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# **VIRTUALIZATION OF MARKETING ACTIVITIES IN TERMS OF COMPETITIVE ADVANTAGE OF THE COMPANY**

## **Introduction**

The growing role of the Internet in consumers' decision-making processes, as well as virtualization of business activities trigger a cultural change in society, which is reflected in the development of the knowledge-based information society.

The goal of this article is to present the virtualization of marketing in the strategic area, which involves the use of the Internet in innovative ways at all stages of the process of value management for the customer, i.e. in the stages of defining and shaping values, as well as its communication and distribution. The development trends of marketing activities conducted on the Internet have been shown through the prism of competing processes and achievement of sustainable competitive advantage by the interested companies.

## **1. Relationships between technology and competing processes of companies**

Since the mid-90s, there has been significant strengthening of the relationship between technology and competing processes. It is connected with the development of Internet applications and specialized software in the activities of enterprises. New technology allows to introduce improvements to the business models of companies, but it also facilitates reproduction of these solutions on a much

broader scale. The effective use of new business solutions in competing processes, which include tools such as Twitter, online communities, or cloud technologies, requires the formulation of answers to the following questions:

- what are the financial implications of the implementation of information technologies in the enterprise?
- where should the money be primarily be allocated?
- which information functions should be centralized and which should be implemented by individual business units?
- how advanced do information systems need to be?
- what level of risk in the area of protection and confidentiality of information is acceptable for the enterprise?<sup>1</sup>

The answer to these questions requires defining the strategic role of information technology and the scope of virtualization of the marketing activities, as well as determining the budget to allow for the achievement of the objectives. It is equally important to prioritize the implementation of new technologies, as their absence may lead to numerous small projects which will be carried out online with little relevance to the company. Furthermore, it should be noted that too much emphasis on the protection and confidentiality of information may cause inconvenience to customers, employees, business partners; and on the other hand, not recognizing the problem may expose the company to data loss or unauthorized disclosure. There is therefore a need for balance between security and confidentiality of the information and convenience of the access to computer solutions. Increasing the scope of information technology in the enterprise and virtualization of marketing activities requires dedication not only of financial resources but also of human resources. Even in the case of the outsourcing IT functions and outsourcing marketing activities on the Internet it is important to determine those responsible for the cooperation with the external company which provides such services. A strategic approach to the development plans of the uses of new technologies in the enterprise requires a link between them, as well as business objectives along with a strategy for growth.

From the point of view of determining the possibility of building a competitive advantage based on virtualization of marketing activities, it is important to distinguish corporate technology from infrastructural technology. Corporate technology, as opposed to the infrastructural one, is owned by a single company and has a copyrighted status. As a result, it can be a source of competitive advantage.

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<sup>1</sup> J.W. Ross, P. Weill: *Sześć decyzji dotyczących systemów informatycznych, których nie powinni podejmować pracownicy działów IT*. In: *Sztuka łączenia technologii ze strategią*. Harvard Business Review Polska, ICAN Institute, Warsaw 2013, p. 7.

On the other hand, infrastructural technologies offer much greater benefits when they are utilised by a number of companies. It should also be noted that at the initial stage of development the infrastructural technology may take the form of corporate technology<sup>2</sup>. From the point of view of competition it is becoming more innovative to use infrastructural technology for market activities conducted by the companies.

## 2. The role of virtualization of marketing in the competitive process

In order to label competition as a process, its stages should include: competitive potential, competitiveness management, and competition results<sup>3</sup>. The starting point in the competitive process is a competitive potential. This potential is influenced by the process of competitiveness management in order to achieve certain competitive effects. There are specific dependencies between those three distinguished aspects of the competition. On the one hand, the competitive potential should be treated as a set of factors affecting the management of competitiveness, on the other hand the management of competitiveness shapes the quality and the size of the competitive potential. Furthermore, the achieved competitive results also affect the quality and size of the competitive potential and competitiveness management<sup>4</sup>. Competing processes are affected by changes in consumers' lifestyles, which express themselves, among other things, through virtualization of consumption. The response of enterprises to changing consumer behavior is virtualization of marketing, which can be done in terms of communication, distribution and products which are subject to digitization. Another solution is to enrich the products with information. In this case, the products do not have to alter their form. Virtualization of marketing should be perceived in the context of the use of the Internet at all stages of value management for the customer (see Figure 1).

