficiency strategy, the company supplies customers with solutions that decrease costs (e.g. transactional costs) and therefore increase efficiency and enable customers to save time and money.

Such a strategy is frequently used by online auction services. They offer an extensive range of products, which usually cannot by attained by traditional companies. By aggregating demand and wide choice of products, such companies are able to reduce customer transactional costs related with search and analysis of available offers. Moreover, online auction services are able to decrease customer costs by reducing information asymmetry, e.g. by introducing seller evaluation systems. It should be also noticed that the companies also provide information on the buyers which helps to limit the risk, and therefore reduce transactional costs, to the sellers. Internet largely contributed to reduction of transactional costs. The research conducted by Garicano and Kaplan (2001) shows that in the case of used car auctions, the transaction costs arising from the introduction of the Internet were reduced by half, compared to traditional means of distribution.

2.7.2 Free Benefit Strategy

The free benefit strategy consists of providing customers with solutions for which they do not have to pay. Anderson (2009), as it was mentioned before, discerned the following methods of providing customers with free benefits.

Direct cross-subsidies mean that a customer pays for some products and receives another product or service for free (e.g. delivery). Another situation, commonly observed in *multi-sided platforms*, is when a group of users gains free access to a given service (e.g. articles, e-mail account, search engine), and the incomes for the company are generated by the other customer group (e.g. advertisers). Another method, frequently applied on the Internet, is the so-called *freemium strategy*, which consists of acquiring customers that take advantage of free benefits and then offering them additional services, for which they have to pay. The last method discussed by Anderson is to operate on a *nonmonetary market*, i.e. a situation when some entities offer benefits for free without being motivated by possible financial benefits.

2.7.3 Strategy of Complete Customer Solutions

The main purpose of the strategy of complete customer solutions is to offer customers a wide range of benefits of particular types. Online shops are able to offer a wide range of products, since the technological constraints they encounter are not particularly important, due to the fact that in the case of the most stores, the company enters into contact with a tangible product only after the customer orders it. Consequently, online stores often shape their offer according to the long tail principle, providing their customers with both popular and niche products and services. Moreover, a lot of companies shape their offer based on the so-called economy of scope. This strategy relies on providing the customers with product of various, yet related, categories. In other words, a travel agency, apart from tours, may offer insurance, a possibility to rent a car, etc.

One of the most common examples of companies that use the strategy of complete customer solutions is Amazon.com. The company offers a wide range of products (the long tail principle), selling e.g. niche books and music albums, and supplies products of various categories e.g. home appliance (economy of scope). Another example may be provided by Google. By offering a wide range of online services, the company provides its customers with the possibility to search, exchange and manage information on the Internet.

2.7.4 Strategy of Unique Benefits

When a company uses the strategy of unique benefits, it offers solutions which cannot be easily found on a given market. From the company's perspective, this technique may be very efficient, since it allows charging high prices for its unique product and services. This strategy, however, presents also some inconveniences, such as, for example, the difficulty in developing unusual benefits and sustaining their long-term scarcity. The strategy of delivering unique benefits via Internet may be employed through innovation, privileged access to resources or the strategy of a market niche.

Innovations may help to produce a situation in which the company is able to offer unique services to its customers. Such is the case e.g. of Google, which owing to its innovativeness in the search technology was able to gain a 96 % share of online searches carried out by the Polish Internet users (Gemius, 2014).

The strategy of unique benefits may be also associated with *privileged access to resources*. This strategy is employed e.g. by online ventures that offer content which cannot be found on other websites. The most typical example are the websites that provide information on transport connections, such as train and bus schedules. It is also employed, to a certain extent, by online editions of newspapers, which give access to current and archive articles.

Uniqueness of the offered benefits may be also achieved through *the strategy of a market niche*, i.e. actions that concentrate on a narrow part of the market, where the needs of customers are very particular and may be satisfied only with a specific value proposition. Niche-oriented activities are frequently associated with low level of competition and higher profit margin. An online venture which is typically quoted in the context of such a strategy are online stores offering unusual shoe sizes.

The companies that offer *unique benefits*, for which customer demand exists, may charge its customers with high level costs. In this context, it may mean both high-level prices, and high-level transaction costs (e.g. a slowly functioning website with low-level usability). Otherwise, when a company provides undiversified services that are also offered by numerous competitors, limitation of customer-encountered monetary and nonmonetary costs becomes the main method of increasing value for customer. Such a situation is particularly pronounced in the case of online stores selling home appliances, books, music and online booking services.

2.7.5 Strategy of Value Co-creation

The main goal of the strategy of value co-creation is to include customers in the process of creating value propositions, which will later be delivered to the users participating in the process or to other customers.

In the first case, customers aim at widely perceived individualisation of value proposition, i.e. they engage in proceedings the main goal of which is to produce solutions responding to their needs and expectations (mass customisation). The customer becomes involved in the value exchange with the company, and thereby receives an individualised value proposition. Customers may purchase customised computers, shoes, and clothes, as well as (to a certain extent) customised cars. Customers involved in value co-creation oriented on other users take actions aimed at producing benefits which will satisfy the needs of other customers. These kinds of actions may have many facets. The customers may e.g. publish product reviews (e.g. on the online store websites), enter in interactions with other users (e.g. by means of social networking services), create and publish contents (e.g. Wikipedia), or co-design software (e.g. open-source movement).

It should be noted that usually the aforementioned strategies are employed simultaneously. In this context, the case of Facebook seems particularly interesting. The service applies the strategy of efficiency, enabling its users to stay in continuous contact with a large group of their friends and colleagues. Maintaining such relations would be for possible without the service, nevertheless it would entail much higher transactional costs. Facebook provides its users with free benefits, at the same charging them for certain solutions (freemium) and also generating the advertisement revenues. The options offered by the company (publishing photos, information, and multimedia; sending messages to other users; communicating via online messengers; participating in discussion groups; subscribing to fanpages) fall in the category of complex communication solutions. From the users' perspective, Facebook offers unique benefits, such as social graphs (friend networks) of particular users, user-published contents, or the record of interactions with other customers. Such items are extremely difficult to transfer to other services. Moreover, Facebook relies on value co-creation, since one of its key features is the access to contents regularly created, commended or published by other users.

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Conceptual Model of Internet-Based Customer Value Management

3

3.1 Introduction

The main purpose of this chapter is to present the conceptual model of Internet-based customer value management. The model draws from the aforementioned models and theories, including the concept of delivering value to customers (Szymura-Tyc 2005).

The elaborated construct is based on models and concepts relating to the development of customer relationships, which have been popularised by various authors, such as Blattberg, Getz, and Thomas (2001), Peppers and Rogers (1997), by Dobiegała-Korona (Dobiegała-Korona, 2006; Dobiegała-Korona, Doligalski, & Korona, 2004) and Szymura-Tyc (2005), Kordupleski and Simpson (2003), and Baker (2003). An important contribution was equally made by the concepts of customer value co-creation described by Prahalad and Ramaswamy (2004), Tapscott and Williams (2006), or Kleemann and Voss (2008). The model presented in this paper is also associated with Doyle's concept of value-based marketing and the idea of company value-based management described by Rappaport (1997) or Szablewski (2008).

The feature that distinguishes the model elaborated in this paper from the aforementioned models and concepts is that its main focus is on Internet-based customer value management. The first stage of the model is defining value to customer (see Fig. 3.1). It is the most important phase, since it is associated with strategic decisions that will shape a long-term vision of the company's operations. At this stage, customer target groups and particular value propositions will be chosen.

The subsequent stage relies on creating value for customers and its main goal is to provide the company with resources, capabilities and other organisational solutions that are necessary to enable the delivery of particular value to the customers selected during the previous stage.

The stage of communicating value to the customers aims at attracting the customers and building their trust in the company. Customer attraction relies on

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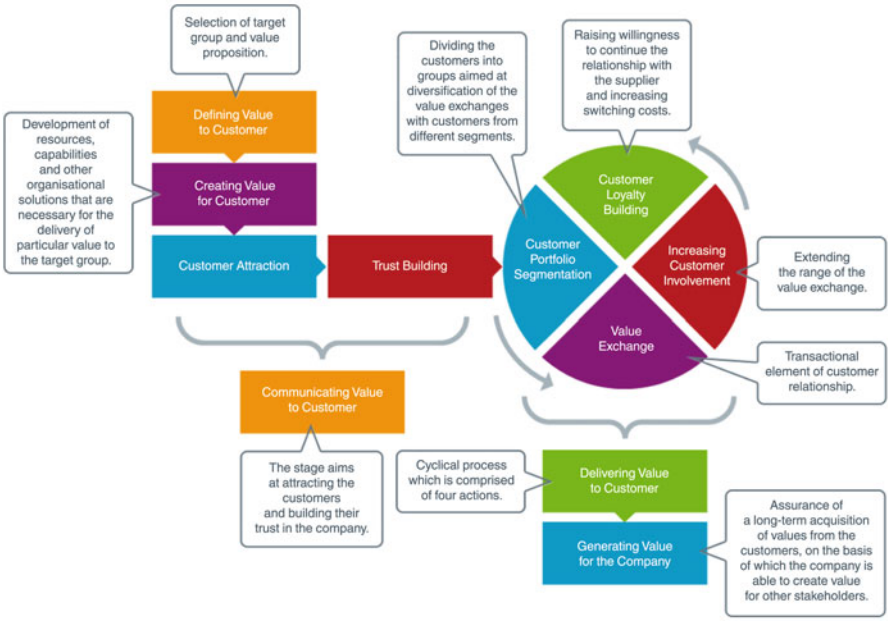

Fig. 3.1 Conceptual model of Internet-based customer value management. Source: own work

shaping needs, preferences, and behaviours of customers (market driving) and/or on informing customers about the value proposition offered by the company (servient approach to customers' needs), as well as on attracting customers to the company's website. From the perspective of the entire process of customer value management, it is particularly important to signalise the company's trustworthiness and build customers' trust. This is because lack of trust is one of the main reasons for which Internet users refrain from online shopping, using online services and sharing sensitive information (Wang, Beaty, & Foxx, 2004).

The phase of delivering value to the customers is a cyclical process, comprised of customer portfolio segmentation, value exchange, increasing customers' involvement and customer loyalty building. Value exchange is the transactional element of the process, during which the company provides customers with value designed to fulfil their needs and in exchange the customers supply the company with values that will serve as the basis for generating value to other stakeholders (e.g. the company's employees or owners). Increasing customer involvement in a relationship with the company aims at extending the range of the value exchange. Companies increase customers involvement by augmenting the frequency and range of exchange with customers and encouraging them to engage in value exchange with other customers or members of a community gathered around the company. Loyalty building is another stage of the value delivery process. Customers' loyalty may result from their willingness to continue the relationship

with the supplier as well as from switching costs. Customer needs and expectations may change with the development of the relationship with the company and customers themselves may start to represent a different value for the company. Hence, re-segmentation of customer portfolio may be necessary. Re-segmentation may be associated with assigning the customer to another segment and therefore with the necessity to provide them with other value proposition and employing other means to increase their involvement and loyalty, since value delivery is a continuous process. Another phenomenon related with communicating and delivering value to customers is customer satisfaction building. Nevertheless, it cannot be perceived as a separate stage of the value delivery process, since the customer's satisfaction is influenced by all the company's proceedings, starting from how the relationship is initiated and the expectations towards the company are formed, ending with the process of loyalty building.

Another phase discerned in the model is value generation for the company, the ability to assure a long-term acquisition of values from the customers, on the basis of which the company is able to create value for other stakeholders (owners, employees, suppliers, state, and society).

The proposed model of Internet-based management combines two approaches. The first one relies on customer value management perceived through the prism of measurement and optimisation of customer lifetime value (Blattberg et al., 2001; Kumar, 2008), the second—on the models of delivering value to customer (Baker, 2003; Szymura-Tyc, 2005).

Compared to the reductionist approach to customer value management, in the proposed model measurement and optimisation of the value of particular customers plays a lesser role, which results from several reasons. Customers of companies using the Internet and particularly of online companies are less likely to generate excessive costs than customers of traditional service companies. Hence the necessity of controlling profitability of particular customers decreases. Moreover, when it comes to online companies, the limitations of capacity are usually much lower than in the case of traditional companies. As a result, building value in online companies relies more on increasing the number of customers than on a strict control and optimisation of each customer's lifetime value.

The differences between the concept of customer value delivery and the proposed model are as follows: in the proposed model the focus switches from value to customer to value exchange that takes place between the customer and the company. As a result, values received from customers also become a subject of analysis. Another element that distinguishes the proposed model is customer portfolio segmentation, which includes the criterion of values being the subject of exchange. Compared to three- or four-sequence models of delivering value to customers, the proposed model also includes the stage associated with the goal of marketing actions, i.e. creation of value to company. This approach seems conform with the American Marketing Association's definition of marketing from year 2004. According to the definition "Marketing is an organizational function and a set of processes for creating, communicating, and delivering value to customers and for

managing customer relationships in ways that benefit the organization and its stakeholders" (American Marketing Association, n.d.).

Moreover, the proposed model reflects the features of customer value management discerned by the author, that is: perception of customer relationships as value exchange, customer orientation, customer value measurement and customer knowledge management, portfolio approach towards customer relationships, focalisation on customer-related processes, association of customer relationship-oriented actions with the company's value, and, finally, perception of the role of customers in the company's business model.

The foundation stone for the model is the concept of value exchange. As it has been mentioned before, value exchange may take three forms. Initial exchange is employed by traditional companies that use the Internet to enter in contact with customers, but the relationship itself is developed through traditional channels. In advertising exchange, the company provides customers with free benefits in exchange for the possibility to display ads. Monetary exchange relies on providing customers with value in exchange for monetary incomes they generate. In consequence, respective stages of the model are perceived through the prism of value exchange.

The author believes that the actions oriented at Internet-based customer value management are more influenced by particular types of exchange than by the type of market on which they take place: institutional or individual (B2B/B2C, respectively). The model elaborated in this paper may be applied to describe actions performed on both types of market as well as to describe market driven and market driving actions.

In the described model, the stages of defining and building value are of strategic character. The following two phases (i.e. communicating and delivering value) of companies' proceedings are presented rather from a tactic and operational point of view. The last stage, value generation for the company, has rather a strategic character.

It should be stressed that the identified stages do not cover all the company's proceedings of a given type. Communicating value may be perceived as a constituent of delivering value to the customers, since the customers are provided with a particular value: communication. Customer trust is built also during the stage of value delivering, when the customer receives products or services from the company. This stage is equally associated with creating or strengthening of company's marketing resources (brand, contents created by customers, etc.), hence resource-related actions should not be perceived only through the prism of creating value.

The model emphasises a feedback mechanism associated with the stage of delivering value. Increase of customer value may result in assigning them to a different segment, which leads to modification of the offered value proposition, etc. In practice, more feedback mechanisms may appear. Financial benefits generated within the scope of customer relationships (value communicating and delivering) may be spent on actions oriented on identification of customer's needs and value innovations for customers (value definition), which consequently may contribute to production of even greater financial benefits.

3.2 Defining Value to Customer

3.2.1 Selection of Value Proposition

Defining value is the first stage of customer value management. During this phase, decisions on the choice of a target group and value proposition are made. When defining value for customers, several factors must be take into consideration. These factors include: customers' needs and expectations, offers of competitive companies as well as resources and capabilities owned or possible to acquire by the company (Szymura-Tyc 2005). During this stage, the main objective of company's proceedings is to gain differential advantage, which was defined by Doyle as a perceived difference in value that leads target customers to prefer one company's offer to those of others (Doyle, 2000). Moreover, Doyle believes that differential advantage may appear only if customers are prepared to pay a higher price for a given product (Doyle, 2000). Marketing actions are often aimed at modifying forms of competition (Garbarski, Rutkowski, & Wrzosek, 2001: 133). In other words, product differentiation serves to transform high-competition markets (perfect competition, or in some cases oligopoly) into monopolistic forms of competition, characterised by diversified offers and thus by less important role of price competition. In its advanced form, the change of competition forms may be achieved through elaboration of so-called ecosystems. The notion may be understood as a wide portfolio of complementary products and services. In such case, the company's main goal is to encourage a customer to start using the services of the company and to maximise product relations attaching customers to the company, and thus burdening them with switching costs. If this goal is reached, the customer that uses products of a given category becomes less prone to offers of competitive companies and the competitive pressure becomes significantly lower.

The use of Internet in marketing has an impact on the analysis of customers' needs and expectations.[1] On the one hand, the use of Internet facilitates identification of customers' needs. Marketing research may be conducted online and customer knowledge may be gathered by customer–company interaction. On the other hand, popularisation of the Internet contributes to changing customers' needs, preferences, and behaviours, which may lead to apparition of new Internet-related needs, such as the need for information search, and the need for widely perceived means of online security.

Apart from customers' needs, the process of defining value to customer should also include the problem of competition. In other words, it should also focus on value propositions offered by competitors. It may be achieved by using preference maps, i.e. graphic representations of value propositions offered by given companies. Based on preference maps, the company may elaborate a value

[1] The problems related to customer need identification and offer positioning have been broadly discussed in the subject literature. In this paper they will be only signalised, since the main focus of the paper is on the use of the Internet.

proposition that is not offered by competitors. Such a value proposition should respond to needs of a particular customer group and stay in conformance with company's resources and capacities.

The model may also serve to describe a popular idea of value innovation. In this paper, value innovation will be understood as a change in the level of offered benefits as well as a changes in the level of price or transaction costs which result in a new value proposition for the customer. Changes in value for customers may stem from modifications of products, but also from modifications in market value chain. The notion of value innovation has been popularised by Kim and Mauborgne. The authors believe that companies should not focus on technological innovations, but rather on value innovations that would make it possible to dominate the market by offering a tremendous leap in value (Kim & Mauborgne, 2004). This approach served as a basis for the method developed by the authors, called the Blue Ocean Strategy.

The authors use the metaphor of red ocean to describe a situation in which a company competes against others according to the rules governing a given market. The company's proceedings do not concentrate on offering new benefits, but on outperforming its rivals. Such a type of competition leads to diminishing prices and to decreasing profit margin within the scope of currently offered benefits. In consequence, competition becomes cutthroat and the metaphoric ocean turns red. Blue ocean is the opposition of red ocean, i.e. a situation when the value for customers becomes redefined, which allows the company to create and capture new demand. In consequence, competition becomes irrelevant, since the company operates in a competition-free market space. In order to achieve the state of blue ocean, a company has to employ the so-called value innovation which may be achieved by four types of actions, that is: by creating, raising, reducing or eliminating factors important to the costumer. As a result, the company should develop a new, innovative value proposition for the customer. The results of the research conducted by Kim and Mauborgne seem particularly interesting. It was showed that the most beneficial for the companies, both in terms of the level of incomes and profitability, was a bold redefinition of value proposition offered to customers. The authors present various examples which prove that the critical success factor was to question the market standards, to introduce value that have never been offered before and, by doing that, to establish the company's position on a market on which competitive constraints are no longer important. The Blue Ocean Strategy cannot be perceived as a breakthrough in defining value for customers, nevertheless it is a coherent method presented in an attractive form, which gained considerable popularity among both market theorists and researchers.