<sup>2</sup> N.G. Carr: *IT się nie liczy*. In: *Sztuka łączenia technologii ze strategią*. Harvard Business Review Polska, ICAN Institute, Warsaw 2013, pp. 40-41.

<sup>3</sup> P.J. Buckley, C.L. Pass, K. Prescott: *Measures of International Competitiveness: a Critical Survey*. „Journal of Marketing Management” 1988, No. 2, p. 175-200.

<sup>4</sup> M. Gorynia: *Teoretyczne aspekty konkurencyjności*. In: *Kompendium wiedzy o konkurencyjności*. Ed. M. Gorynia, E. Łązniewska. Wydawnictwo Naukowe PWN, Warsaw 2009, pp. 56-58, 65.

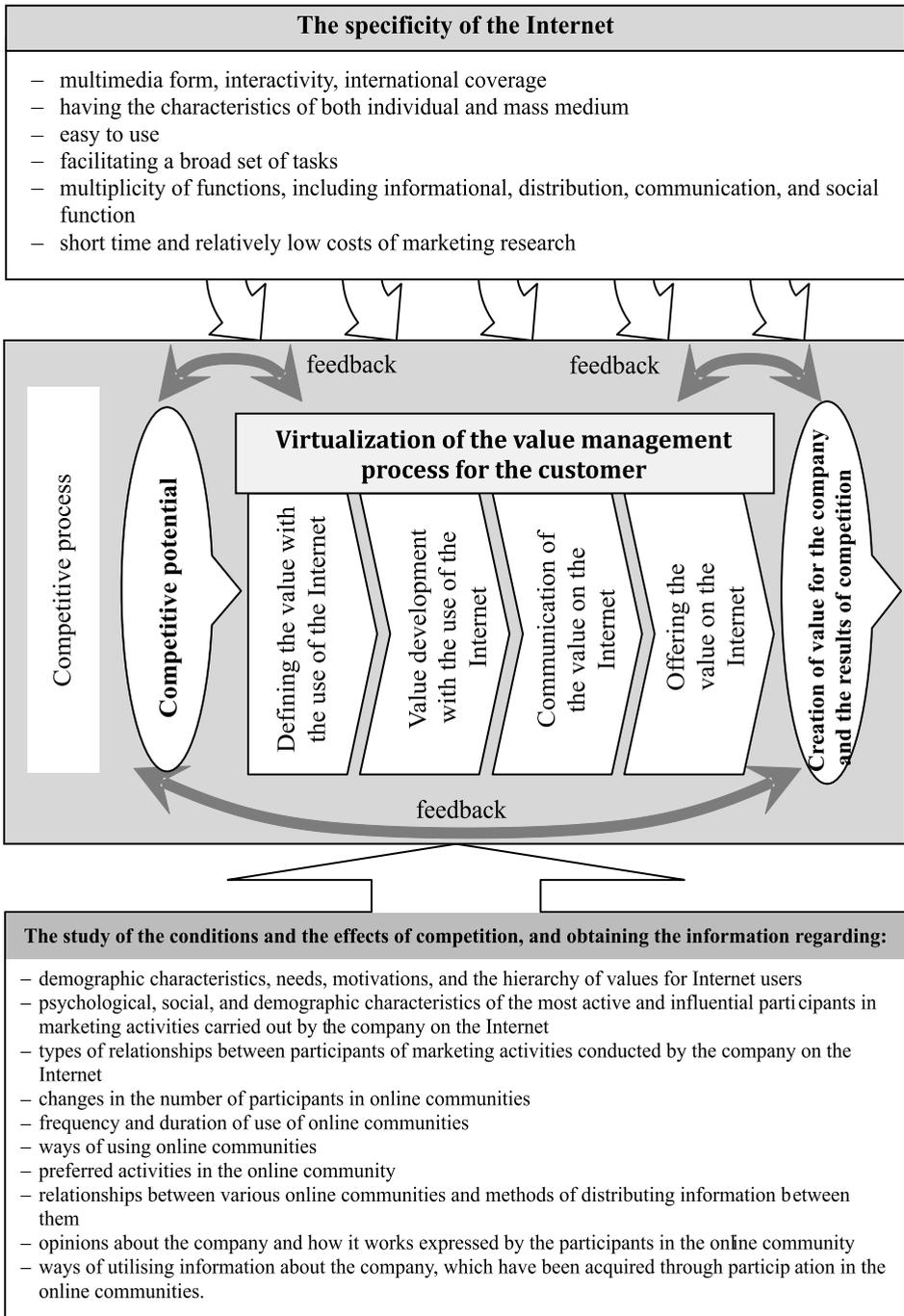


Figure 1. Virtualization of management as a value for the customer in the competitive process

Information technologies, particularly the Internet, make it easy to work with consumers at all stages of the process of value management for the customer, which means the stages of defining and shaping value, as well its communication and distribution. Customer participation in shaping the offer may depend on assessments, as well as presenting their own ideas in the process of creating innovative solutions. Extensive possibilities for the customer's involvement in the process of creation is provided by mass individualization of a cooperative kind, which takes the form of customer cooperation not only in shaping but also in defining the values<sup>5</sup>. The growing importance of prosumers in the development of innovation stems from the fact that it is precisely the most active consumer who has a lot of information important for the company, especially since sometimes they spontaneously make changes to the product during its use.

Competitive processes of companies, which are based on virtualization of marketing activities, are therefore associated with the implementation of the strategy of open innovation. The essence of this strategy is the exploration and exploitation of ideas in the works related to the product, which are created not only by specialists from the company and by consumers, but also by professionals formally unrelated to the company. In order to achieve the objectives of the open innovation, it is crucial to develop general principles of cooperation in the network. In addition, in order to exploit the potential of external R&D, it is necessary to expand the company's internal R&D. It involves possessing by the company not only appropriate tools, but also an organizational culture which gives rise to the inclusion of external partners in the process of co-creation of value<sup>6</sup>. The increasing scope of open innovation is associated with the development of virtual organizations and the network economy, as well as changes in consumer behavior which are expressed on the one hand through individualized behavioral processes, and on the other hand through the emergence of new forms of social integration, whose goal is to reduce the sense of alienation in the era of globalization. This phenomenon is accompanied by individuals seeking new forms of identification and the creation and expression of their identity, as well as striving to meet their needs of respect, recognition and fulfillment in virtual communities<sup>7</sup>. Using the innovation model based on the relationship between the company and its customers requires the sharing of knowledge based on a new quality of contact. In addition to the dialogue

<sup>5</sup> E. Peelen: *Customer Relationship Management*. Prentice Hall, 2005, p. 146.

<sup>6</sup> T. Taranko: *Zmiany w otoczeniu przedsiębiorstw a strategię produktowe*. „Marketing i Rynek” 2013, No. 1, pp. 13-14.

<sup>7</sup> K. Mazurek-Lopacińska: *Uczestnictwo w portalach społecznościowych w kontekście zmian zachodzących w konsumpcji i stylu życia Polaków*, „Handel Wewnętrzny” September-October 2011, part 3, p. 184.

with the customer, it is important to assess the risks and provide customers with an ability to access the product in the design phase, not only during the sale. As emphasized by C.K. Prahalad and V. Ramaswamy, another factor in the co-creation of customer value is building trust through transparent communication<sup>8</sup>. Initially, the idea of open innovation was utilised in the companies of the IT sector. Today, however, it is also used by companies in other vertical markets. Among the companies which address the skills and knowledge of their customers through their participation in the development process there can be mentioned, among others, Adidas, BMW, 3M. For this purpose there are being created online platforms which integrate customers into online communities centered around specific brands, and enable them to share views on the desirable directions of innovations<sup>9</sup>.

It is well illustrated by the example of Procter & Gamble. Using the Connect+Develop program, the company uses InnoCentive and other open innovation networks to solve problems in the design of their products. Through an easily accessible, three-dimensional online store, the company carries out numerous experiments. With online communities of users, such as e.g. Vocalpoint, the company generates a lot of useful information, because it presents new products and recognizes the consumer response before deciding on the full commercialization of these products. It is worth noting that in 2008, ten highly qualified employees conducted nearly 10 thousand design simulations, in several hours allowing the completion of full-scale prototypes (mock-up), the creation of which previously took several weeks<sup>10</sup>. Currently, the company Procter & Gamble improves its virtual sets of tools and uses them in most of their new business ventures.