A representative example of Internet-based value innovation may be provided by online banking. Compared to traditional banking, it possesses a much more elaborated set of features which increase its value for the customer, including a possibility to conduct a wide range of bank operations, unlimited access to bank accounts and to information that could not be easily obtained by means of traditional banking, such as for example possibility to get a statement of account for any period (enriching product information), simplified payment receipt acquisition

(digitalisation), receiving of notices and recommendations (mass customisation). In the case of Internet banking, the value innovation is also founded on lower bank operation costs and, which is probably even more important, on lower transaction costs. The customer does not have to go to the bank's branch to perform the most basic operations, which results in considerable time saving. It is worth noticing that the introduction of an innovation may lead to diminution of some benefits (which was noted by the authors of the Blue Ocean strategy). The value diminution in the Internet banking manifests as the lack of personal service and factors that increase transaction costs, such as the necessity to understand how the system of a given bank functions. The diminution of value is also related to the risk inherent to the internet banking itself.

3.2.2 Selection of the Target Group

In the scope of defining value for customer, the company has to choose a particular target group and determine what kind of value proposition it will receive. Customer analysis concerns their characteristics as well as the value they create for the company. Customer characteristics should take into account their needs, expectations towards the offered value proposition, as well as information on their lifestyle and product they use. Customer analysis should not neglect customer-generated benefits and costs. An analysis based on thorough research may become the ground for market segmentation, i.e. the process of splitting customers into different groups, which present different characteristics and react to the company's proceedings in various ways. The segmentation stage of the value definition process is of strategic character. Its main goal is to determine which customer groups (market segments) may be reached with a particular value proposition.

Universal segmentation criteria are impossible to define, for they are chosen in a way that ensures the highest possible utility from the perspective of subsequent marketing actions. Staying in conceptual framework of this paper, the most important criteria of segmentation on the market of individual customers will be as follows:

- Value expected by customers
- Value generated by customers for the company
- Internet usage
- Demographic criteria

Value expected by the customers are strictly correlated with customers' needs and their expectations towards fulfilment of such needs. It should be stressed that this criterion is very wide, since it includes benefits related with psychographic factors (e.g. the value of security having its origins in risk aversion), desired forms of customer service, etc. The criterion of value expected by the customers is also related with value associated with current customer needs and situational

determinants. An example of a target group discerned by means of the criterion of current needs may be provided by the group of customers are in urgent need of particular product and are ready to purchase it for a higher price. Segmentation based on the criterion of expected value makes it easier for the company to deliver value tailored to customers' needs.

Another important criterion of customer segmentation are the *value generated by customers for the company*. Customer-generated value include mainly financial incomes, both in terms of profitability and liquidity, as well as other values delivered by the customers, such as recommendations, information, and benefits associated with the company's image. The use of such a criterion helps to focus on the groups of customers that generate the most important benefits for the company.

Internet usage is another important criterion of market segmentation. Customer's ability to make use of online applications, experience in using the Internet and mode of connecting to the Internet have a considerable influence on their expectations of how their needs should be fulfilled. The majority of internet services is designed for users with different levels of Internet skills. On the other hand, a given value proposition may become unattractive for users with a certain level of Internet knowledge. Mode of connecting to the Internet equally has an influence on the availability of offered value and convenience of use. Customers with slow Internet connection may not be able to view a multimedia message. Access to the Internet from mobile devices may result in difficulties in making use of some features. In the case of institutional market customers, the way of using the Internet may be associated with the customer's willingness to employ online tools of co-operation, such as placing orders, system integration, extranet, etc.

In the context of online customer segmentation with regard to the way of using the Internet, the research entitled *Social Technographics*, conducted by Forrester Research, should be mentioned. The research investigated the level of user participation in social technologies. Nevertheless, it may not be perceived as a type of segmentation, since it does not discern particular groups of Internet users, but it gathers data on various social technology behaviours (Table 3.1).

Even though, according to some researchers, *demographic criteria* have lost their importance in modern economy (Cespedes & Nunes, 2003), in some cases they still seem important. They stay valid especially in Internet promotion, since it is mainly on their basis that targeting of promotional messages is made. Demographic criteria are especially important in a situation when value exchange with some groups of customers is limited or impossible. This may result e.g. from a particular localisation of the customer, or lack of possibility to use a given service. Many services available in the US are unavailable not only in Europe, but also in Canada.

The segmentations presented above confirm that customers cannot be perceived as a homogenous group. The aforementioned segmentations should be treated as specific market maps that outline particular groups of Internet users linked by common interests. A proper segmentation must be useful for the company. Hence, it seems important to create segmentations that reflect specificity, strategy, resources, and capabilities of a given company.

Table 3.1 Levels of social technology participation in the US and Europe according to Forrester Research (Forrester, 2010a, 2010b)

	Characteristics
Creators	• Publish a blog or a website • Upload multimedia • Write articles or stories and post them
Critics	• Post ratings/reviews of products or services • Comment on someone else's blog • Contribute to online forums • Contribute to/edit articles in a wiki
Collectors	• Use RSS feeds • "Vote" for Web sites online • Add "tags" to Web pages or photos
Joiners	• Maintain profile on a social networking site • Visit social networking sites
Spectators	• Read blogs • Listen to podcasts • Watch video from other users • Read online forums • Read customer ratings/reviews
Inactives	• None of the above

When it comes to marketing of products and services offered via traditional channels with the use of the Internet, segmentation is usually not associated with an essential target group redefinition. In such a situation, the Internet becomes another marketing channel. The target group is usually broadened with customers who, because of limitations of various kinds, did not use the existing marketing channels. The inclusion of the Internet in the process of value delivery enables to broaden the target group customers that up to now were unavailable, e.g. because of their localisation (e.g. people from other cities), lack of time (e.g. active people), or lifestyle (e.g. young mothers).

The companies that employ the Internet as the main marketing channel have to determine how particular market segments will be serviced. In the case of online companies, the five patterns of target market selection elaborated by Abell may be successfully applied (Abell, 1980, quoted in Kotler, 1991):

- Single segment concentration
- Product specialisation
- Market specialisation
- Full market coverage
- Selective specialisation

Single segment concentration helps to deliver value that strictly fit the target group's needs. Such type of specialisation is commonly employed on the Internet, e.g. by online stores that offer shoes in big sizes or maternity clothing. The Internet facilitates the development of ventures focused on one particular segment or market niche, since it helps to overcome limitations related with reaching customers that result from geographical distance.

Product specialisation is frequently used by online stores that offer articles of a given category to various customers segments, such as stores selling wines of wide price range and various origin, or online shops offering cameras and camera accessories designed both for professionals and hobbyists.

Another commonly used pattern of segmentation is associated with focus on customers from a given segment (*market specialisation*), who are provided with various kinds of products. Such kind of specialisation is exhibited e.g. by finance-oriented websites that aim their offer at customers who need complex and advanced financial services, such as investment advice, deposits, insurance or consultancy. Another example of ventures concentrated on a given customer segment may be provided by websites designed for customers that are willing to buy an apartment, which apart from information on housing estate, publish contents associated with design, renovation, home insurance, etc.

Full market coverage is a strategy typically employed by large companies that are able to deliver a diversified value proposition to various segments. Such companies usually become successful in one type of product or with one particular customer segment and then, owing to acquired capabilities, technology, scale effects, or brand, broaden the scope of their operations. They may equally benefit from the scale effect (resulting from high value of sales) or from the scope effect (wide range of offered products or services). This strategy was implemented by Amazon.com, which expanded its offer from books to various product categories. On the hardware market, the strategy of full market coverage is used by Dell, which provides its products to various groups of customers. This example shows, however, that associating companies with product specialisation or full market coverage is determined by the way in which the market itself will be defined. Full market coverage is also typical for Internet portals (Yahoo, MSN) that supply various Internet users with differentiated value propositions.

Selective specialisation is associated with operating in several segments by means of various value propositions. Benefits stemming from selective specialisation result more from risk diversification than from the effect of scale or scope.

3.3 Creating Value for Customer

Creating value for customers comes directly after defining value and represents another stage of customer portfolio building process. The first stage focuses on particular target groups and value propositions. After it, the company must deliver the selected value proposition to the customers. In order to succeed, it must ensure efficient organisation of the customer value management process and possess sufficient resources and capabilities, as well as other necessary instruments or solutions.

3.3.1 Organisation of the Internet-Based Customer Value Management Process

One of the most important elements of creating value is to determine how the Internet-based customer value management process will be organised. It can take place within the scope of an already existing organisation or it can be based on a separate framework.

According to Jelassi and Enders, separation from the structures of an already existing organisation (i.e. launching of a new venture) aimed at the development of Internet-based customer relationships results in greater specialisation, higher flexibility, significant innovation and easier access to capital (Jelassi & Enders, 2005). Greater specialisation of online companies, in opposition to multi-channel companies, results from the fact that this kind of entities deliver value to the customers solely via Internet. The online companies, separated from traditional organisations, are found to display higher flexibility in their actions, which is associated with less complex decision processes since they are not limited by constraints of developed organisation. Smaller business units, such as online companies, are equally associated with much more significant innovation level and entrepreneurial spirit. Moreover, separation from the organisation gives easier access to capital of online companies, both by financing with venture capital or by public offering.

The development of Internet-based customer relationship within an already existing organisation (integration) has several benefits, such as the possibility to use an established brand, more effective management of customer knowledge, greater bargain force, as well as the advantages related to the scale effect and multi-channel customer service. Offline companies usually possess a well-known and trusted brand, which plays an important role in Internet-based customer relationship development. The use of various marketing channels, including the Internet, gives more possibilities to collect and employ customer knowledge, and therefore helps to better adjust value proposition to the customers' needs. Multi-channel companies tend to have a stronger bargain power in negotiations with suppliers, related with a more considerable number of customers. What is more, they draw more benefits from the scale effect, resulting e.g. from the necessity to maintain one distribution structure. Finally, the benefits of multi-channel customer service must be also taken into consideration. When it comes to customer value delivery, each marketing channel has a different potential. The customers may, for example, purchase a product via Internet and then return it to a physical store owned by the company (Jelassi & Enders, 2005).

When pondering on possible separation or maintenance of a particular division responsible for the development of Internet-based customer relationships, one should not neglect the question of advantage of multi-channel companies over their online counterparts and the idea of channel conflict.

In his monograph *Clicks, Bricks and Brands*, Martin Lindstroem states that multi-channel companies (*brick-and click companies*) that develop customer relationships with the use of traditional marketing channels and Internet have an

advantage over online companies (*pure players*) and the companies that use the Internet in an insignificant degree or not at all (*brick-and-mortar*).

The thesis seems to be confirmed by Macierzyński, who, while discussing the problem of the Polish banking, stated that contrary to expectations formed during the period dot-com boom, the development of online banking did not make customers turn away from traditional banks. After a few years of optimistic prognoses, such entities had to face tough market reality and eventually the majority of them was closed or sold to traditional competitors. It is true that virtual entities display lower fixed costs, but they spent much more money on acquiring new customers, being at the same time forced to operate under significantly lower net interest margin. Their customers required not only higher interests on deposits, but at the same time expected competitive loan rates. As it soon turned out, the lack of physical presence of such banks made it even more difficult to grant credits (Macierzyński, 2007).

Another important part of the discussion on the addition of the Internet marketing channel is the problem of *channel conflict* (i.e. a situation in which a new channel enters into conflict with already established channels). Such a situation occurs when various channels start to compete against each other on the same market (Lee, Lee, & Larsen, 2003). Quite frequently the customers decide to shift distribution channels. Lower prices and greater accessibility of products encourage customers to leave traditional channels and engage in online purchase. This kind of problem was encountered by the Levi's clothing company in the mid-90s. Due to numerous protests by the owners of traditional stores selling Levi's clothes, the company had to stop selling products via its website. Since it did not want to give up on such an important segment of the market, the company proposed an alternative solution: on its official website, next to pictures and descriptions of the products it publishes a list of e-stores that offer particular goods (Karpinski, 1999). Addition of a new channel may decrease the number of sales when customers are not willing to purchase goods through a new distribution channel. A decrease in sales may be related with a drop in the number of benefits engendered e.g. by lowering of customer service quality, mistaken delivery or an important delay.

The problem of channel conflict was explored by Lee et al. (2003) in the article entitled *Coping with Internet Channel Conflict*. In the preface, the authors present the dilemma associated with the channel conflict: *If you do not sell your products directly over the Internet, people will go to your competitors who do, while if you do sell your products directly, your distributors and dealers will desert you and only carry products from manufacturers who do not compete with them.*

A study conducted among 500 companies in 2010 provided some interesting results (Econsultancy & Foviance, 2010). It revealed that the customer experience associated with multichannel relationships with a company is important or very important to 91 % of the surveyed companies. The greatest barriers to improve the multichannel customer experience are: the company's organisational structure (41 %), the complexity of customer experience (38 %), problems with customer data integration (34 %), insufficient resources (33 %), insufficient means (31 %) and lack of global strategy (30 %).

Another argument for engaging in multichannel activities is the so-called ROPO (Research Online Purchase Offline) effect, i.e. a situation in which customers look for the information about the product on the Internet but then purchase the product through traditional channels of distribution. According to a survey conducted by *Forrester Research* online search for information on products had an influence on 42 % of online and offline sales in 2009 (eMarketer, 2010). A research conducted among the customers of popular Polish chain stores offering consumer electronics and appliances showed that 64 % of respondents conducted an online search for information on a product prior to the purchase (Google, 2008). Other surveys conducted among Polish users show that the Internet is the key source of product information for 78 % of Internet users (Gazeta.pl, Next, 2008).

3.3.2 Resources and Capabilities of Online Companies

In order to provide customers with value defined in the previous stage, the company must possess (or, in some cases, control) particular resources and capabilities. Resources may be defined as material or nonmaterial assets that may be used in the value creation process. Capabilities of a company can be described as abilities that allow the company to make use of its resources in a proper and effective way. The resource theory states that companies should develop key capabilities, i.e. competences that, when put in use, will be appreciated by customers, which are unique, difficult to imitate and possible to apply on various markets (Lockett, Thompson, & Morgenstern, 2009). It is worth noticing that the resources of online companies can be largely treated as marketing resources, i.e. nonmaterial resources that appear during the marketing process and may be used to build competitive advantage (Szymura-Tyc, 2005: 200). The most important marketing resources related to the Internet-based customer value management are:

- Customer portfolio (customer database, loyal customers, advocates)
- Customer knowledge
- Brand, credibility, reputation, image, customer trust
- Domain
- Websites (corporate website, product websites, blogs, profiles on social networking websites, microblog profiles, video website profiles, etc.)
- Information resources (contents) owned by a company or co-created by customers
- Links to the company's website
- Relationships with suppliers
- Partnership and cooperation with other online services

Apart from the aforementioned resources, there company-related resources associated directly with its activity. Some resources may intersect, e.g. brand, reputation and opinions on the company. Moreover, some resources are composed

of sub-resources, e.g. customer portfolio includes customer database, loyal customers and advocates.

The definition of brand equity coined by D. Aaker may help to give a broader look on the specific role of the brand in the scope of customer resources. According to the definition, brand equity is a composition of all the assets and liabilities associated with the brand, its name and symbol that adds to, or subtracts from, the value provided by a product or service to the company and/or that company's customers (Aaker, 1991: 15–16). This non-conventional approach underlines the role of a brand in value creation, both for the customer and for the company. The starting point for the definition is a product or service that becomes a source of value for both parties. Next, the level of value is increased or decreased by assets and liabilities associated with a brand. This approach shows that a brand may be a source of value for customer, but it can also contribute to its reduction. The assets of a brand include contents created by customers, positive opinions on a brand published on the Internet, etc. Negative opinions may be perceived as liabilities, having a negative influence on the company value.

Resources of an online company may also be perceived in relation to search engine positioning or actions involving social media. In the process of web positioning, which aims at getting a high search engine ranking position, the elements that become the most important are: links to the company's website, an Internet domain that is valuable from the perspective of the search engine algorithm, information resources of the website, good construction of the website and the ability to maintain users' interest. On the other hand, when it comes to the assessment of company's actions in social media, the most important element are opinion leaders that are willing to promote the company, the people that join groups that associate the company's followers, etc.

The aforementioned resources should not be perceived as separate elements that individually contribute to value creation in a company. Marketing resources must be seen as a specific cluster of elements possessed by a given company. Quite frequently, valuation of an online company is carried out based on the value of the result resource, that is—the customers, and not by adding up the value of each asset. Business practice shows that in the case of bankruptcy of an online store, the element that is often put up on sale is the company's internet domain. It is understandable, since many of the marketing resources, such as the brand, links leading to a given website or loyal customers are inseparably connected with an internet domain.

It seems difficult to enumerate the most typical capabilities of online companies, since they are strictly related to a particular scope of activity. They can be categorized, however, according to the stage of customer value management process. Therefore, the capabilities of a company may be viewed from the perspective of:

- Value definition—understanding of customer's needs and choosing of right value proposition to fulfil them

- Value creation—acquisition or development of resources and capabilities necessary to provide customers with given value[2]
- Value communication—reaching particular customers with properly customised information, resulting e.g. in building customers' trust
- Value delivery—customer service resulting in customers' satisfaction, involvement and loyalty
- Value generation for a company—the ability to acquire a set of values from customers

This approach partially links up with the classification of market-based capabilities elaborated by Ramaswami, Srivastava, and Bhargava (2009), who present marketing capabilities in the scope of:

- New product development (value definition and creation)
- Customer management (value communication, value delivery and generating value for a company)
- Supply-chain management (value delivery)

Capabilities may be equally perceived from the point of view of the role of the Internet in company proceedings. Within this approach, the capabilities of pure players may be defined as the capacity to provide customers with value, or in other words—fulfil their needs, by means of the Internet. In the case of brick-and-click companies, one of the most important capabilities is to integrate traditional and online marketing channels.

For pure players such as Amazon.com, key resources include the brand, the domain, technology, links to the store webpage, loyal customers that purchase products and recommend the company to others, and a database containing 35 millions of product reviews (state as of March 2013) (McAuley & Leskovec, 2013). The reviews transform Amazon.com from a typical online store into a place where decisions about purchase are made. The key capabilities of the company include the capability to supply customers with exhaustive information on a given product, such as the above mentioned reviews, but also with propositions of related products, simplified order process, as well as efficient delivery and logistic operations. These resources and capabilities enabled the company to successfully switch from one to many product categories.