The adoption of a perspective, according to which the buyer becomes an active participant in intra-organizational processes, involves competing at the level of value, which is based on the information resources and the bonds formed between the participants of the widely understood exchange<sup>11</sup>. Increasingly, consumers are also being engaged in the sale of goods and services. Giving buyers the role of the seller involves their participation in the activities of the affiliate networks<sup>12</sup>.

<sup>8</sup> C.K. Prahalad, V. Ramaswamy: *The Future of Competition. Co-creating Unique Value with Customers*. Harvard Business School Press, Boston 2004.

<sup>9</sup> T. Taranko: *Zmiany w zachowaniach konsumentów i ich wpływ na kształtowanie produktów*. „Marketing i Rynek” 2013, No. 3, pp. 2-5.

<sup>10</sup> M. Reeves, M. Deimler: *Zdolność do adaptacji źródłem nowej przewagi konkurencyjnej*. „Harvard Business Review Polska” 2011, No. 12-2012, No. 1, pp. 41-43.

<sup>11</sup> G. Mazurek: *Znaczenie wirtualizacji marketingu w sieciowym kreowaniu wartości*. Wydawnictwo Poltext, Warsaw 2012, pp. 124-125.

<sup>12</sup> D.L. Hoffman, T.P. Novak: *How to Acquire Customers on the Web?* “Harvard Business Review” 2000, Vol. 78, No. 1; G. Mazurek: *E-konsument jako e-sprzedawca – warunki i determinanty współpracy przedsiębiorstwa z klientem*. „Handel Wewnętrzny” September-October 2011, part 3, pp. 222-227.

The trends in the virtualization of marketing are well illustrated by the example of the activities carried out by Frito Lay, the essence of which is presented in Table 1.

Table 1

## Virtualization of marketing activities in the example of the Lay's chips

The use of the Internet in brand management for Lay's potato chips
<b>Market trends and the starting position of Lay's</b>
<ul style="list-style-type: none"> <li>– in recent years, the market for chips in Poland reported a slowdown, reflected in the decrease in sales (in 2008, there was a 21% increase in the market, and in 2011 there was only a 6% increase)</li> <li>– market leaders: Frito Lay, Lorenz – competed through innovation in the field of flavors and varieties of chips</li> <li>– at the same time, trade networks also introduced new varieties of potato chips flavors and sold them under private labels (the share of private labels by trade networks increased from 15.6% in 2008 to 21.9% in 2011)</li> <li>– in consequence, operations of trade networks led to inhibition of the sales growth for Lay's</li> <li>– the introduction of new seasonal flavors within the core product line no longer affects the less loyal customers because consumers have become accustomed to new flavors introduced by the competition</li> </ul>
<b>Main marketing challenges</b>
increase of consumer interest in new varieties of Lay's potato chips flavors and increase of the involvement of customers in marketing activities related to the Lay's brand
<b>Marketing objectives</b>
<ul style="list-style-type: none"> <li>– increase of market share by Lay's (without the «effect of cannibalism» of the standard offer in connection with the introduction of new seasonal flavors)</li> <li>– increase of customer engagement in the process of creating new versions of chips and obtaining at least 100 thousand proposed flavors</li> </ul>
<b>Target group</b>
<ul style="list-style-type: none"> <li>– regular and occasional consumers of chips</li> <li>– people aged 15-35 (with particular importance of the age group 15-24, because this is a group sensitive to the price, and to the actions of trade networks carried out on behalf of private labels)</li> </ul>
<b>The essence of the strategy and stages of implementation of marketing activities</b>
<ul style="list-style-type: none"> <li>– a communication strategy was based on engaging consumers by allowing them to propose their new flavors of crisps</li> </ul> <p>The campaign was divided into the following stages, the essence of which was:</p> <ul style="list-style-type: none"> <li>– encouraging consumers to submit flavor proposals (via text messages or web)</li> <li>– choosing by a committee four flavors of chips, which are manufactured and introduced for sale</li> <li>– voting by consumers for their favorite flavor after trying the new ones (text message and web)</li> <li>– announcing the results of the competition and providing information for consumers about the best flavor</li> </ul> <p>At each stage there was a multi-channel communication maintained in a humorous tone in order to stimulate customers' interest in participating in the creation of new flavors.</p>

Table 1 contd.