The following part presents the results of studies on resources and capabilities of online companies and traditional companies that sell their products via Internet. The research on resources and orientations of online companies operating on foreign markets conducted by Colton et al. reveals that the main resources which contribute to financial success of the company are brand and strong relationships with suppliers. The influence that market orientation (the capability to increase the

[2] Cf. Dynamic capabilities related with the company's ability to acquire or update resources and capabilities (Teece, Pisano, & Shuen, 1998).

company's value for a customer), entrepreneurial orientation (the capability to confront new challenges), and international orientation (the knowledge of foreign markets) had on the company's financial performance was indirect and associated mainly with the impact of these factors on the brand and supplier relationships (Colton, Roth, & Bearden, 2010).

Zhu distinguishes four components of e-commerce capabilities. These are:

- Providing information on products and services, including the scope of information (catalogue data, opinions, store location) and tools facilitating data utilisation
- Transaction facilitation, including the possibility of online ordering, tracking of the order status, collecting products from a physical store, etc.)
- Customisation, including customer service and delivery of individual offers and information
- Integration of internal processes, which improves coordination, order fulfilment and supply management

The research conducted by Zhu (2004) shows that in the case of companies involved in online sales, the e-commerce capabilities, together with a complementary factor, that is the level of IT-structure development have a positive influence on the company's performance, including revenue per employee, inventory turnover and cost reduction.

The study prepared by Barua, Konana, and Whinston (2004) seems to confirm this findings. According to the authors, increased customer-side processes digitalisation level has a positive influence on e-commerce's financial performance. In the survey, customer-side digitalisation was perceived as a percentage of online transactions, the number of customers purchasing online and the number of new clients acquired via Internet. The data was collected from American companies in the manufacturing, distribution, retail, and wholesale sectors.

Given the high competition pressure, one of the most frequently presented capabilities of online companies are innovations. It was the main focus of the research conducted by Liao et al., which proved that resources and capabilities of online companies affect the company's innovativeness to a very small extent. Innovations depend mainly on integrative capabilities, which can be defined as the ability to modify the use of capabilities and resources of the company in order to seize new market opportunities. Integrative capabilities include the ability to recognize new opportunities outside the company and to capitalise them. It should be noticed that the resource stock (i.e. competences and capabilities) owned by a company has a positive influence on the both types of integrative capabilities—the broader is the resource stock owned by a company, the more market opportunities it is able to perceive and transform into innovations. The authors state that in order to find a market opportunity, the company must closely watch its customers and competitive companies and focus on problems associated with products, services and processes. On the other hand, market opportunities can be capitalised by a

thorough analysis from various perspectives, including different scenarios and diverse criteria.

3.4 Communicating Value to Customer

Communication of value to customer is the third stage of the customer value management process. It includes drawing of potential customers and gaining their trust towards the company.

The process of attracting potential customers to the company is based on value communication (maintaining servient relationship with customers) or on changing their preferences and behaviours (the concept of new market creation), as well as on encouraging new customers to enter in contact with the company via its website or other means. It should be stressed that one of the main current tendencies is to atomise the company's online presence. In other words, apart from a corporate webpage, companies often have at their disposal product websites, microsites, blogs and subpages (such as on profiles or fanpages) on social networking websites, microblog services or video portals. In the following part, the main focus of which falls on the ways of drawing a potential customers to a website, "a website" will be understood as the total set of pages owned or managed by a company.

Subsequently, due to high level of perceived risk associated by the customers with Internet activities, the company has to display its trustworthiness (related to brand, reputation, image and security) in order to be invested with customers' trust, which is usually a necessary condition to initiate and develop a company-customer relationship.

Being aware of the extensive scope of the concept of customer value communication, in the following part of the book the author will concentrate only on selected aspects of the subject. The analysis of customer attracting process will focus mainly on problems with reaching potential customers by means of online message targeting. It will also include the differences between push and pull strategies within the scope of communicating and present the benefits of word-of-mouth communication. The chapter will not include the description of the instruments of online marketing, since they have been already extensively described in the subject literature. In online economy, as well as in traditional economy the roles of promotion and distribution partially converge. That is why the description of the value chain modification on the market was included in the scope of customer attracting. The part on trust building includes the description of substantive features of the notion and the way various factors influence this process on the Internet.

3.4.1 Customer Attraction

3.4.1.1 Possibilities of Promotional Message Targeting

Internet promotion enables various forms of promotional message targeting. Message targeting makes it possible to deliver message a only to a determined group of

Internet users, at the same time minimising the contact with Internet users from outside the target group. Targeting is influenced by various technical parameters related with Internet use, such as operating system, web browser, screen resolution, IP number or Internet supplier. An advertisement may be displayed in a specified period (e.g. only on public holidays) and in a specific area (geo targeting).

In declarative targeting (which is also referred to as demographic targeting), the promotional message is formed for a particular group of Internet users, based on the information they provided e.g. during e-mail account creation process. Usually, Internet users are asked to provide general demographic information, such as age, gender, place of residence, education, occupation, hobbies, etc. It seems to be a very efficient method of user data acquisition, but it should be stressed that such information are frequently unreliable, since the Internet users may give false data in order to become less interesting for advertisers and consequently receive fewer advertisements.

Contextual targeting consists of displaying promotional messages in an environment related to a particular theme or designed for a particular group. An example of such action is emission of cosmetic advertisements on websites for women. This way of targeting can be compared to ad publication in magazines or spot emission during a particular TV broadcast. Contextual targeting may take place on search engine result pages, as the promotional message may be matched with the user's inquiry. A particular group of Internet users may be reached, just as in the case of traditional media, based on the research on profile and behaviour of its members. It allows to assess the level of consumption of particular media by the target group and to determine which websites they visit the most frequently. The choice of internet websites on which the advertisements will be displayed is based on the affinity index, i.e. the level of compatibility between the community of a given online service and the target group, and other parameters, such as the number of users or the number of views. The use of the above mentioned methods in media strategy preparation may be compared to the use of telemetry research in TV advertisement and reading research in the case of press publicity.

In behavioural profiling, the choice of message recipients is made based on the profiles which reflect their behaviours. This kind of profiling enables to reach e.g. only the users who visit a football service few times a week, the advertisement being displayed on other websites they visit. It is perceived as the most controversial targeting method, since it relies on continuous gathering of data on users' behaviour.

Other mechanisms related with targeting should be also mentioned. The first of them is capping, i.e. the limitation of the number of times an internet user may encounter an online advertisement, e.g. up to 5 emissions per user. Another mechanism that boosts advertisement efficiency is retargeting, which consists of repetitive display of a given advertisement to users who acted in a particular way, e.g. visited an online store, but did not purchase anything. Such a mechanism is a part of behavioural targeting, which is based on gathering information on the message recipients.

3.4.1.2 Push and Pull Strategies

Within communicating value, strategies of push and pull can be distinguished. The push strategy consists of direct activities of a company, aimed at encouraging potential customers to purchase the company's products, change their perception of the company, etc. The pull strategy is focused on customers who initiate actions aimed at developing the relationship with a company (Kumar & Shah, 2004).

It is often believed that the Internet is dominated by the pull strategy (Williams, 2007) and it is the Internet users who initiate interactions by searching information on companies, placing enquiries, etc. The above mentioned process takes place on the Internet, but it is not the sole pattern of purchasing behaviours. Due to increasing number of Internet users, the development of forms and means of promotion and raising accuracy of research, the Internet transforms itself into a mass medium which allows advertisers to reach a wide group of recipients. In the following part the two strategies will be presented as two separate *modi operandi*, nevertheless with the online advertising development, the differences between them seem to fade and one can find various exceptions from the rule.

Push-type operations are usually performed by larger companies that operate on consumer market or institutional market of mass character (e.g. finance, telecommunication, automotive industry). Online promotional campaigns are usually coherent, in terms of content and target group, with the campaigns led in traditional media. They are mainly aimed at image-building (the increase of brand awareness, better perception of the brand, etc.) or sales (usually increase in offline sales). Push-type campaigns are frequently based on graphic forms, such as display advertisement. It includes banners and its derivatives (e.g. billboards, double billboard sky scrapers, rectangle box) and advertisements displayed over the informative content of a website (top layer, interstitial, brandmark). Another forms of push-type advertisement is e-mailing or video advertisements. Online push campaign activities often include sponsoring, which in terms of online promotion is often perceived as an advertising tool.

The pull strategy is most commonly employed by smaller companies that do not make use of mass media in advertising process. In this kind of activities, one of the most frequently used promotion elements is the presence in search engines. This type of promotion includes both purchase of paid links and web positioning, i.e. the entire repertoire of activities aiming at the most visible positioning of the website in search results. The main focus of pull-type promotional campaigns is on generating sales both by engaging customers in direct contacts with a company and by selling products directly via the company's website.

The push-type campaigns employ advertising forms that make it possible to enrich the message with animation, multimedia and interactive elements, which help to boost the broadcast with emotional contents and engage the recipient in an interaction. Nevertheless, the use of multimedia elements may paradoxically have a reverse effect: the more multimedia elements are employed in a message, the more irritating it becomes to the recipient, since it extends the page loading time or disables the content of the site for the time of the ad broadcast. The research conducted by McCoy et al. shows that users' intention to re-visit and recommend

a given site is impaired by aggressive advertising. The results of the study confirm the theory that interruption of targeted activities may generate a negative emotional reaction (McCoy, Everard, Polak, & Galletta, 2007).

The message used in pull-type campaigns is usually significantly poorer. In the case of paid links it is usually limited to a short text which encourages customers to visit the company's website. The description of a website, displayed in search results, is selected by the search engine based on particular parameters and other criteria. As a result, the website's owner does not have always influence on the website's description displayed in the results.

The push strategy may help to generate sales and image benefits (image change or strengthening). In the case of push strategy-based campaigns, promotional messages influence users from the very moment of contact. The users may immediately go to the company's website, on which the force of advertising message becomes increased by adding new information or positive experience. The pull strategy-based campaigns, on the other hand, aim at encouraging users to perform specific actions, such as purchasing, registration or entering into contact with the company. The content of the message is usually poor, focusing more on the presentation of possible benefits to customers that may become an impulse to visit the company's website than on image-building elements. In the pull-type campaigns, entering the advertiser's website is usually indispensable for continuing the purchasing process. There are, however, some exceptions, e.g. when a customer decides to enter into contact with the company by other means, e.g. by telephone, or when a high rank in online search results has a positive influence on the company's image.

Differences between the two types of advertising campaigns may be equally noted in the manner of cost calculation. The value of push-type campaigns is based on the number of views (number of broadcasts) or the number of sent advertising mails. The value of pull-type campaigns, in the case of paid links, is determined by the number of clicks and price per click. Therefore, the advertiser pays for entries and not for views. In order to become noticed by customers and help to strengthen a given brand, the push-type campaigns have to be conducted on a very extensive scale. The minimal scale depends e.g. on the target group or the intensity of the actions performed by competitive advertisers. In the case of pull strategy, the actions may be performed also on a smaller scale.

Online marketing campaigns are highly quantifiable. They can be measured in respect of such variables as the number of people who entered in contact with the advertising message, the average view rate per user or the advertising environment (e.g. the place of the broadcast, the phrase entered into a search engine, etc.). The measuring process may also relate to the behaviour of message recipients after the end of the contact with an advertisement: e.g. whether they visited the advertiser's website, how long they stayed or if they effectuated a purchase. The obtained data help to optimise promotional campaigns and amplify given variables, such as the campaign's range and sales volume. It is a very important feature of the Internet as an advertising medium, since it allows more effective customer acquisition.

3.4.1.3 Informal (Word-of-Mouth) Communication

When analysing customer acquisition one should not forget about informal communication. The notion may be defined as the exchange of information on products or companies carried out by people not related to these companies (Kłopocka 2006). Word-of mouth communication exists in every society and has an influence on various aspects of life. The Internet significantly boosts the potential of informal communication by facilitating the acquisition, publication and exchange of information.

On the Internet, informal communication may appear in various forms. The information may be transmitted via social networking services, blogs, discussion forums, video websites, e-mail and voice messengers. Word-of-mouth communication is the substance of the current tendency on the Internet: web 2.0, that is co-creation, distribution and exchange of contents by Internet users.

Word-of-mouth communication has a significant impact on perception of the company and its products. User opinions available on the Internet frequently influence consumer purchase decisions. As a result, the company's capability to acquire new customers or sell products largely depends on informal communication.

Informal communication monitoring consists of controlling information transmitted via different channels, such as blogs or discussion forums. The employment of technologies largely facilitates the process e.g. by making it possible to receive notifications of the appearance of selected phrases, such as the company's name, in the so-called "blogosphere". The information posted on discussion forums may be corrected, amended or completed by company representatives. The above mentioned operations are an example of reactive actions that influence informal communication.

Proactive actions that impact on informal communication include initiating and maintaining discussion about a subject important from the company's perspective. Companies frequently employ the influence that word-of-mouth communication has on opinion forming and anonymity on the Internet to transmit contents that may bring them advantages.

A company may engage in informal communication with customers e.g. by creating and publishing informative messages that will be passed along Internet users. Such kind of informal communication is sometimes referred to as viral marketing (Word of Mouth Marketing Association, n.d.). The notion was elaborated based on analogy between the rapid spread of information and the spread of viruses. The analogy seems plausible, since viral marketing, just like epidemics, exploits weak ties between social networks. An important element of this form of interaction is the distribution of contents, colloquially called "viruses", by Internet users. According to Phelps et al. the main motivation of Internet users to distribute messages among their friends is the need of entertainment, but also care for others, getting away from current affairs or the need to maintain social connections. The information distributed via viral marketing is usually entertaining, interesting or shocking (Phelps, Lewis, Mobilio, Perry, & Raman, 2004).

An interesting research on the influence of product/service characteristics on informal communication carried out by Moldovan et al. should be also mentioned (Moldovan, Goldenberg, & Chattopadhyay, 2011). For the needs of their research, Moldovan et al. discerned two main parameters of informal communication, that is amount and valence. The amount may be defined as the number of informal messages on the product. Valence describes the extent to which a message encourages or discourages a customer to enter into contact with a given product. The research included two product parameters: originality (innovativeness, uniqueness) and usefulness (the ability of product to provide benefits likely to fulfil customer needs). According to the research, product originality does not influence the valence of word-of-mouth communication. Original products may generate both positive and negative opinions among the customers. Product originality, however, impacts the intensity of communication, which is extremely important when a new product is introduced to the market. The valence of communication, that is encouraging or discouraging of potential customers is determined by product usefulness. These conclusions, as obvious as they seem, help to define the elements that will become a basis of the product introduction strategy. The introduction of an innovative, but useless product may result in more intensified negative word-of-mouth communication than in the case of non-innovative useless product introduction. The subsequent augmentation of usefulness may not generate a similar positively valenced word-of-mouth communication, since the product loses its originality and therefore is not discussed so eagerly. The authors give an example of a product that fell under the above-mentioned scenario. It was Newton, one of the first personal data assistants introduced by Apple in 1993. First model, despite its originality, was perceived as not very useful because of its inadequate handwriting recognition. Even though the error was fixed in the following model, launched a half-year later, the project failed. Paradoxically, if the first model of Newton PDA, with all its limited usefulness, had been less original in the eyes of customers, it would have probably been less discussed. As a consequence, the product would not have lost its reputation within in a very short time, a fact which the latter efforts of the Apple company could not overcome. It should also be mentioned that original products are not only more intensively discussed by customers, but also have a positive influence on the valuation of the company that introduced the product by investors (Srinivasan, Pauwels, Silva-Risso, & Hanssens, 2009).

Another important subject study was conducted by Chen et al. and focused on two mechanisms of social influence: word-of-mouth communication and observational learning (Chen, Wang, & Xie, 2011). Observational learning relies on changing the behaviour of a customer under the influence of the action or consequences of actions taken by other consumers, without the knowledge of their motivations. When it comes to customers of online stores, observational learning may take place based on the analysis of the most frequently purchased products, or products bought together with a given item. The research by Chen et al. focused on the online store Amazon.com and consisted of the analysis of data from the digital camera section of the company's website. This product category is characterised by high customer involvement resulting from high prices and

important role of information (including the information provided by other users) on purchasing process. According to the study, negative word-of-mouth communication has stronger influence on customer buying behaviour than positively valenced communication of this kind. Positive observational learning, based in this case on information about the popularity of a given product among other customers, contributes to sales increase. The opposite effect, however, does not take place—in case of less popular products, the information on low number of sales will not discourage customers from purchase. This important observation gives reason to publish information on product sales. Such data may contribute to increasing sales of popular products, and in the case of niche products, according to the results of the study, they will not restrain the customers from the purchase. It is interesting to note that the influence of the mechanisms described above diminishes with the product lifecycle. This can be interpreted in such a way that consumers who were among the first to purchase the product pay more attention to the information provided by other customers than the users who belong to the so-called late minority and buy the product on a later stage.

From the customer value management perspective, it seems particularly important to compare the value of customers acquired by word-of-mouth communication with the value of customers acquired by standard marketing actions. This problem became the focal point of the research by Villanueva, Yoo, & Hanssens, 2008) who analysed acquisition of customers and their further behaviour towards a web-hosting company. The research shows that in the analysed company, before incorporating customer acquisition costs, the word-of-mouth customers add nearly twice as much value to the company than the customers acquired by traditional marketing actions. After incorporating customer acquisition costs, the difference between the values of customers became even more visible, in favour of informal communication. The higher value of word-of-mouth customers was associated with the fact that they stayed longer as active customers and thus generated more value over time. The higher retention of customers acquired by WOM communication may be related with customer self-selection (customers of a company recommend its services to their friends and colleagues, who have similar needs), positive perception of recommended services (social proof) and the possibility to share the service-related experience with friends, which may result in finding solution to service-related problems and thus in increasing service-related benefits. Marketing-induced customers to a greater extent benefited from short-term sales promotions (time of free use of the service). Both manners of customer acquisition should be perceived as complementary: the word-of-mouth communication is based on the so-called social graph (friend networks), while traditional promotion takes place through institutionalised promotion channels. Therefore, recipient groups reached via the above mentioned channels may differ. Nevertheless, it should be stressed that the authors, analysing the case of a web-hosting company, presented only one of possible scenarios. In the case of other companies, the disparity in value of customers acquired via various channels may look different, for example because of various potentials of products and services to generate word-of-mouth communication.

In the context of recommendation efficiency, one should not forget about the research by Henseler, Hassenburs, and van Birgelen (2011), which concerned the efficiency of programmes of recommendation, consisting of rewarding customers for recommending a company to others, resulting in new customer acquisition. The rewards offered to the recommending customers, right after satisfaction, are quoted as the main reason to recommend the company. According to Henseler, Hassenburs and van Birgelen, high rewards presented to customers for recommending the company may create opportunistic behaviours to a higher extent than low rewards. On the other hand, in terms of company recommendation, opportunistic behaviours tend to be more associated with weak social bonds than with the strong ones. Weak social bonds include acquaintances based on scarce, irregular contacts, whereas strong social bonds comprehend family ties, or relations with close friends. The research shows that the percentage of customers displaying opportunistic behaviours was below 20 %.

Some interesting research focused on another consequence of programmes of recommendation, i.e. the influence of recommendations on the recommending person's loyalty. The premise of the research carried out by Garnefeld, Helm, Eggert, and Tax (2011) was the rule of consistency, popularised by Cialdini, according to which people tend to exhibit behaviours that are consistent with their previous behaviours, beliefs or declarations. Thus, one may make an assumption that recommending a company to friends may result in increasing the loyalty of the recommending person, who wants to perceive themselves and be perceived as consistent in their actions. The research was conducted among customers of an international mobile network operator using pre-paid services. It showed that the recommendation of the company, for which a customer was favourably rewarded or not rewarded at all, increased the loyalty of recommending customers. Why do low awards do not lead to loyalty increase? Low awards may be perceived by customers as offensive or make them feel undervalued. In the research of such type, the problem of selfselection seems particularly important. There is a risk that the customers that recommend the services of a company may be characterised by higher loyalty compared to average customers, which may be associated with greater satisfaction. During the discussed research, the control group included customers of similar characteristics, but who did not take part in recommendation programmes. Thus, the researchers were able to measure the influence of recommendation programme on the loyalty of recommending customers.

Word-of-mouth communication may equally present a threat to the company's image or the reputation of its products. Dissatisfied customers frequently share their opinions on the Internet. These opinions may affect potential customers that look for online information on a given product. The publication of product reviews is also available on the pages of various online stores and there even exist services that contain solely the opinions of customers on given products. The Internet allows dissatisfied customers and the company's competitors to coordinate actions aiming at discrediting it. For this purpose, websites that contain negative information on the company are often created.

3.4.1.4 Modification of Market Value Chain

Similarly to traditional marketing, where the functions of promotion and distribution partially overlap, drawing customers on the Internet may be also based on market value chain. Market value chain shall be perceived as a number of entities playing the role of a distribution channel, the main goal of which is to transmit information, perform transactions, participate in negotiations, etc. Changes within the scope of market value chain can be due to a different formation of transaction costs e.g.:

- The cost of transactions executed through e-business channels is lower than that of transactions executed through conventional channels.
- Electronic channels are able to transmit more information than conventional channels.
- As complexity and uncertainty increases, the quantity of information transmitted through electronic channels also increases.
- Market efficiency is positively correlated with ICT concentration.
- Transaction costs decrease as e-commerce volume increases (Rossignoli, 2009).

The following part of the chapter will concentrate on the possible modifications of market value chain, from the perspective of producers or importers of traditional, non-digital goods. After some modifications, such a manner of reasoning may be extended to other entities functioning in the supply chain, e.g. online stores.

The producer may make use of a direct channel, entering into direct contact with customers and thus cutting out intermediaries. Even though it is equal to complete renunciation of benefits associated with the employment of already existing Internet marketing channels, some companies (such as Dell) willingly use such this solution. One of the most important challenges for companies using direct channel is to generate traffic, i.e. draw potential customers to the company's website. If the company succeeds, it will be put in advantageous position, since, compared to other options, in the case of direct channel competitive pressure is much lower. In other words, the webpage does not contain rival offers, even though customers may easily access the sites of other companies. In the mid-90s, when the Internet started to be employed as a business tool, many experts claimed that indirect market channel would prevail and that intermediaries, perceived in a traditional way, would completely disappear. As time went by, it turned out that direct channel did not dominate purchase process, mainly because of the appearance of new intermediaries. What is more, transaction costs associated with direct sale through the Internet generated multichannel conflict, i.e. the situation in which customers abandoned traditional distribution networks to the benefit of online shopping. It may seem that from the perspective of Internet sales, such a situation is quite advantageous. A traditional distribution network, frequently containing co-operating companies constitutes an important asset for the company. Customers' choosing the Internet over traditional distribution channels may force companies to withdraw co-operation with the manufacturer and thus lead to diminishing of its product distribution and consequently—its competitive position.

The manufacturer may use a marketing channel based on already existing intermediaries, such as for example information intermediaries (also referred to as infomediaries), i.e. companies that provide environment enabling buyers and sellers to enter into contact. There are numerous kinds of infomediaries, such as for example online auctions. A common example of employing already existing intermediaries is the use of search engines to promote a given manufacturer. Owing to proper positioning, Internet users visit the company's site, gaining a possibility to contact the company's representatives or purchase a product. Price comparison websites work in the same manner. These mechanism enable to identify the most competitive offer on the market with regard to the product's price. Quite often price comparison websites give customers the possibility to verify the supplier trustworthiness, by providing them with other users' opinions on a given store. Another way to co-operate with already existing intermediaries are affiliate programs, i.e. advertising programs in which the company publishes information about its products on websites which it does not own. In return for stimulating a particular action, such as entering the company's website, registration or product purchase, the company pays the owner of the webpage which initiated the action. As opposed to direct channel, the manufacturer cooperating with an intermediary does not have to generate traffic on its website, since this task becomes assigned to an intermediary. On the other hand, the company has to deal with strong competition: in the case of online auctions and price comparison websites, competitive pressure is extremely high. Intermediaries give customer a possibility to easily compare various homogeneous offers provided by various suppliers and choose the offering the lowest price, which leads to increasing customers' price sensitivity. Involvement of an intermediary seems more relevant when the company is one of many manufacturers of a given product and still does not possess a recognisable brand.

A more elaborate method of use of an Internet-based marketing channel in the company's operations is to provide the value chain with a new link, which will seize some of the transmitted value. The value-seizing links may exist in various forms, such as for example metamarkets, i.e. environments elaborated in order to satisfy a particular need of customers (e.g. a portal presenting hotel offers). A manufacturer willing to add a new intermediary into the value chain must be ready to generate traffic. It should be noticed that in such a situation competitive pressure is much lower than in the case of co-operation with already existing intermediaries. The producer acting at the same time as an intermediary gains advantage over other companies whose offers are presented on the website. Without generating any costs, it can display its advertisements when the advertising space is not occupied by the paid ads of competitive companies.

The highest level of Internet marketing channel employment is value chain dominance. It takes place when on a particular level of the chain exists only one entity, or when a given entity is significantly stronger than others. When such a situation occurs, the dominant entity can seize a bigger part of value than it is normally possible. Such is the case of leading online auctions, eBay on the international level and Allegro on the Polish market. Value chain dominance may

Table 3.2 Possible modifications of value chain on the Internet from the manufacturer's perspective

	Consequences for increasing company's value	Necessity to generate traffic	Competitive pressure
Direct channel	Lack of necessity to share value with intermediaries. Limited access to customers, possible outflow of value to competitors	High	Low
Using already existing intermediaries	Necessity to share value with intermediaries (e.g. price comparison websites) for gaining access to potential customers	Low	High
Providing the value chain with a new link	Ability to overtake a part of value by means of conjoining adjacent links of the value chain (buyers and sellers). Necessity to create a link offering benefits that would seem attractive for the both sides	High	Moderate
Value chain dominance	Ability to overtake a large share of value by means of conjoining adjacent links of the value chain (buyers and sellers), which may be achieved only when a dominance over other intermediaries is reached	Low	Low

Source: own work

cause inconvenience to customers: the company may burden customers with higher costs, such as additional charges or commissions, since there are no alternative competitive suppliers

Limitations of benefits to customers, stemming from modifications within the value chain, have been described by many authors. Tyagi points out that decreasing transaction costs together with important economies of scale may lead to reduction of the number of suppliers on the market. As a result it may limit the benefits to customer, especially when customers' needs and expectations are diversified (Tyagi, 2004). Similar conclusion has been reached by Szymański, who believes that such a situation may lead to development of imitations strategies by companies that follow the leader-innovator (Szymański, 2010) (Table 3.2).

3.4.2 Trust Building

3.4.2.1 The Notion of Trust

The notion of trust appears in various domains and scientific disciplines. In recent years the concept started to be frequently employed in economics and management sciences. Trust appears in these sciences e.g. in the following contexts (Grudzewski, Hejduk, Sakowska, & Wańtuchowicz, 2007: 29):

- Key element of every transaction,

- Reduction of transaction costs,
- Ensuring of market existence,
- Organisational coordination,
- Company's capability to survive in a crisis situation.

In their monograph entitled *The Social Construction of Trust*, Weber and Carter state that without trust society could not exist. The need to analyze all the decisions for possible negative consequences would lead to paralysis of society. Therefore, society is organised around trust (Weber & Carter, 2002: 52).

In *Trust. Social Capital and Civil Society,* Fukuyama, perceives trust as the source of economic growth and social development. According to the author, the societies displaying a low rate of trust (e.g. Italy, France, South Korea, China) develop more slowly than the high-trust societies (e.g. Germany, Japan, USA). Even though the examples provided by Fukuyama were met with strong criticism, the concept of trust as a growth factor appears equally in other publications. Fukuyama's hypothesis about a strong positive correlation between the level of trust in a society and economic growth was empirically proven by Knack and Keefer. The study focused on determining the correlation between economic growth and the overall trust index, measured by the percentage of responders who positively answered the question: "Generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people?". The increase of trust by 10 % is associated with an increase with GDP per capita by 0.5 % and augmentation of the growth rate by one-quarter (Grudzewski et al., 2007: 29). This correlation, however, does not necessarily mean simple causality. On one hand, an increase in trust levels in a society may lead to reduction of transaction costs and therefore to acceleration of economic growth and augmentation of GDP per capita. On the other hand, an increase in GDP per capita may result in lowering the level of customer risk perception and influence a global trust increase.

In the subject literature, the notion of trust has been defined in various, often contradictory, ways. There is no single trust model that could be applied to various areas of marketing. Moreover, the question whether trust is the key concept in every marketing area is still to be answered (Cowles, 1997 quoted by Jevons & Gabbott, 2000). In the following part, the idea of trust will be perceived solely through the prism of relationships between companies and customers.

Schurr and Ozanne (1985) define trust as the belief that a party's word or promise is reliable and that a party will fulfil their obligations in an exchange relationship. Similarly, Rotter states that trust may be perceived as a generalized expectation held by an individual that the word, promise, oral or written statement of another individual or group can be relied upon (Rotter, 1980 quoted in Schlosser, White, & Lloyd, 2006). Sitkin and Roth, on the other hand, perceive trust as a belief in a person's competence to perform a specific task under specific circumstances (Sitkin & Roth, 1993, quoted in Schlosser et al., 2006). Doney and Cannon (1997) give the notion a narrower sense, i.e. the perceived credibility and benevolence of a target of trust. Finally, Bart et al., in the context of customer behaviour on the Internet, provide a broader definition of the notion, according to which trust is a

psychological state comprising the intention to accept vulnerability based on positive expectations of the intentions or behaviours of another (Bart, Shankar, Sultan, & Urban, 2005).

For the needs of this paper, trust shall be defined as the conviction of the subject that their expectations of receiving particular value from the entity invested with trust will be fulfilled and that it will not generate additional unjustified costs. This interpretation draws from various definitions existing in literature, at the same time referring to the idea of the value for the customer. It gives equally a broader perspective on the subject invested with trust, which can be not only a person or institution, but a webpage, technology, marketing channel, etc.

The above mentioned definitions present trust without distinguishing particular dimensions of this notion. In the subject literature, the dimensions of trust are categorised based on several different aspects. The most popular categorisation includes three dimensions of trust: ability, benevolence and integrity. Ability reflects the customer's belief that the company is able to deliver the expected value proposition. Benevolence reflects confidence that the company has a positive orientation towards customers' needs and it will ensure their satisfaction, even if it entails additional costs. Integrity reflects confidence that the company adheres to a set of moral principles or professional standards (Schlosser et al., 2006).

These trust dimensions are connected, nevertheless they may appear separately. Customers may not exhibit trust in a company that cares for their needs, respects laws, moral principles and professional standards, but which is unable to supply customers with desired value. Similarly, a company that provides suitable products and displays integrity towards its customers may lose its trustworthiness if it does not care for fulfilment of customers' needs or the level of their satisfaction. Non-obedience to law, moral principles or professional standards may result in weakening or losing customers' trust, even if the fulfil their basic needs and delivers value properly.

Another typology presents trust dimensions based on the role of various cues and customer's experience in customer trust building. Trust may be formed on the basis of various cues delivered by an entity which wants to be invested with the customer's trust (cue-based trust). Another dimension of trust is related with the customers' beliefs related with previous experiences with the company (experience-based trust) (Wang et al., 2004). When it comes to internet-based customer relations, the importance of trust increases, as the customer-perceived risk becomes greater.[3] High level of risk perception is characteristic on only for beginners, but also for experienced Internet users (Forsythe, Liu, Shannon, & Gardner, 2006; Schlosser et al., 2006). Therefore, the message transmitted by means of the website and other communication tools should emphasise the so-called trust markers, i.e. signals that contribute to gaining customer's trust. Negligence of the trust-building process may lead to the absence of trust and become the main reason for which customers refrain from online purchasing,

[3] The idea of customer risk was developed in Chap. 2.

using online services and sensitive information disclosure (Wang et al., 2004). According to Urban, Amyx, and Lorenzon (2009) trust is a crucial factor that enables Internet users to make transactions, purchase online and engage in various actions on a website or within a community. Influence of trust consists of perceived risk diminution and reduction of cognitive complexity that accompanies even the most simple market decisions (Lewicka-Strzałecka, 2003). The research conducted by Kim et al. shows that investing an online store with trust by customers has a positive influence on their buying intentions and negative impact on the perception of transaction risk. On the other hand, the risk perceived by the customer lowers purchase intention. The process is equally influenced by the expected benefits that increase purchase intention (Kim, Ferrin, & Raghav Rao, 2008). Other studies show that acquisition of customers' trust by signalising seller reputation may lead to an increase in price levels (Bapna, Jank, & Shmueli, 2008; Liu, Wei, & Chen, 2009; Obłój, 2006). Finally, trust is also perceived as one of the premises of customer loyalty in e-commerce.

3.4.3 Customer Trust Acquisition on the Internet

In this chapter, the ways of gaining customers' trust on the Internet will be presented. The approach to be discussed focuses on the problems related with communication, which is determined by the construction of the model. However, the level of customers' trust is influenced not only by the communication of the company's trustworthiness (reputation, brand, image or security) to customers, but also by the value delivery on subsequent stages of the process.

The following part of this chapter concentrates on the key conclusions from selected studies on online trust building. It should be noted that the trust building process is to a large extent determined by contextual factors and the recipient's personal profile (Urban et al., 2009), which produce some restrictions to the universality of the observations.

Kim et al. proved that the knowledge of the vendor is one among many factors influencing customer trust. The knowledge of the vendor marks not only the trust building process, but also customers' purchase intentions (Kim et al., 2008). Hence, trust building becomes a very important element e.g. to specialised companies, previously unknown to customers, that become discovered by potential customers by means of various search mechanisms. The problem was elaborated in the article by Wang et al. (2004) entitled *Signalling the Trustworthiness of Small Online Retailers*. The research conducted by Guinaliu, Belanche, Casaló, and Flavián (2011) shows that both the frequency and quality of the online communication between a consumer and a company have a positive influence on the level of trust.

The research conducted by Schlosser et al. (2006) shows that in spite of customers asserting that information on the company's privacy policy plays an important role, one of the key factors of trust building is the look of the company's website. Professional design of the site may encourage customers to purchase, building their conviction that the company is able to assure satisfying service

quality. Customers tend to believe that a company which pays attention to its website design is able to assure a satisfying level of service.

Bart et al. (2005) conducted a research on elements helping to establish trust to websites from various thematic categories. The research was based on data from 6831 consumers using 25 sites from 8 website categories. The results showed that the role of the determinants of online trust is different across site categories. Privacy policy is an influential element of trust building for travel sites, social networks and online stores. Customers shopping or booking online are highly sensitive to risk associated with transferring sensitive data. On community sites, the customers exchange information, hence privacy protection, especially the protection of personal data, becomes an important factor of building trust.

Navigation is a dominant element of building customers' trust for the majority of site categories, but the strongest in the case of sports sites, portals, and online stores, i.e. information-sensitive sites. That is why proper navigation and presentation of information is in this case extremely important. Moreover, quite frequently competitive websites contain identical information, such as for example results of sport games from given seasons. Hence, providing customers with easy access to information becomes crucial, not only for building customers' trust, but also for gaining competitive advantage.

Brand is important for building online trust in all the website categories, except portals. It has the strongest influence in the case of sites associated with high involvement of users, such as automobile, financial services, computer, software and social sites.

Similarly to brand, in the case of high-involvement sites (i.e. sites dedicated to software and computers, or sites giving a possibility to purchase a car or choose travel services), the option to be provided with advice is one of dominant determinants of online trust. In other words, sites relating to products that must be wisely chosen in order to satisfy the customer.

Proper order fulfilment is an influential determinant of trust for online stores and sites which enable booking travel services. The influence of absence of errors on online trust is not very large and does not differ across categories.

The main goal of the study described above was to determine if there exists a diversification of online trust drivers influencing customers of particular characteristic. The results showed that brand strength helps to build trust of better educated customers. It may be linked with the fact that the customers who are better educated and better paid dedicate less time to the decision making process and rely on the criterion of brand. Among all the participants of the research, brand strength and advice were the most influential determinants of trust for websites (Bart et al., 2005). Moreover, the authors of the research stress that navigation, content presentation, advice and brand strength have bigger influence on trust building than privacy policy and webpage security.

Schlosser et al. (2006) have verified which elements of trust (ability, benevolence and integrity) may encourage the customer's purchase intention, i.e. convert website visitors into buyers. The authors discern two types of online stores customers: searchers and browsers. Searchers want to acquire information about a

given product and the way they browse the page reflects this primary goal. Browsers navigate through websites in a non-coordinate manner, acting spontaneously, without a precise goal. They tend to rely more on general impression. According to the results of the research, searchers' purchase intentions were mainly influenced by their trust in the company's ability to process the order properly. Information on privacy and safety policy published on the company's website increase searchers' confidence in the company's benevolence and integrity, but do not influence their purchase intention. In the case of browsers, the element of trust, which influences their purchase intentions is benevolence, and not ability, which is dominant the case of searchers.