The use of the Internet in brand management for Lay's potato chips
<b>The utilised communication tools</b>
<ul style="list-style-type: none"> <li>– the main instrument of communication was the website on which there were numerous videos, manuals, and presentations of the jury</li> <li>– the website enabled reporting proposals of flavors by naming a new flavor with a justification in the form of text or pictures, and the next phase of the campaign included voting for the selected flavor</li> <li>– especially for the campaign, there was created a fan page on Facebook, which gathered 32 thousand fans, becoming the beginning of the official fan page of the Lay's potato chips in Poland</li> <li>– internet activities were reinforced by classic commercials with the participation of celebrities such as Paweł Wilczak, and public relations</li> <li>– an important role in the campaign was played by videos involving four people who offered the best flavors, since people whose propositions passed encouraged a network of their friends to vote for their flavor, which in turn helped to increase the impact of the activities</li> </ul>
<b>Achieved results</b>
<ul style="list-style-type: none"> <li>– increase of market share by 7 percentage points (from 28.8% in February 2011 to 35.8% in May 2011)</li> <li>– increase of the share was at the expense of private label retailers</li> <li>– a webpage visited by over 2 million unique users</li> <li>– consumers proposed over 700 thousand chips flavors</li> <li>– the final four flavors gathered a total of over 1 million votes</li> </ul>

Source: Based on *The Effie Awards 2012*, the Association of Marketing Communication SAR, Warsaw 2012, pp. 272-274.

### 3. Customer cooperation and competition in the process of co-creation of value

Projects which use the co-creation of value by customers can be divided by whether said customers compete or cooperate. Bearing in mind the criteria, there are distinguished:

- a competitive market model, which assumes that the online platform connects two groups of customers with different needs that are met in the process of exchange; in this model, the increase in the number of members of one group leads to a reduction of their benefits, while the increase of the size of the second group translates into the increase of benefits, as it increases the number of potential people with whom it is possible to conduct a transaction; this type of model is characteristic of online auctions;

- a non-competitive market model, in which the online platform becomes a place to meet the needs of both sides of the relationship; in this model, there is a low level of both competition and cooperation between customers of the same group; it may be due to the digital nature of the traded goods; an example of a non-competitive market platform is a peer-to-peer platform, which enables the exchange of files;
- a competitive community model which is a collectivity of people both competing and cooperating with one another, and applies to numerous social networking sites, where users exchange information and knowledge, but also compete in the area of assessments; an example of such a community may be a service, in which users cooperate by commenting on pictures posted by others, while at the same time make judgments on the basis of which rankings are formed,
- a non-competitive community model; a good example of such a model is Wikipedia, or the Open Source movement<sup>13</sup>.

#### **4. Managers' opinions on the role of marketing on the Internet in the competition process of companies**

Based on a quantitative<sup>14</sup> study conducted in April 2013 on a sample of 152 companies, it can be concluded that companies mainly use the Internet and new technologies to explore the available publications, press releases, industrial reports (86.2% of the surveyed companies), as well as to obtain information about competitors by visiting their websites (83.6% of respondents). 79.6% of the surveyed companies conduct advertising campaigns on the Internet. It should also be noted that less than 13% of companies allow their customers to configure their products online. The fact that companies do not use the full potential of the Internet is also confirmed by the information that only 28.9% of the surveyed compa-

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<sup>13</sup> T. Doligalski: *Internet w zarządzaniu wartością klienta*. Oficyna Wydawnicza SGH, Warsaw 2013, p. 101-103.

<sup>14</sup> The study was carried out in the framework of the project "Internet in marketing and the use of new technologies in business cooperation with customers"; project manager: prof. dr. Krystyna Mazurek-Łopacińska, a member of the research team: dr. Magdalena Sobocińska; a nationwide sample; the structure of the surveyed companies: 51 companies employing up to 49 people; 51 companies with 50 to 200 employees, 50 companies with over 200 employees; interviews with the use of a standardized questionnaire was completed in the CATI studio of the ARC Market and Opinion research institute in Warsaw.

nies engage their customers in online promotional activities, and less than 18% invites them to participate in the sales activities on the Internet.

It should be noted that the companies recognize the importance of online marketing in the process of competition. However, the opinions on the role of the Internet vary according to the size of the company (see Figure 2).

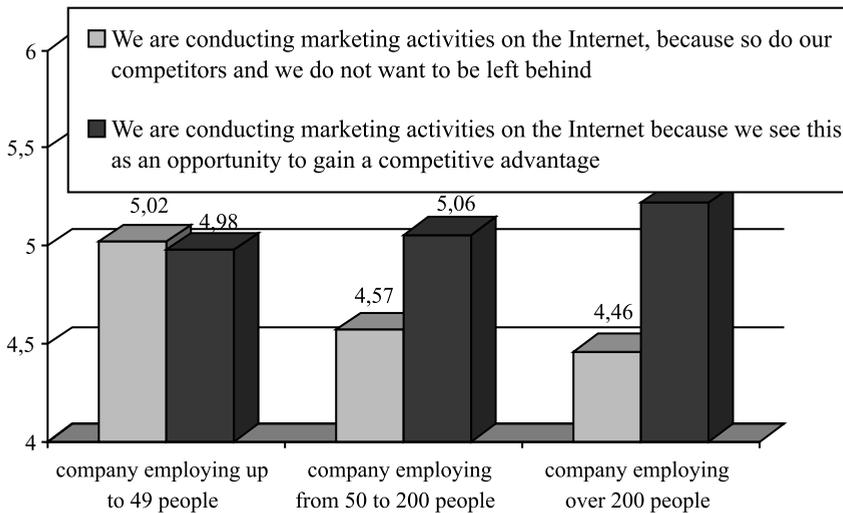


Figure 2. Managers' perception of the role of marketing on the Internet in the process of competition (rating scale 1-7)

Source: Own, based on questionnaires (N = 152).

Large companies which employ over 200 people conduct more marketing activities on the Internet in order to gain an edge over the competition, as opposed to small businesses, for which more often than for large companies the incentive to conduct marketing activities on the Internet is the desire not to be left behind the competition, as well as the will to imitate the competitors.

## Conclusion

With the increasing competition in the market increases the importance of marketing resources. These include not only the brand, but also the customers, the knowledge of buyers, and relationships with suppliers and distributors<sup>15</sup>. An im-

<sup>15</sup> R. Niestrój: *Zarządzanie marketingiem. Aspekty strategiczne*. Wydawnictwo Naukowe PWN, Warsaw-Cracow 1996.

portant element of value management is to link the activities in the field of customer relations to the creation of the company's value. It should also be noted that the resources and marketing activities of the companies are subject to the processes of virtualization. One of the directions of the development of the Internet in marketing is the inclusion of the public in the process of creating value for the customer on the Internet.

The future of crowdsourcing will depend on qualitative and quantitative factors. On the one hand, its development will be influenced by the increasing number of persons involved and participation offers from crowdsourcing portals, and other trends in this area will depend on the degree of attractiveness of the models of participation and the competence of customers<sup>16</sup>.

The scope of virtualization of marketing activities for companies will also affect the degree of acceptability to consumers. It is particularly important in the context of increasing awareness and expectations of the Internet societies, pertaining to the improvement of standards of personal data protection and consumer privacy.

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<sup>16</sup> *Crowdsourcing. Jak angażować konsumentów w świat marek*. Ed. J. Kasprzycki-Rosikoń, J. Piątkowski. Helion, Gliwice 2013, p. 172.

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## VIRTUALIZATION OF MARKETING ACTIVITIES IN TERMS OF COMPETITIVE ADVANTAGE OF THE COMPANY

### Summary

The increasingly important role of the Internet in consumers' decision-making processes and virtualization of business activities triggers a cultural change in society, which is reflected in the development of the knowledge-based information society. The goal of this article is to present the virtualization of marketing in the strategic area, which involves the use of the Internet in innovative ways at all stages of the process of value management for the customer, i.e. in the stages of defining and shaping values, as well as its communication and distribution. The development trends of marketing activities conducted on the Internet have been shown through the prism of competing processes and achievement

of sustainable competitive advantage by the interested companies. It should be noted that in the future the scope of virtualization of the marketing activities will depend on the degree of its acceptability to the consumers. It is particularly important in the context of increasing awareness and expectations of the Internet societies, pertaining to the improvement of standards of personal data protection and consumer privacy. The development of virtualization of marketing and consumption will also depend on the competence of customers and on the creation of a culture of trust and cooperation between companies and their customers.

Keywords: virtualization of marketing activities, competitive advantage