Another element that must be taken into consideration when analysing online trust building is the product price. According to Kim and Benbasat (2009–2010), customers are more influenced by the content of trust-assuring arguments when the price of a product is relatively high. When it comes to cheaper products, the level of customer trust will be influenced by the source of the arguments, which may come from the company, but also from a third party. The authors believe that the obtain results are coherent with the observations provided by the elaboration likelihood model (ELM). The model distinguishes between central and peripheral route of information processing. When the customers become highly involved in the process (e.g. because of the high price of the product), they look for detailed information, which they subsequently start to process intensively. In such a case, it is recommended to use the central route of persuasion, i.e. supply of extensive information and use of strong arguments in favour of purchase. In the case of low involvement (e.g. resulting from low price of the product), the employment of rational argumentation is not necessary, since the most important role is played by peripheral elements of the message, such as graphics, sound, symbols and humoristic elements.

Another facet of the problem is associated with inconclusive influence of the transfer of trust from the third party. Wang et al. have proved that elements such as awards given to a website by various institutions and privacy disclosure enhance customers' trust in a website. Information on the company's privacy policy and seals of approval awarded by authentication companies (e.g. Verisign) were found to directly encourage consumers' willingness to provide sensitive data. Finally, awards from neutral sources were found to directly encourage customers' bookmarking intentions (Wang et al., 2004). Kim et al. (2008) engage in polemics with this statement, stating that the third-party seals have no significant effect on trust and purchase intention of the customers. They may reduce, however, the actual level of risk they perceive. The authors believe that it may be associated with the fact that consumers simply do not recognize a third-party seal as an assurance of trust.

In the case of entities participating in online auctions or other sub-kinds of online market, a very important role in customer trust acquisition is played by contractor evaluation systems. Signalling reputation with the use of these systems may have an impact on the price level of transactions, as described in chapter two.

3.5 Delivering Value to Customer

Once the company managed to attract customers to its website and to gain their trust, it engages in the stage of value delivery. It is a cyclic process that includes customer portfolio segmentation, value exchange, increasing customer involvement and loyalty building. Customer portfolio segmentation consists of dividing customers into groups, which enables differentiation of value exchanges between the company and customers from various segments. Value exchange is the transactional element of the process, during which the company provides customers with value designed to fulfil their needs and in exchange the customers supply the company with values that will serve as the basis for generating value to other stakeholders (e.g. the company's employees or owners). Increasing customer involvement in a relationship with the company aims at extending the range of the value exchange. If a customer bought a basic product in an online store, the activities in this field will be directed towards increasing customer purchase frequency and augmenting the scope of the value exchange, i.e. encouraging the customer not only to buy more expensive products, but also to provide the company with information and recommend its services. Increasing customer involvement may help to engage in communication and interaction with other customers of the company through active participation in opinion exchange and in creating value within the community gathered around the company. Loyalty building is another stage of the value delivery process. Customers' loyalty may be gained by increasing customers' will to continue the relationship with the company, but also by locking them with switching costs. After carrying out of the proceedings described above, customer needs and expectations may change and customers themselves may start to represent a different value for the company. Hence, re-segmentation of customer portfolio may be necessary. Re-segmentation may be associated with assigning the customer to other segment and therefore with the necessity to provide them with other value proposition and employing other means to increase their involvement and loyalty. The value delivering stage includes also satisfaction building. The actions aimed at building customer satisfaction cannot be perceived as a separate stage of the value delivery process, since the customer's satisfaction is influenced by all the company's undertakings, starting from how the relationship is initiated and the expectations towards the company are formed, ending with the process of loyalty building.

One of the most desired effects of delivering value to customers is to generate value for the company, which in this paper will be perceived as acquisition of values from the customers, on the basis of which the company is able to create value for other stakeholders, such as employees and owners.

3.5.1 Customer Portfolio Segmentation and Value Exchange

Customer portfolio includes the totality of relationships between the company and its customers. Customer relationship should be perceived as a bidirectional transfer

of value between the company and the customer. Taking into account the vast range of value being the subject of the exchange, customer relationships may take different forms. Hence, there arises a need of customer portfolio segmentation (customer profiling), i.e. dividing the customers into groups, based on differences in their characteristics and reactions to the company's proceedings. Portfolio segmentation may contribute to better fulfilment of customer needs, but it may also help to focus the company's efforts on the customers that are likely to generate the most important benefits. A consequence of customer portfolio segmentation is the diversification of the exchanges between customers from different segments. That is why both phenomena are described together.

There is a significant difference between customer portfolio segmentation and market segmentation taking place during the stage of value definition. Market segmentation aims at identifying groups of potential customers to which a given value proposition will be presented. Customer portfolio segmentation relies on dividing current customers into particular segments, in order to better meet their needs and help the company to concentrate on the customers that generate the most important benefits. The two segmentations differ not only in their objectives, but also in terms of employed information. Usually, companies have extensive knowledge of their customers, including their characteristics and information on their past relationships with the company. Therefore, customer portfolio segmentation may be much more detailed than the market segmentation. It does not mean, however, that a detailed segmentation must mean high amount of discerned elements. Proper segmentation, in the case of both market and customer portfolio, must give a possibility to be put in practice and consequently generate value for the company. An efficient segmentation is not necessarily related with a high number of segments. The detailed character of segmentation may be associated with precise assignment of customers to given segments. Such a segmentation is possible for companies that display extensive knowledge of their customers, based on the record of all the interactions (including transactions) between a customer and the company. It is the most common in telecommunication, banking and insurance sector. Online companies may equally register their customers' activities, especially if they take place after logging.

Both in the case of market segmentation and customer market segmentation, universal procedural criteria cannot be provided. The choice of particular criteria must ensure the highest possible value of the segmentation from the company's perspective. For this to happen, the segments must be sufficiently large and clearly described in order to enable the company to implement a strategy aimed at increasing the value of customers from a given segment.

In subject literature, numerous models of customer portfolio segmentation, based on various criteria, have been described. Reinartz and Kumar perceive customer segmentation in terms of customer longevity and companies' profits (Reinartz & Kumar, 2002). Zeithaml, Rust, and Lemon (2001) elaborated the customer pyramid model, in which the customers are assigned to particular groups, based on the profits they generate to the company. Storbacka (1997), on the other hand, created a model of bank customer segmentation, the main criteria of which

were sales volume (the sum of deposits and loan balances) and customer profitability.

Based on the models of segmentation described above, an attempt of formulating the idea of customer portfolio segmentation may be made. In this approach, portfolio segmentation includes three segments of customers, distinguished by the criterion of profitability, based solely on financial data or—assuming that non-monetary values received from the customers may be valuated—the entire set of values received from customers. This type of segmentation enables to discern three groups of customers: customers that are highly profitable, although not numerous; the group of customers that generate moderate profits, but is generally large, and the group of customers that are unprofitable or below the expected profitability.

This division and conclusions of the studies cited above help to formulate a framework of actions designed to increase the value of customers from given segments (see Table 3.3). *High-profit customers* are not numerous, but owing to the high profitability level they largely contribute to the growth of the company's profits (or to loss reduction). Customers of such type are familiarised with the company's offer, usually have used it for some time and therefore do not need to receive detailed promotional information. In this case, the main focus of the company's proceedings should be on customer retention, e.g. by limiting the value gap (the difference between expected and received value), decreasing non-financial costs associated with maintaining relations with the company (reduction of transactional costs, e.g. by simplified ordering process) as well as by imposing and making evident switching costs (which prevent customers from switching to competitive companies)

Medium-profit customers are usually very numerous and therefore contribute to the growth of a company's profits or to loss reduction. This group is comprised of customers that use only selected services from the company's repertoire, and of customers who provide the company with numerous benefits, but still are perceived as medium—or low-profit customers, due to the high level of costs they generate. In

Table 3.3 An example of customer portfolio segmentation and strategies for increasing value of customers from various segments

Customer portfolio segments	Actions to increase the customer value
Small group of high-profit customers (++)	Limitation of value gap Limitation of non-monetary costs of relations with the company Imposition of switching costs
Large group of medium-profit customers (+)	Additional sales Imposition of switching costs
Low-profit and unprofitable customers (−)	Elimination of cost-generating factors Additional sales Strict cost control Price augmentation

Source: own work

the case of medium-profit customers, company's proceedings should aim at retention and augmentation of their value to the company, which may result in migration of a part of the medium-profit customers to the group of high-profit customers. This kind of action combines elements used in case of high-profit and unprofitable customers, including switching cost imposition as well as increasing their profitability by additional sales and service cost reduction.

The third group includes *low-profit and unprofitable customers*. It should be noticed that the company has more restrictions when it comes to customer service, but on the other hand the level of required customer profitability grows with the company's capacity to acquire new customers. Before formulating a strategy aimed at increasing value of low-profit and unprofitable customers, it is particularly important to understand the reasons why the profitability of this group is below expectations. It may be caused by high customer-generated costs associated with time-consuming service, high number of returns, but also low rate of transactions combined with high acquisition costs. When analysing customers' behaviour, the company should check if low profitability does not result from providing customers with cost-generating benefits, which from their perspective are not particularly important (e.g. 24 h call centre). In such case, elimination of these benefits may have a positive impact on the company's profitability. Reinartz and Kumar state the companies with low share in the totality of customer's purchases (i.e. if the customer spends more on the products offered by direct competitors of the company than on the products of the company itself) should engage in sales activities (Reinartz & Kumar, 2002). If the company is able to satisfy most or all of the customer's needs for product of a given type (i.e. high share in the totality of customer's purchases), it should introduce strict control of costs. Further actions should consist in augmentation of prices, which will probably result in loss of certain customers and increase in profitability of the customers that will remain. Ending relationships with selected customers is perceived as a very controversial issue. Some researchers advise such a proceeding (Awdziej, 2009; Peppers & Rogers, 2011: 146). Other authors, however, criticise such an approach, stating that companies should cooperate with customers to increase their profitability (Dobiegała-Korona, 2010: 43).

Zeithaml et al. (2001) state that the company which not only successfully employs customer differentiation (segmentation), but also has revolutionised this approach by questioning the rationality of treating all the customers in the same way is FedEx. The company divides its customers into three groups: the good, the bad and the ugly. According to the authors, the company puts its efforts into the good, tries to convert the bad into the good, and discourages the ugly (Zeithaml et al., 2001). In the mid-90s the company started to analyse the profitability of its most important customers. It turned out that the biggest 30 customers generate about 10 % of the total volume of returns. The analysis found that the level of incomes generated by certain customers, especially those requiring lots of residential deliveries, is much lower than it had been negotiated. FedEx decided to impose higher rates on its customers and those who refused were advised to start using services of other delivery companies (Brooks, 1999).

Storbacka provides an example of a Nordic retail bank, which in mid-90s conducted an analysis of its customers' profitability. The collected data showed that 54 % of the bank's customers were unprofitable. Nevertheless, the bank managed to generate profits, mainly because of the most profitable customers who, despite the fact that accounted only for 30 % of all customers, managed to provide over 200 % of the bank's benefits. At the same time, a similar dependence was possible to trace also in the case of U.S. banks. Brooks admits, citing the data collected by a consulting company, that 20 % of the most profitable customers of a bank generate 150 % of overall profit, while the bottom 20 % of customers decreases the profits by 50 % (Brooks, 1999). Gupta and Lehmann quote data according to which in some banks 70 % of customers are unprofitable (Gupta & Lehmann, 2005; Rudawska, 2010: 406).

High percentage of unprofitable customers is characteristic for sectors in which a major role is played by customer service, and the customers have important bargain force. As a result, service costs constitute a significant part of overall customer costs. In traditional banking, unprofitable customers frequently use cost-generating service channels, such as physical bank branches, and are not usually interested in products that generate the highest profit to the bank (i.e. loans and deposits) (Brooks, 1999; Storbacka, 1997). The sectors on which customer service has the most important influence are service sectors. In many types of service ventures (e.g. advertisement agencies) customers that cooperate with companies posses a very strong bargain force, which leads to possible cost increase e.g. if customers reject subsequent projects of the company and constantly demand new ones. In such situations customers display higher potential of cost generating, hence a higher percentage of customers may be unprofitable.

The use of Internet makes it possible to reduce the scope of customer service in the totality of benefits delivered to customers. It results from the fact that online customers usually have to use self-service, which consists in e.g. self-configuration of a service of even designing a product. If the company is able to discourage customers from the use of cost-generating forms of service, such as call centres, they usually do not have any possibility to generate additional costs. Naturally, many exceptions to the rule may be found: online store customers may return products causes costs; opinions published by some users on online discussion forums make some customers leave; other website users may try to do damage to the company's IT system, which may be associated with significant losses. Higher percentage of online customers may be also associated with the pricing policy of the company. If the company employs freemium strategy, which consists of providing customers with free benefits and then offering them additional premium solutions for which they have to pay, free customers, being usually the majority, become unprofitable. The company renders some services to them without imposing any fee (at this point, recommendations, network effect, information provided to the company and other values generated by these customers that are difficult to measure will not be discussed).

Customer portfolio segmentation seems particularly important for companies that use the Internet in their relationships with customers. In such a situation,

customer portfolio includes not only the customers that purchase product and services, but also the persons who provide the company solely with non-monetary values. Hence, there exists a greater diversification of relationships between the company and its customers (both in terms of benefits delivered to customers and values supplied by customers to the company) than it takes place in traditional economy. Therefore, segmentation of the online customer portfolio, should include the criterion of values being the subject of exchange between the customer and the company. Usually, companies possess an extensive knowledge of value delivered to particular customers, as well as of values received from the customers. The segmentation based on values being the subject of the exchange enables the company to concentrate on the customers that offer the biggest benefits. When it comes to customers who participate in monetary exchange, in which they generate financial benefits to the company, profitability becomes an important criterion of segmentation

The criterion of the used marketing channel becomes particularly important when it comes to segmentation of multichannel company customer portfolio. Multichannel companies build their relationships with customers based on various marketing channels, usually characterised by differentiated potential of delivering value to the customers. Consequently, customers that use different marketing channels may be provided with diverse value propositions. Moreover, the use of various marketing channels is associated with additional costs, arising from the necessity to learn how to install or operate new software. Finally, diversified marketing channels influence customer satisfaction to a different extent (Rylander, Strutton, & Pelton, 1997).

Another important element of the customer portfolio segmentation process is the information obtained on the stage of the customer's relationship with the company, since the customers' needs and value propositions that may fulfil them change with development of the relationship.

It should be also noticed that the more the company's online relationships with customers reflect the relations maintained via traditional channels, the more the segmentation of online customer portfolio will reflect the traditional segmentation of company's customers.

Segmentation in online companies may also be performed according to the criterion of service use, which combines the criteria of value delivered to the company and value expected from the company. An example of customer (user), store or service segmentation may be as follows:

- Customers that visit the website once or irregularly (usually, they find the website by accident, while browsing search engine results or by surfing on the Internet. They tend to leave the site very quickly)
- Customers that visit the website many times (usually, they are interested in the value offered by the company, but they have not performed any particular action, such as creating an account)
- Users who have performed a particular action one or few times (they have made one transaction or created an account which they use sporadically)

- Users who make intensive use of the value offered by the company

Probably the most popular segmentation of Internet community users, which can be also applied in the case of user content co-creation websites, is based on the so-called "1-9-90" principle. The principle, introduced in the '90s and popularised by Nielsen, refers to the user participation inequality (2006). According to Nielsen, the typology of online community users, is as follows:

- 1 % of users contribute a lot
- 9 % of users contribute occasionally
- 90 % of users employ contents created by other users

Nielsen believes that these inequalities are so significant, that 90 % of contents is usually created by only 1 % of users. He states that the elimination of such discrepancies is impossible, but at the same time he encourages to take actions leading to increase the participation of the rest of the users.

The main objective of customer (user) portfolio segmentation is to discern particular segments, towards which different strategies aimed at customer lifetime value increase will be employed. According to the aforementioned studies, some customer segments may be complementary (e.g. those who create contents vs. those who read and comment the created contents). It should be stressed once more that a proper segmentation is a such that makes it possible to increase the value of customers, and consequently—value of the company. Two companies that offer the same value to the same group of customers may employ different segmentations, which may be associated with different resources and capabilities of the two companies. Employment of different strategies towards different groups of customers may be related with differentiation of websites or other marketing tools, based on customer profile. Nevertheless, such an approach seems rather complicated and requires gathering a lot of specific data related with customers as well as providing them with various contents. Another approach relies on designing information architecture in a way that will allow the company's website to provide various groups of users with specific contents.

When designing information architecture, the company should not forget that not only users differ between each other. Differences may be also observed in the behaviour of a single user. Kellar et al. distinguished patterns of user behaviour in the scope of fulfilling information needs: fact finding, information gathering, browsing and transactions (Kellar, Watters, & Shepherd, 2006). Fact finding occurs only once and consists in finding a particular information e.g. a pizza recipe or weather forecast for the next day. Information gathering is a task that takes more time and involves various sources of information e.g. building a bibliography for a research paper or finding information on an expensive car the user intends to buy. Browsing means visiting various websites without any particular reason. Examples include reading online news or blogs. Transactions include not only financial exchanges, but also various tasks performed online, such as e-mail sending or posting to social networking services. The research conducted by the authors

showed that transactions are the most popular kind of online activity (46.7 %), followed by browsing (19.9 %), fact finding (18.3 %) and information gathering (13.5 %). 1.7 % of online actions could not be associated with any group. The research proves that differences exist not only between users, but may be also found in the behaviour of particular customers.[4]

3.5.2 Increasing Customer Involvement

In this paper, increasing customer involvement should be perceived as increasing the scope of values being the subject of exchange between the company and the customer. It means both augmentation of the scope of the customer-generated values and the scope of value supplied to customers by the company. In this case, broader scope of value may be perceived in two ways: higher intensity in value exchange or broadening of the scope with new benefits.

In the following part, methods of increasing customer involvement will be described, based on particular types of exchange in which they may be employed. In the *initial exchange*, the role of the Internet is to enable or facilitate the customer to enter in contact with the company. Increasing of customer involvement may be reached by providing more thorough information on the company and its products or by enhancing communication processes. The process of increasing customer involvement also includes the process of enriching products with information. Providing more complete information during the initial exchange may also consist of giving customers a possibility to control the most important elements of the value exchange process by means of the Internet. Such is the case of delivery companies, who provide their customers with delivery tracking systems.

More elaborate means of increasing customer involvement are available in *advertising exchange*, during which the company delivers free benefits to customers in exchange for the possibility to display ads. In this case, increasing customer involvement often consists of giving customers access to an increasing number of value sets (value propositions) offered by the company. An example of a company that decided to use this strategy may be provided by Google. Firstly, the company offered a text search engine. Then, it supplied its customers with a tool to browse through files located on the users' computers (Google Desktop), to communicate (Gmail), to plan (Google Calendar) and to publish photos (Google Picasa). Providing customers with an increasing number of value sets results in higher frequency of use and therefore in displaying of higher number of advertisements. Increasing customer involvement by offering increasing number of value sets is a common strategy for companies participating in advertising exchange. This strategy relies on offering a popular service and then encouraging customers to use other services, which are frequently integrated with the basic service. Usually, the

[4] The study on web revisitation patterns based on the researches conducted by Microsoft was presented in Adar, Teevan, and Dumais (2008).

companies that provide free benefits have in their offer paid versions of services, characterised by increased value for customers.

Monetary exchange gives other possibilities of increasing customer involvement. During this kind of exchange, the customer who purchases company's products receives a particular set of values in exchange for incomes generated for the company. Companies aim at increasing the number of customers and the number of value sets offered to customers, since it is related with higher incomes.

Encouraging a buying decision presents another important element of increasing customer involvement. It is estimated that the number of customers that purchase products in online stores accounts for 2.5 % of all the website's visitors (Fireclick Index, n.d.). The company's ability to converse visitors to buyers seems to be of particular importance to its financial results.

Kuan, Bock, and Vathanophas (2008) investigated the influence of website quality on customer initial and continued purchase. The study was conducted based on travel company websites and included three dimensions of the website quality: perceived system quality (the degree to which the user believes the website is easy to navigate), perceived information quality (the degree to which the user believes that the information on the website possesses the attributes of content, accuracy, format and timeliness) and perceived service quality (the degree to which the user believes the website is responsive, interactive, clear about security and privacy policies, and effective in its search and comparison capabilities). The research showed that all these factors have an influence both on the customer's intention of initial and intention of continued purchase. The intention of initial purchase was mostly influenced by the perceived system quality and the intention of continued purchase was strongly related to the perceived service quality.

Another important issue related with increasing customer involvement in monetary exchange is the use of an already existing relation with customers purchasing company's goods to sell them other products. For the needs of this paper, such proceedings will be referred to as additional sale. The notion contains both up-selling, that is selling of more expensive products of the same category and cross-selling, i.e. selling of complementary products. Both terms are defined in various ways and in business practice they tend to overlap, that is why in the following part of this paper additional sale will perceived as an action which combines both of the procedures.

Owing to additional sale, companies reach higher incomes. Increased number of sales is not accompanied by additional costs of new customer acquisition, but by usually much lower costs of encouraging past customers to try another product or service. Using databases the company may target its additional sale supporting activities to the groups of customers which are more likely to purchase a given product or service. It helps to increase the effectiveness of actions by the limitation of costs, associated with omission of groups of customers less inclined to purchase.

In the case of online stores, customer involvement may be increased by means of recommender systems, i.e. systems that deliver information on items that are likely to be of interest to the customer who bought or considers purchasing another product. Recommender systems are based on a large data pool on user shopping

behaviour (e.g. transactions) and complex algorithms. Two of the most frequently cited companies using recommender systems are Amazon.com and Netflix. Amazon.com, after analysing the behaviour of its customers, displays other products that may be interesting for them and the products bought by the users who had equally purchased the product which currently draws the customer's attention. Netflix, a provider of on-demand Internet streaming video, gives its customers recommendations of films similar to the one they are currently watching. The efficiency of such actions, however, is very difficult to estimate. According to some sources, the recommender system employed by Amazon.com generates 20–30 % of the company's general sale (Marshall, 2006). On the other hand, Netflix reports that 60 % of its customers employ its recommender system (Netflix promotional materials). According to Laudon and Traver, however, the influence of recommender system on sales level of online stores is rather modest. The implementation of a You-Might-Also-Like system by the FreshDirect online grocery store has generated an income raise by 5 % (Laudon & Traver, 2010).

Another interesting approach to increasing online sales is to adjust the website to the customers' cognitive style (leader/follower, analytic/holistic, impulsive/deliberative, visual/verbal, reader/listener). Such a concept was described, among others, by Hauser, Glen, Liberali, and Braun (2009) in the article *Website Morphing*. The authors conducted a research, during which they modified the design of the website of BT Group (a telecommunication company) without changing its content. They esteem that changing the website's look to match its customers cognitive style may increase purchase intentions by 20 %, which corresponds to approximately an $80 M increase in revenue. Nevertheless, one should take into consideration that introduction of such modifications is associated with creating detailed customer profiles and a considerable effort put in the appropriate presentation of contents on the website. In the research by Hauser et al. respondents were asked to complete questionnaires, based on which the authors determined their cognitive styles. Persuading customers to participate in such a survey may be difficult due to their reluctance to disclose such kind of information. Another difficulty is to differentiate websites based on the customers' cognitive style. It may require a lot of work in the field of content management. Finally, it may be also challenging to elaborate a system which will identify a given type of user and adjust the website to their cognitive style. Probably one of the easiest way to implement the conclusions of the research is to differentiate the messages sent to users via e-mail (e.g. in the form of newsletter), combined with differentiation of the landing page. This solution enables to reach particular users (identification by the e-mail address) and does not require to differentiate the entire website of the company, focusing only on the messages sent by e-mail and displayed on the landing page.

Another effect that frequently accompanies additional sale is higher retention rate, associated with customers that purchase more company's products. Higher retention rate is usually linked to greater difficulties in leaving the company (higher switching costs), which provides numerous products and services. Gupta and Lehman provide the example of Cox Communications, a company which offers a wide range of data transmission services, such as cable television,

telecommunication, and Internet (Gupta & Lehmann, 2005: 67). Customers that use two or more services are characterised by higher retention scale than those who use only one service.

It also seems interesting to compare the process of increasing customer involvement in the scope of advertising exchange and additional sale in monetary exchange. When it comes to advertising exchange, the customer is usually offered a rather moderate number of new value sets, such as the possibility to use e-mail, online messengers or other benefits unavailable to non-registered users. Most frequently, the process of increasing customer involvement is not differentiated based on customers' profiles. Additional sale, on the other hand, usually includes more refined actions, which rely on in-depth customer knowledge. Additional sale helps to provide customers with products adjusted to their profiles, drawing mostly from the history of their previous purchases. Certainly, additional sale may take form of undiversified actions, but as such it will not use the opportunities offered by the Internet.

It seems interesting to confront the model presented above with social networking-based actions performed by traditional companies operating on consumer market. The research conducted by Economist Intelligence Unit and published in 2011 as a part of the report entitled *The Social Shopper*, shows that the most frequent reason for adopting social media was promotion of merchandise (56 %), followed by customer service (36 %), promotion of coupons or other purchase incentives (32 %), understanding customer sentiments (32 %) and collection of competitive information (28 %).

3.5.3 Customer Loyalty Building

3.5.3.1 The Notion of Loyalty

Just as in the case of other dimensions of the relationships between customers and companies, such as trust or involvement, the notion of loyalty may be interpreted in several ways. Reichheld defines loyalty as the willingness of a given person—a customer, an employee a friend—to make an investment or personal sacrifice to strengthen a relationship. The author believes that: "For a customer that [loyalty] can mean sticking with a supplier who treats him well and gives him good value in the long term even if the supplier does not offer the best price in a particular transaction" (Reichheld, 2003). According to R.I. Oliver (1999), loyalty can be perceived as a deeply held commitment to re-buy or re-patronise a preferred product consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite marketing efforts aimed at switching suppliers.

In this paper, customer loyalty will be understood as an intention to continue the relationship with a company, stemming from their will to continue the relationship or from switching costs. Customer loyalty may be associated with product purchase, employing the company's services, supporting and patronising the company (i.e. recommending it to others), as well as with protection of the company's image.

3.5.3.2 Customer Switching Costs

The notion of customer switching costs has gained in popularity in recent years, but it should be noted that it also appeared in earlier publications. In the article *Oligopolmodell mit Nachfragetraegheit* published in 1965, Selden formulated a model of dynamic oligopolistic competition, in which he assumed that the demand depends not only on current prices, but also on inertia of the demand arising from sales in previous periods (Wetzels, de Ruyter, & Van Birgelen, 1998). The article played an important role in the balance analysis development in the non-cooperative game theory, and in 1994, Selten, together with Nash and Harsanyi won the Bank of Sweden Prize in Economic Sciences in Memory of Alfred Nobel (The Royal Swedish Academy of Sciences, 1994).

Switching costs may be defined as the actual or customer-perceived costs that may arise during the supplier switching process and which do not have to be incurred, when maintaining the relationship with current supplier (McSorley, Padilla, Williams, Fernandez, & Reye, 2003).

McSorley et al. (2003) have established the following classification of switching costs:

- Transaction costs
- Compatibility costs
- Learning costs
- Contractual switching costs
- Uncertainty costs
- Psychological costs

In the case of certain products, switching entails additional *transaction costs*, such as time and money spent on analyzing offers on the basis of which the choice of the supplier will be made. *Compatibility costs* arise when a customer willing to buy a product manufactured by a different company first has to purchase a so-called system product of the given supplier. A frequently quoted example of employing compatibility is the case of razor blades manufactured by various companies.

The *learning costs* associated with using a new product can also be an element discouraging from switching suppliers. The importance of this category grows with technological complexity of products. Companies offering a wide range of goods tend to use the same solutions in every product in order to minimize the learning costs.

Contractual switching costs include early termination fees. The category also comprises other forms of developing customer attachment, such as loyalty programs. *Uncertainty costs* appear when a client can assess the quality level of a product or service only after consumption. These costs occur mainly in the case of products or services that are difficult to parameterize, or assessment of which depends largely on customer's individual preferences. *Psychological costs* arise when product switching forces customers to change their habits, routines or preferences. In the literature, it is often mentioned that this kind of switching cost can lead to inertia, i.e. consumer's reluctance to change.

It should be noted that the above list of costs does not seem complete. McSorley et al. did not mention the costs which may be referred to as *losses arising from imperfect substitution* (i.e. losses associated with lower value offered by the new supplier). McSorley et al. do mention emotional costs, but in fact they may be perceived as a result of imperfect substitution. Although the quoted authors perceive transaction costs as a subtype of switching costs, it should be noted that the remaining types of costs may be also included in transaction costs. Emotional costs or, in general, losses arising from imperfect substitution, are the only exception from the rule. This categorisation suggests that a company may on the one hand increase transaction costs of switching, and on the other—take care of its distinctive advantage. The more unique is the value offered to the customers, the more difficult it will be for customers to leave the company, provided that other conditions will remain unchanged.

According to Shapiro and Varian (1998), identification, understanding and calculation of switching costs, as well as proper strategy development, are the key factors of efficient competition in the scope modern economy. Farrell and Shapiro (1988) include switching costs in relationship-specific assets. In the subject literature, supplier switching costs, along with customer satisfaction, are considered to be two of the most important determinants of customer loyalty (Caruana, 2004; Fornell, 1992). Quite frequently, the publications on customer loyalty concentrate on particular aspects of supplier switching costs. Siemieniako and Urban (2006) indicate that loyalty is formed based on trust, involvement, but also on habit. The authors support the thesis of Shaw, who states that customers cultivate shopping habits in order to avoid any disappointment related to the products of other suppliers. Risk aversion as a premise of customer loyalty appears also in other publications. Gourville reports that for a customer a loss of a benefit is more significant than a gain of the same amount (Jelassi & Enders, 2005: 142). Some authors assume that for retail customers the psychological barrier of switching costs is the most difficult to deal with (Caruana, 2004).

The influence of switching costs on the market operation and firm strategies was broadly discussed in Klemperer's works written from the perspective of *industrial organization,* a field of knowledge that studies the behavior of markets and companies, from the perspective of microeconomic analysis. Klemperer's research shows that switching costs can lead to a decrease in market competitiveness, including rise in prices (Klemperer, 1987a), market entry deterrence (Klemperer, 1987b) and reduction of losses resulting from price wars (Klemperer, 1989). The results of the research prove that it is the company imposing switching costs on customers that draws the biggest benefit from it. The subjects most damaged by these actions are the company's customers, other customers and potential competitors willing to enter the market.

In the context of electronic markets, Dolfsma describes the risk of limiting customer benefits by the necessity of specific investments that must be made in order to build up a relation with a given subject—a manufacturer, an agent or a retailer. In this context, 'specific investments' mean the amount of labor used to initiate or develop a relation with a given subject, which in the case of switching can

be used only to a small extent. Hence, customers impose the switching costs on themselves, which means that in the case of establishing a relationship with a new supplier the costs must be borne again. Customers that co-create the company's value, being at the same time unable to close relationships with a given supplier are defined by Dolfsma with the notion of 'customers-subcontractors', an expression that strongly underlines their servient relationship with the company (Dolfsma, 2006).

Hence, it seems plausible to take into consideration the ethical implications of supplier switching costs. Since customers are perceived as a company's main asset, providing it with incomes and other indispensable values, is it justified form the ethical point of view to burden them with supplier switching costs?

It is worth noticing that supplier switching cost can stem from the value offered to customers. If a service provider operating on institutional market (e.g. an advertising agency) acquires a profitable order, it is likely to employ the *client-proximity strategy*: an advertising agency will try to most accurately identify the client's needs in order to adjust to them the value represented by the final product, but also by the patterns of communication and proceedings. From the client's point of view the situation may seem very comfortable, as the advertising agency tries to fulfill their needs. However, with every new attempt to understand client's needs and adjusting the offer, advertising agency burdens customers with switching costs. From the client's perspective, finding an alternative supplier and developing a new customer-supplier relationship requires an investment of time and money and considerable effort, without guaranteeing satisfactory final results. Thus, customers offered competitive value tend to build a relationship with a company, which in turn increases the company's competiveness and allows to obtain benefits described by Klemperer and other authors.

It should be noted that increasing customer loyalty related with switching costs is not associated only with imposing them on customers, but also with making the customers aware of their level (Garbarski, 2009).

3.5.3.3 Customer Loyalty Building on the Internet

The method of customer loyalty building on the Internet is conditioned by the type of value exchange existing between the customer and the company. The main goal of *initial value exchange* is to enable or improve the value exchange taking place outside the Internet. The main objective of such an exchange is to provide potential and existing customers with information on the company and its products, solutions to their problems, and efficient means of communication. Hence, customer loyalty building process is based on maintaining relations with existing customers and encouraging them to re-purchase or to increase the frequency of purchase of given products. To such an end, companies employ social media and other communication tools, such as newsletter (digital bulletin sent to all registered users, such as customers, but also company's stakeholders) or, less frequently, RSS channels (i.e. tools for retrieving current information from chosen websites, which combine the functionality of newsletter and web browser; RSS channels are mainly employed by users who possess more elaborate knowledge of technology).

Online *advertising exchange* relies on offering customers free benefits, that is information (e.g. articles, audio/video files) or services (e.g. e-mail account, information search and publishing). Acting as recipients of advertisements, customers increase their value for the company's advertisers. Usually, the company offers value to customer, without appealing to elaborate loyalty building mechanisms. An exception may be provided by the aforementioned tools for maintaining relations with customers (social media, newsletters, RSS channels).

It should be mentioned that loyalty building is equally based on delivering unique benefits, which may encourage customers to pursue the relationship with the company. Some online services, especially those used for communication, are continuous, hence the process of customer loyalty building, instead of offering additional benefits, focuses rather on eliminating factors that are likely to discourage customers from continuing the relation. An interesting exemplification may be provided by Google, which provides many solutions, the most important of which is the search engine. In this scope, the company acts as a market leader, possessing a portfolio of loyal customers, nevertheless it does not employ loyalty mechanisms. The factor that induces customers to use the company's online search services is the high-quality and accuracy of search results.

Customer loyalty building strategies based on increasing the repertoire of offered benefits is associated with the strategy of increasing switching costs. Augmentation of the scope of offered benefits is usually associated with active participation of customers, who, relying on their knowledge, adjust the value proposition to their individual needs. The effort put in the value co-creation process translates into increase of switching costs and in consequence to increasing of customer loyalty. This process seems to correlate with the consistency rule elaborated by Cialdini, according to which the people want to be and to be seen as consistent with their existing commitments (Cialdini, 2000). The mechanism of building loyalty by increasing offered benefits and switching costs includes the majority of instruments based on personalisation of the offered value proposition.

Within *monetary exchange*, customers receive benefits for generating financial income for the company. Customer loyalty is built mainly by providing suitable value propositions. Just as in the case of the exchange models mentioned above, newsletter is one of the most popular tools of customer loyalty building, since it helps to inform customers on new products, special offers, etc.

In the following part the factors shaping customer loyalty, discerned in various studies on e-commerce, will be presented. The category of e-commerce entities includes online stores as well as companies providing e-services. The loyalty determinants that appeared the most frequently in the analysed studies were:

- Customer loyalty and satisfaction
- Customer experience
- Value for customers
- Switching costs
- Store image (Doligalski, 2011)

A different approach to the sources of loyalty of e-commerce platform users was presented in the publication entitled *The 2006 Walker Loyalty Report for Online Retail* (Jackson, 2007; Walker, 2006). The publication—in contrast to previously quoted studies, published in academic journals—is a commercial report prepared by a market research and consulting company. The research which served as the report basis was designed to identify the leaders in the domain of customer loyalty among e-commerce platforms and to determine common characteristics of such proceedings. The following platforms were identified as ventures associated with high level of customer loyalty: Amazon.com, eBay, iTunes, L.L. Bean, Lands' End, QVC, Victoria's Secret and Walgreens. The loyalty leaders stand out among all the companies in the following areas:

- Overall look and feel of Web site,
- Ease of use,
- Display and description of items,
- Whether the site is considered trusted and safe,
- The speed of the site,
- Uniqueness of items offered,
- Availability of reviews,
- Ability to personalize.

It is worth noticing that the above mentioned factors are related with the company's ability to fulfil customers' needs. It is particularly significant that the list does not include loyalty programs or other mechanisms aimed at increasing customer loyalty. According to the report, the loyalty leaders stand out among other companies also owing to their superior financial performance.

The data and facts included in the aforementioned report correlate with conclusions formulated by Mithas et al. in the paper entitled *Designing Web Sites for Customers Loyalty Across Business Domains: A Multilevel Analysis*, presenting factors that drive customer loyalty to a website (Mithas, Ramasubbu, Krishan, & Fornell, 2006–2007). The authors conducted a survey among 12,000 Internet users of 43 websites. The study showed that perception of such elements as content, functionality and website structure is positively correlated with customer loyalty. The relationship between website content and customer loyalty is more important for information-oriented websites than for transaction-oriented websites. Nevertheless, customer loyalty is higher for transaction-oriented websites, which might be associated with higher switching costs. The content of a website has more influence on customer loyalty for commercial websites than for government websites. Lesser impact of the content on the loyalty for government websites may be associated with the fact that they offer unique information, unavailable in any other place, hence a decrease in quality of content does not lead to users' resigning from the service. When analysing the data collected by the authors, one can conclude that the factors that have the most important impact on building customer loyalty for a given type of website are largely associated with the ability of the website to meet the

needs of their customers: e.g. the need for information (in the case of information-oriented websites) or functionality (transaction-oriented websites).

In the customer loyalty building process, a very important role is played by the network effect, i.e. a situation in which value for customers increase with the number of customers served by the company. The network effect enables some companies to deliver value proposition which helps them to attract new and maintain existing customers without any particular action in this regard. Such a phenomenon is associated with various types of exchange, but it is especially important in customer loyalty building for social networking services, online messengers and online auctions. When analysing the process of customer loyalty building on the Internet, it should be also noted that the group of online ventures, apart from online stores and online service providers, equally includes e-commerce intermediaries, such as price comparison sites. The entities of such kind provide information on stores that offer a given product for the lowest prices. The users of such services may be characterised by higher sensitivity to price and lower tendency to become loyal to particular online stores. On the other hand, they may exhibit loyalty towards the price comparison site itself.

3.6 Generating Value for the Company

In the described model, generating value for the company relies on ensuring continuity of receiving customer-produced stream of desired value, based on which the company will be able to increase its value and generate value for other stakeholders (owners, employees, suppliers, country and society). Nevertheless, such proceedings should not be identified with a broader concept of value based company management, i.e. a specific type of company management, which includes rules, suggestions, and solutions aimed at maximisation of company value to its owners and remaining stakeholders.

In this context it seems worth to remind the standpoint of Day and Fahey, who believe that the influence of customer relationship-oriented actions on the creation of the company's value may be achieved by:

- Existence of previous cash flows
- Increase in cash flow level
- Reduction of risk associated with cash flows
- Increase in residual value (Day & Fahey, 1988)

Naturally, the repertoire of values delivered by customers extends beyond the aforementioned cash flows. Nevertheless, the non-monetary values received from customers have an influence on the cash flows of a company.

3.6.1 Internet and Competitive Advantage

The notion of competitive advantage is widely employed in management-related publications and discussions. Porter believes above-average profitability of a company is possible to achieve with a sustained competitive advantage (Porter, 2004). According to Barney, a company gains competitive advantage when it implements a value creating strategy and when potential competitors are unable to duplicate the benefits of this strategy (Barney, 1991). Obłój states that a company gains competitive advantage when it becomes a more attractive partner for customers than other companies in a given domain (Obłój, 2007: 385).

In the discussion on competitive advantage of online companies, or traditional companies that conduct online-based activities, the notion of first-mover advantage is frequently employed. First-mover advantage may be defined as the company's ability to generate superior incomes, having source in its being the first to introduce new products or services to the market. This ability may be perceived as one of the sources of competitive advantage.

Lieberman discerns four elements that enable online-based companies to maintain first-mover advantage. These are: proprietary technology, pre-emption of scarce resources, switching costs, and network effects. According to the author, in the context of online companies, the term 'resources' denotes partnerships or recognizable brand. Nevertheless, being a market pioneer may equally present disadvantages, such as:

- Late movers may be able to take advantage of a pioneering company's investments e.g. in buyer education (the free-rider effect),
- The actions taken by first-movers are frequently associated with market and technological uncertainty,
- A pioneer company entering the market may cause shifts in technology or customer needs,
- Pioneer companies may fall into incumbent inertia, i.e. ability of the company to modify its products in order to respond to environmental change (Finney, Lueg, & Campbell, 2008; Lieberman, 2007).

Lieberman conducted a research on first-mover advantages based on data received from over 200 online companies operating in 46 different business sectors. Taken into consideration that online companies frequently do not yield profits, even though their value gradually increases, Lieberman assessed first-mover advantages on the market based on companies' market capitalisation (the total value of the company's tradable shares) and revenues, measured from 1999 to 2003. The research showed that first-mover advantages may be sustained only on markets with network effects and pioneer companies that offer proprietary technologies. The entities that are the most likely to use network effects and gain first-mover advantages are multi-sided platforms (which in the research are referred to, after Eisenmann, as brokers or market animators). In other cases, first-mover advantages were not particularly important. In the research based on the data acquired between

1999 and 2007, no relationship between being the first to offer a product and the number of years of market survival was noted.

The subject of first-mover advantages for Internet-based companies was approached by Hidding and Williams in a different way. The authors concentrated on the question whether pioneers, i.e. companies that were first to offer new products or services of a given category, may be still perceived as market leaders (Hidding & Williams, 2003). The research focused on the companies from e-commerce technology industry, operating mainly on B2B markets. It does not come as a surprise that in 80 % of cases the pioneers lost their initial advantage. These numbers may be even higher, but in some cases the authors were unable to determine the order in which companies entered a market. It is interesting, however, that only one-third of pioneers managed to survive as independent companies. What has happened to other pioneers? The majority of pioneer companies was bought up by others, which may be perceived both as a failure and as a victory. The study equally showed that current leaders entered the market on average 2–4 years after the first mover. Half of the current leaders were the second or third market entrant, with an average leader lag of 1 year, probably still during the first cycle of the product. Hidding and Williams found out that in half of the company categories, the current leaders were among the first three entrants, which, according to the authors, may be an important premise for investors. Finally, the authors state that further research should focus more on early-entrant advantages than first-mover advantages, since quite frequently it is early followers that become market leaders.

The research presented above draws on Golder and Tellis's (1993) study published under a meaningful title *Pioneer Advantage: Marketing Logic or Marketing Legend?*. The study was carried out in early 90's and revolved around benefits associated with the time of introducing new products in a group of 50 product categories. The authors proved that it is early followers who have the biggest chance to become market leaders. The element that distinguishes the results coming from the two studies is the time lag between the pioneer's and the current leader's market entry. The time lag was between 2 and 4 years in e-commerce product categories, 11 years in post-World War II categories, and 26 years in pre-World War II categories. These differences prove that the competitive pressure on the stage of product introduction gradually increases.

Similar conclusions were reached by Min and Wolfinbarger, who investigated the benefits of market pioneers in American sector of e-commerce. The research showed that when it comes to market share, profit margin or marketing efficiency, pioneers do not possess any important advantage over following companies (Min & Wolfinbarger, 2005).

The above-quoted studies show that the possibilities to gain and maintain first-mover advantages are limited. Hence, it seems important to analyse more thoroughly the nature of competitive advantage. In order to properly understand the notion of sustainable competitive advantage, one must become acquainted with the concept of isolating mechanism. i.e. mechanisms that prevent, or at least hamper, competitive imitation (Min & Wolfinbarger, 2005). Bach et al., in the context of research on computer-based product and service industry, discerned three types of

isolating mechanisms. These are: patent protection, organisational reputation and contractual alliances. The study showed that patent protection and organisational reputation significantly contribute to success of IT companies during initial public offering (Bach, Judge, & Dean, 2008). Similar to isolating mechanisms are strategic control points elaborated by Slywotzky (1996). Strategic control points are a mechanism of revenue assurance that helps protect the profits flowing from a business model against the corrosive effects of competition and customer power. Slywotzky believes that a business model without a strategic control point is like a ship with a hole in its hull—it will sink much sooner. Hence, a well managed company should employ at least one mechanism to protect its profits. According to the author, Microsoft owns an industry standard, super-dominant position in many product categories, and a brand. Intel, on the other hand, has a 2-year lead in product development, control of value chain, and a brand. The list of strategic control points discerned by Slywotzky starting from the strongest is presented below with internet examples in bracket.

- Industry Standard (Skype)
- Dominant position in value chain (Google, eBay)
- String of super- dominant positions (Apple)
- Close relationships with customers (Amazon)
- Brand, copyrights (particular online stores or information services)
- Two-year lead in product development (pioneer companies)
- One-year lead in product development (pioneer companies)
- Homogenous commodity with 10–20 % cost advantage (particular online retailers)
- Homogenous commodity without cost advantage (majority of online retailers)
- Homogenous commodity above market price (particular online retailers

Slywotzky's strategic control points may be applied to competition in online business. The *industry standard* owned by a company is a mean of online income protection, that in online environment may e.g. take form of communication tools which are not based on open protocols, such as online messengers (e.g. Skype). *Dominant position* in value chain occurs when a company, which is another link in a market value chain, becomes so popular that in the exchange process it may acquire a greater part of value than its smaller competitors. It may be associated with higher commissions or higher price introduction. An example of companies that assume a dominant position in value chain may be provided by Google and its position on many online search markets, as well as by the Polish company Allegro, which owns an internet auction service and a price comparison website. The factor behind the both strategic control points described above is the network effect. Owing to the one-sided network effect, the companies offering communication solutions were able to make their product the market standard. On the other hand, the two-sided network effect, i.e. operating on multi-sided markets, enabled eBay to assume a dominant position in the value chain. Nevertheless, it should be noted that the Google search engine does not use the network effect. Hence, the number of its

users does not lead to increasing value for other users.[5] Google's dominant position on many markets results rather from high quality of search results.

In terms of strength, the *string of super-dominant positions* was ranked by Slywotzky as the third strategic control point. The notion defines competitive advantages gained on complementary markets. On the internet, such means of control becomes of particular importance: some companies aim at developing a wide portfolio of complementary products and services, which altogether form the so-called ecosystem or walled garden, accessible only to customers that have purchased (or at least use) specific products (software or hardware). The strategy employed by Google may be described with the use of the ecosystem idea. The company develops its portfolio of complementary products and services in order to make the customers use its product to conduct a wider range of activities relying on search, publication and management of information. Apple operates in a similar way. A customer purchases a device produced by the company, with its original operating system, and then buys new applications via App Store or downloads audio files from iTunes. This business model is particularly interesting, since the majority of hardware manufacturers not only does not develop their own ecosystem, but also does not offer additional solutions, such as operating systems. Apple managed to deliver value also on subsequent stages of the value chain, which is naturally associated with additional commissions. Consequently, in 2011, the company was listed as the most important technological company. Company ecosystems seem to be durable, since they are based on the network effect and the economy of scope, i.e. employing the existing platform to sell additional products. These products are characterised by high switching costs, associated with the costs of learning how to operate new products, the necessity to transfer data and sometimes the need to purchase a new basic product which will enable the use a given ecosystem (e.g. Apple products). It should be stressed, however, that ecosystems are equally associated with high risk of losing a significant number of customers, and hence with losing network effect-related benefits. Such was the case of MySpace. The company provides users with services oriented on content publishing, making and sustaining contacts and presenting music groups. For a certain time, the company was a market leader and its services were used by 250 million of Internet users. In 2005 MySpace was bought up by Rupert Murdoch for $580 million and in 2011 it was sold for $35 million (Foley, 2011). Why did MySpace lose its competitive advantage? Mainly because of the influence of Facebook, which intercepted MySpace's customers. Facebook offered the services of the same category, concentrating however more on current communication between users than on contacts with artists. In March 2014, the number of Facebook's monthly active users mounted to 1.28 billion (Facebook, 2014).

Further strategic control points have a similar impact in the case of both online and offline ventures. *Close relationships with customers* is employed by Amazon.

[5] In order to simplify the description, the influence of customers' behaviour on the quality of search results will not be discussed.

com, the focus of which is more on customer portfolio management than on product portfolio management. *Brand and copyrights* are the measures of income protection employed by numerous online stores and information services. In the case of the latter, copyrights usually relate to contents that the providers create and publish on the Internet. *One- or two-year lead in product development* is typical for companies that were first to offer a particular product.

The following group of strategic control points includes the least effective ones, i.e. *selling of homogenous goods below, for, and above market price*. Lower price may be reached through the effect of scale or scope, but this kind of advantage is particularly difficult to maintain, since the Internet is characterised by considerable price transparency and customers may easily find a company that offers a particular product for a lower price, which increases pressures on a part of retailers to lower prices. Selling goods above market price is possible mainly for companies that own a proven and trusted brand. Selling above market price is also possible in the case of customers that are not familiar with market offers (Liu et al., 2009).

Sources of competitive advantage are usually seen in resources and capabilities of the company (the resource-based view), or in its position in a given sector (the sector-based view). It seems plausible to investigate on the influence of the sector's individual character on the ability to gain and maintain competitive advantage. The problem, in the context of a particular type of competitive advantage displayed by first movers, became the subject of analysis conducted by Suarez and Lanzolla (2007). Nevertheless, the conclusions reached by the authors may probably be extended to other examples of competitive advantage. Apart from external factors and limiting mechanisms, Suarez and Lanzolla also analysed internal changes. The last group is comprised of two elements: the pace of technological evolution and the pace of market evolution.

Rapid technological evolution frequently results in a succession of different technology generations, each of which renders the previous one obsolete. When perceiving this "technological uncertainty," the users tend to be reluctant to buy products of current generation. A pioneer company, which offers products of a category in which the pace of technological evolution is very fast, may encounter various problems, such as strong competition based on product innovation and customer inertia. *Rapid market evolution*, related e.g. with fast market growth or changes in consumer preferences, may result in the entry of new competitors counting on easy acquisition of customers. According to several authors, it is especially the market growth, which increases the chances for new entrants, at the same time diminishing benefits for pioneer companies.

Companies from the sectors in which both types of evolution take place particularly fast operate in a state of high uncertainty and therefore are more likely to make erroneous organisational decisions (Suarez & Lanzolla, 2007). Furthermore, fast pace of both types of changes may result in decreasing switching costs, which are perceived as one of the main isolating mechanisms for market pioneers. On the other hand, low pace of technological and market evolution contributes to maintaining benefits reserved for market pioneers. It was confirmed by the results of a research on consumer products, such as medications and cigarettes (in both

cases the brand acted as an isolating mechanism) quoted by Suarez and Lanzolla in their study.

In a situation when the market and technology evolution are not aligned (i.e. fast-paced technology evolution is accompanied by slow-paced market evolution and vice-versa), benefits associated with being a market pioneer are influenced by two opposite factors, that is why it is difficult to determine the exact effects of their action.

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Financial Aspects of Customer Value Management

4

4.1 Introduction

This chapter will begin with presenting customer lifetime value as a measure of the value of the relationship between the customer and the company. The concept will be thoroughly described and the methods to calculate the value will be shown. The last part will focus on a comparison between customer value management and securities portfolio management.

4.2 Calculation of Customer Lifetime Value

The notion of customer lifetime value has recently gained in popularity and started to frequently appear in publications devoted to customer relationships. The notion comes with a wide range of definitions and interpretations. In fact, customer lifetime value has a similar meaning to customer relationship value. The use of the word 'lifetime' helps to distinguish the notion form 'customer value', which is frequently interpreted as the value offered to customers (value to customer).

Customer lifetime value comes with several associated notions, including 'strategic lifetime value': the maximum level of income, which may be delivered by a given customer relationship. 'Customer equity' is frequently defined as the sum of values of all the company's customers. The notion of customer equity has the same meaning as 'customer portfolio value', nevertheless is more frequently used in practice.

Berger and Nasr define customer lifetime value as the difference between the value of customer-generated revenues and the costs of sale, service, and customer acquisition (Berger & Nasr, 1998). According to Doyle, customer lifetime value is 'the discounted net present value of all future cash flow generated by dealings with the individual' (Doyle, 2000: 327). Pfeifer et al. perceive customer lifetime value as 'the present value of the future cash flows attributed to the customer relationship' (Pfeifer, Haskins, & Conroy, 2005: 17).

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Diversity of approaches towards customer lifetime translates into diversity of customer lifetime value formulas. The majority of mathematical formulations represent the sum of discounted cash flows associated with customer relationships, nevertheless additional parameters are frequently introduced in order to precise the type of a given cash flow. All the approaches have been thoroughly described in the literature (Berger & Nasr, 1998; Dobiegała-Korona & Doligalski, 2010).

In this paper the following definition of customer lifetime value was adopted. Customer lifetime value (LTV, CLV) is the present value of future net benefits resulting from the relationship with the customer, expressed in monetary terms.

$$\mathrm{CLV} = \mathrm{NCF}_1 + \frac{\mathrm{NCF}_2}{1+i} + \frac{\mathrm{NCF}_3}{(1+i)^2} + \frac{\mathrm{NCF}_4}{(1+i)^3} + \ldots + \frac{\mathrm{NCF}_n}{(1+i)^{n-1}} \tag{4.1}$$

Where:

NCF—net cash flow.

I—discount rate.

Customer-associated net cash flow (NCF) expressed in monetary terms consists of revenues and non-monetary benefits generated by a given customer, reduced by customer costs, such as costs related with customer acquisition, maintaining, etc.

The presented definition focuses solely on future cash flows. This approach stays in accordance with discounted cash flow analysis and economic definition of value. In this case, customer lifetime value rate should be interpreted as *the current value of future cash flows*, resulting from customer relationships. Due to the fact that only future cash flows are taken into account, the number is characterised by a variable time value. Nevertheless, it does not allow to assess the profitability of the entire relationship, unless the customer lifetime value is calculated at the occurrence of first cash flow or earlier. Customer lifetime value calculated conformably to this concept is consistent with the universal method of valuation of any given asset, for the value of an asset is calculated based on the present value of future cash revenues that a given asset is likely to generate. The customer lifetime value calculated in such a way may be therefore employed for company valuation.

The second concept of customer lifetime value measurement consists in taking into account all of the customer-associated cash flows that are generated during the time of relationship with the company, i.e. during the entire lifecycle of the customer. The concept relies on back data and prognoses on future revenues and costs associated with customer relationship. The methods used for calculation make it resemble the net present value indicator. Hence, both indicators may be also interpreted in a similar way. In this case, customer lifetime value is perceived as an excess of value, generated by a given venture, over the invested capital. Customer lifetime value measured in such a way is therefore identical to *customer (customer relationship) profitability* (Berger & Nasr, 1998). Assuming the stability and accuracy of prognoses of future revenues, customer lifetime value perceived in such a way does not change for the duration of the relationship.

4.2.1 Calculation of Customer-Generated Values

The first of elements determining customer lifetime value are the values generated by customers to the company, the most important element of which are revenues. Other customer-generated values include recommendations, information, and image benefits.

The level of revenues generated by a customer in a given period is easy to determine, provided that the company employs a system that collects information on customers' transaction history. Such is the case of relationships with institutional customers, where each transaction has to be documented, e.g. by means of an invoice. When it comes to relationships with individual customers, the company may apply systems for collecting customer information, with special regard to transaction history. If a company operates on a market in which transactions are not regulated by written agreements, nor documented by means of invoices, its access to detailed information on revenues generated by particular customers may be limited. Such is the case of the market of fast-moving consumer goods, where measuring of customer lifetime value may become impossible. Nevertheless, the value of an average customer from a given sector may be estimated based on market research.

In the majority of publications on measuring customer lifetime value, customer revenues, similarly to customer costs, are classified according to their character. Such a classification may include basic revenues, cross-selling revenues, up-selling revenues, etc. (Bauer, Hammerschmidt, & Braehler, 2003). In the publication *Customer Equity*, Blattberg, Getz, and Thomas (2001) divide customer-generated revenues into revenues associated with customer acquisition, customer retention, and add-on selling. This concept seems of particular interest, for it shows that it is possible to obtain revenues at the very initial stage of relationship, which is usually perceived by other authors uniquely as the source of customer acquisition costs.

Apart from revenues, customers provide the company with other values. The values include recommendations, information, co-operation (value co-creation), image-associated benefits or the value associated with the growing number of customers, which is particularly important for the companies that use the network effect. The values presented above may be of importance to the company, nevertheless expressing them in monetary terms seems rather difficult. The majority of authors dealing with the subject of customer lifetime value usually do not elaborate on non-monetary values generated by customers. The non-monetary values appear even more scarcely in customer lifetime formulas.

4.2.2 Calculation of Customer Costs

Customer costs should be understood as the totality of costs associated by a causal relationship with the process of providing benefits to customer. In the literature, customer costs are frequently perceived as the costs of the relationship between the customer and the company, stemming from the methods and requirements of

customer service. Customer costs understood in such a way, however, usually do not include the costs of products and goods sold to the customer. In this paper, the costs of products and goods being sold to customers will be incorporated in customer costs. In a great number of publications on customer lifetime value measurement, the costs are classified according to the period in which they appear during the customer lifecycle (e.g. acquisition costs, retention costs). Such an approach is reflected in mathematical formulas describing customer lifetime value, in which cost differentiation also appears.

Determination of customer costs is frequently seen as an important challenge of customer lifetime value calculation. The difficulty, however, does not lie in placing the costs in a particular moment of customer lifecycle in the company, but in determining indirect costs encumbered by the customer. Customer costs taken into account when calculating customer lifetime value include direct and indirect customer costs. Apart from them there are general costs of the company, nevertheless the latter are not reflected in customer lifetime value (c.f. Table 4.1).

Direct customer costs incorporate all the costs associated with providing services to a given customer. Determination of such costs is relatively easy. Direct customer costs include costs of products sold to the customer, delivery costs, etc. (Rybarczyk, 2006)

Indirect customer costs are more difficult to determine, because some cost elements are common for many customers. Such is the case e.g. of costs generated by customer service centre. Naturally, it is possible to ascribe each customer with an even part of customer service costs, but such an approach would give a false image of the customer cost level, and therefore would entail erroneous management decisions. Proper ascribing of indirect costs to single customers relies on finding the so-called cost driver, i.e. a parameter that reflects the actual formation of the costs. When it comes to customer service centre, the cost driver may be seen in the number of customer contacts with the centre. The cost driver—in this case a single contact between the customer and the company—is ascribed with the cost resulting from all the costs borne by the centre, reduced by the level of non-use of this resource. The reduction of the costs generated by the customer service centre by the

Table 4.1 Comparison of costs due to their use in customer lifetime value calculation (Rybarczyk, 2006)

	Direct customer costs	Indirect customer costs	General company costs
An example of the cost	Costs of products sold to the customer	Participation in the costs of customer service centre	Management costs
Use in customer lifetime value calculation	Yes	Yes	No
Determination of the cost level for a single customer	Simple	Complicated	N/A

extent to which it was not used, e.g. due to a low number of customers, is necessary to meet the requirement of causal relationship between the costs and providing services to a given customer. Such a manner of indirect cost determination is conform with activity-based costing.

The final cost category is comprised of *general company costs*. This kind of costs is not associated by a causal relationship with services provided to customers. General company costs include managerial costs, costs generated by the board of directors, and the costs of resources that were not employed in the process of delivering value to customers. General company costs are not included in customer lifetime value calculation, but they obviously have an influence on the measures describing the financial results of the company.

Due to the lack of proper data, it is frequently impossible to determine the level of costs for particular customers. In many cases, costs are calculated on the level of given groups or segments of customers. Nevertheless, the methods and principles of calculation do not change with the level of actions.

The problem of customer costs on the market of digitalised goods seems particularly interesting. The costs associated with manufacturing the first product are usually rather important, but drastically decrease in the course of production of next units, frequently amounting to zero. In such a situation, the cost of goods delivered to customers may not be included in direct costs incurred by customers, but in the category of indirect costs. Such a situation commonly appears in the case of companies that create and publish contents on the Internet, e.g. information websites.

4.2.3 Customer Relationship-Associated Risk

Another important facet of customer lifetime value, which seems rather neglected by subject publications, is the risk associated with customer relationship. In this paper, the notion of risk will be defined as the totality of risks incurred by the company from entering and maintaining a relationship with a customer. Such risks include unexpected relationship interruption, decrease in incomes, increase in the level of service costs, etc. The construction of customer lifetime value based on the aforementioned definition makes it possible to include the rate of risk in the value in several ways. The most common method is to employ risk-adjusted discount rate. The companies may also use adjustment of revenue rates, or shortening the time horizon in which customer lifetime value measuring occurs.

Free-of-risk customer lifetime value may be calculated with the use of proper level of discount rate. In this case, discount rate plays a role similar as in case of net present value—it adjusts the future income based on the declining value of money over time and income-associated risks. One of the methods of estimating discount rate is to rely on the cost of company's capital associated with financing of a given investment project of a particular level of risk. Such a method makes it possible to estimate the discount rate, nevertheless it may be also applied to estimate the value of particular customers, provided that they display the same level of risk. Naturally,

the level of customer-associated risk is usually very diverse, for a typical customer portfolio is comprised of customers that have for a long time generated incomes, as well as of newly acquired customers, the future expenses of which are difficult to determine. If customer value management is based solely on one, averaged discount rate, the value of low-risk customers will be underestimated, compared to the value of high-risk customers. Nevertheless, when it comes to general valuation of customer portfolio, perceived as the sum of values of particular customers, such an approach seems justified. However, if the customer lifetime value measurement is designed to determine the proper manner of asset allocation aimed at increasing the value of customer portfolio, the use of single discount rate will yield false results and hence lead to erroneous managerial decisions.

Customer lifetime value, according to discounted cash flows calculation method, relies on adjusting the value of cash flows in a long run, with the use of a discount rate. As a result, customer value measurement tends to focus on cash flow yielded in a shorter time horizon, and pay less attention to long-horizon cash flows. Such a phenomenon is particularly pronounced with high-level discount rates. On the other hand, it comes as a natural result of the adopted assumption that the measurement will focus on present—and not nominal—value of customer-generated cash flows. Consequently, a relationship with a customer characterised by a given level of generated costs and incomes may be beneficial for one company ($CLV > 0$), and unbeneficial for another ($CLV \leq 0$). Such a situation results from adopting different discount rates, which may depend of various capital costs exhibited by the companies.

Estimation of risk-free customer lifetime value carried out on the basis of a given discount rate seems coherent with the method of company valuation based on cash flow measurement. In the case of high level of risk, the value of companies, as well as of other resources, may be estimated with the use of real options, for the application of risk-free discount rate leads to excessive underrating of the calculated value.

4.2.4 Criticism of Customer Lifetime Value

In this paper, customer lifetime value is perceived as the present value of future net benefits resulting from the relationship with the customer, expressed in monetary terms. Hence, the measure describes the possible benefits and losses resulting from engaging in and maintaining a relationship with a customer. This kind of approach enables a description of marketing actions within the scope of relationship in economic terms. Perceived in such a way, customer lifetime value may serve as a basis for company valuation.

Nevertheless, perception of the value of customer relationship solely through the prism of its economic value diminishes or even omits other important elements of the relationship. Customer lifetime value represents the economic facet of the relationship, nevertheless it does not provide any information on other important elements, such as the customers themselves or their characteristics. Hence,

information on customer satisfaction, demography, or product use is ignored. Moreover, the same level of value may characterise customers of very diverse types, sets of values delivered to company or levels of risk. Therefore, it may be stated that customer lifetime value should not be the sole criterion in the process of the development of strategies aimed at increasing the value of customer portfolio. Nevertheless, it is a valuable tool of estimating of customer lifetime value to company, and by that gives a possibility to determine the most valuable customers.

As opposed to customer profitability, customer lifetime value is based on future net benefits resulting from the relationship with a customer. Hence, to measure it, prediction of future events is necessary. It seems logical that the level of difficulty of estimating customer lifetime value will differ according to the nature of relationship. In the case of cyclic customer relationships, which continue owing to particular legal and organisational solutions or to high switching costs, customer lifetime value is relatively easy to estimate. Nevertheless, it becomes more difficult when it comes to customer relationships characterised by high variability of generated incomes or important share of non-monetary values delivered to the company.

There is no one determined method of customer lifetime value measurement. The majority of authors provide various definitions and measuring methods, which often makes it difficult, or even impossible, to compare the value of two different companies. On the other hand, it proves that the measure is of universal character and may be adjusted to present needs of the company. Its adjustment may be centred on particular benefits (financial, image, recommendation-associated), cost measurement, or on inclusion of particular type of risk, by employing a particular discount rate, the length of period taken into consideration, or the level of incomes/costs. It should be perceived as an important advantage of the measure, for it gives a possibility to measure the benefits which seem the most important from the company's perspective. Naturally, the more accurately the customer lifetime value should present the real picture, the more variables should be taken into account.

Apart from financial aspects, the calculation of customer lifetime value includes also non-monetary values delivered in the course of customer relationship, including recommendations, image benefits or customer-provided information. Non-monetary values stemming from customer relationship are particularly important at initial stages of product lifecycle. A customer acquired at the stage of product introduction is often characterised by a greater value than a customer acquired at the stage of product maturity. This situation is mainly due to non-monetary values generated by customers, especially to recommendations to a third party. Estimation of the value of a customer acquired at the introduction stage may be difficult, since it requires taking into consideration of a large number of variables, such as the value of recommendations. Moreover, such estimation is usually associated with a high level of risk. When valuating assets characterised by a high level of risk, the income methods, being the cornerstone for customer lifetime value calculation, are sometimes replaced by other ones, such as real option-based methods. Customer lifetime value may be successfully employed when the level of risk decreases, i.e. at further stages of product lifecycle.

The authors dealing with this particular subject state that customer lifetime value and customer portfolio value may serve as a criterion for the evaluation of managerial decisions within the scope of customer relationships (Gupta & Lehmann, 2005). It should be noted, however, that as opposed to other investment project performance ratios, such as EVA, customer lifetime value does not take into account the aspect of capital commitment. Naturally, capital intensity, insignificant on the level of a single customer relationship, may significantly increase on the level of the entire portfolio. Another type of cost, which is not included in customer lifetime value is the so-called alternative cost, i.e. the loss of value, which could have been obtained if the company's resources had been allocated in an alternative manner.

4.3 Comparison Between Customer Value Management and Securities Portfolio Management

In this paper, just as in many other publications, the notion of customer value management has been presented as a specific approach to customer relationships that draws from marketing, management, and finance. The financial facet manifests itself in the perception of customers as a kind of resource, the value of which may be measured, similarly to other resources. Moreover, the portfolio approach to customer relationships draws from methods of analysis based on investment portfolio, commonly applied in finance and management. Nevertheless, there are significant differences between customer value management and management of securities, such as shares, bonds, or equity equivalency certificates.

The first difference between customers and securities is the manner of their *acquisition and reselling*. Usually, when it comes to securities, an investor operates in a market where security acquisition and reselling is conducted without significant transaction costs. Moreover, the investor has access to various information, including detailed back data. The process of customer acquisition, on the other hand, is usually long and laborious. Normally, the company has at its disposal only a limited set of data on a potential customer, and therefore cannot specify the exact amount of potential benefits or customer-associated costs—the elements that determine the profits which the company may gain throughout the relationship with a particular customer. Consequently, customer acquisition is usually associated with a high level of risk concerning future cash flows. An investor may resell their securities and a company may terminate the relationship with a customer. Obviously, a situation in which a company resells its customers seems unlikely. That is why speculation, understood as the process of engaging in transactions in attempt to resell the items in near future for favourable prices, common on financial markets, does not take place within the scope of customer relationships. Moreover, customer acquisition is also limited by the very nature of companies, including their specialisation, owned assets (e.g. reputation) or geographical area of operating. The choice of customers incorporated in the company's portfolio is therefore

limited with a greater number of factors than it takes place in the case of operations conducted on securities market.

Acquisition price of securities consists mainly of the price of a given security and relatively low transaction costs. The cost of customer acquisition includes mainly transaction costs, such as advertisement costs and costs of personalising the offer. Moreover, investing in customer acquisition comes with various risks and dilemmas. It is mainly due to the fact that customers should be perceived as a result resource, which may be obtained by means of other resources. A company willing to acquire customers must decide in which type of actions it should invest. The options include direct actions aimed at customer acquisition, brand-strengthening or development of distribution channels. In the case of securities, the investor usually put at risks funds invested in the purchase. When it comes to customer relationships, on the other hand, customer acquisition costs are not the only relationship-associated costs that the company must bear. Theoretically, losses produced by a customer relationship may be infinite.

In *portfolio methods*, securities are usually analysed based on two parameters: expected return on investment and risk. Return on investment shall be perceived as the ratio between the benefits provided by the investment and its cost. Risk represents the difference between the expected and the actual return on investment (Rogowski, 2004: 38). In the case of securities such as shares or bonds, the return on investment or the associated risk may be easily determined at the end of the period under consideration. It is due to the fact that the benefits generated by securities are expressed in monetary terms.

It is particularly difficult to determine the return on investment associated with customer relationships. It should be remembered that customers generate various types of values (cash incomes, data, information, knowledge, recommendations, image benefits, network economies, scale economies, etc.) which seem difficult to translate into monetary terms. On the other hand, taking into consideration solely customer-generated cash flows may results in a biased valuation. What is more, the other variable, committed capital, seems very difficult to define, for it requires to determine all customer-generated costs, such as costs of acquisition, service, purchased products, etc. Hence, expression of benefits provided by customers, as well as expression of the committed capital itself, seems rather challenging. It should be also noted that securities are usually analysed on a year-to-year basis. When it comes to the analysis of customer relationships, longer periods may seem more reasonable. Moreover, the two approaches differ in scope of risk - customer risk includes all the risks borne by a company, resulting from the relationship with a customer, including the risk of unexpected termination of the relationship, the risk of income diminishing, the risk of augmented service costs, etc. As opposed to the security market, the customer risk does not only reflect potential fluctuations of financial results, but potential losses arising from maintaining a relationship with a customer.

Complex character of the asset-based approach to customers within portfolio analysis was highlighted by Rupik and Żyminkowski (2011). The authors contrast various approaches to customer portfolio analysis, stating that the choice of

particular criteria of the analysis depends on the specificity of the company as well as of customers; nevertheless it should always focus on the elements of prospective character, which enable long-term planning. While securities portfolio is usually perceived through the scope of expected return on investment and risk, customer portfolio may be analysed from the following perspectives:

- Turnover/profits;
- Strategic importance of customers/problems in customer relationship management;
- Current customer relationship/customer's attractiveness;
- Customer's attractiveness/company's position in customer relationship;
- Customer lifetime value/share in customer expenses;
- Customer lifetime value/value to customer;
- Customer lifetime value/value of customer recommendations;
- Strength of customer relationship/customer-perceived product importance;
- Current value/potential value.

Difficulties associated with expression of customer-generated values in monetary terms translate into decreased utility of more complex methods of analysis, applied in securities management. An example of measure which seems of particular usefulness to customer portfolio management, but which rarely appears in the literature, and thus is probably rarely applied in practice, may be provided by the so-called *beta ratio*, which describes the volatility of security (here: customer) price movements relative to a benchmark (here: customer portfolio) (Ryals, 2003). A customer with a beta higher than 1.0 will be expected to produce higher changes in return than the customer portfolio. The knowledge of the beta ratio of particular customers would enable the managers to shape customer portfolio according to their preferences on the relationship between the rate of return and the level of risk. The beta ratio may be easily calculated based on back data, which in the case of newly acquired customers simply do not exist. Even if the company obtained such information from other companies, it would not be useful, for it is conditioned by the activities within the scope of a relationship with a particular customer.

Even if the company managed to determine the beta ratio for particular customers, there would still exist the risk of *high interdependence* (Nenonen, 2009). Customer lifetime value may depend on some company-associated factors, such as its capacity to fulfil customers' needs, or reputation (brand, image, trustworthiness, etc.), but equally on external factors, such as economic situation or competitors' activities. Therefore, managers dealing with customer portfolio have more limited possibilities of risk diversification than in the case of securities portfolio (Nenonen, 2009). Moreover, the network effect can increase the likelihood of the customers displaying herd behaviours, which further reduce the opportunities of risk diversification.

On the other hand, some arguments for the rationality of customer portfolio shaping may be also found. In many cases customers have different, complementary functions and provide the company with diverse streams of values. Such is the

case of online services that enable content publishing, the users of which are divided into the following groups: content creators, comment-posting users, and readers. Customer portfolio optimisation based on allocation of assets between various groups of customers is the most pronounced among the multi-sided platforms. Maintaining optimal proportions between particular groups of customers, e.g. between buyers and sellers participating in online auctions, is the key element for company development.

Another element in which customer portfolio management and securities management differ is the aforementioned *influence of the company's actions on received values*. Usually, the owner of a given set of securities does not have an important influence on their value, maybe except of a substantial stake in a company. By identification of customers' needs and taking proper actions aimed at shaping value proposition to customers, the company is able to impact customers' purchase behaviours and thus influence customer-generated benefits for the company. Therefore, the company's return on asset—that is: the customer—depends mainly on the company's ability to recognise customers' needs and to translate this knowledge into the ability to maintain a mutually beneficial relationship. Nevertheless, the process is frequently characterised by much greater dynamism than it may be deduced from the above statement. Usually, customers also influence the company, and sometimes are able to persuade it to take actions in which otherwise it would not engage (Boyd, Chandy, Cunha, & Ryals, 2010). Thus, relationship-based benefits generated by the company, as well as the level of capital of the company involved in the relationship are dependent on the customer's characteristics, and the actions taken by the company, which are frequently co-shaped by customers.

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