

Marketing concepts of customer experience in digital economy

Olga Fokina^{1*} and *Sergey Barinov*²

¹ Vyatka State University, 36, Moskovskaya str., Kirov, Russia

² Moscow State University of Civil Engineering, 129337, 26 Yaroslavskoye Shosse, Moscow, Russia

Abstract. Digital transformation is a key determinant in global economic growth and development. There are serious risks of digitalization of markets and society. In order to understand the key trends in consumer behavior under the conditions of digital economy, the analytics of various global consulting companies such as McKinsey Global Institute (MGI), the consulting company Gartner, Inc., companies Deloitte, Bain & C, Forrester Consulting were summarized in this study. Based on the analysis, the main shifts in consumer behavior in the post-industrial society during the transformation of the service economy into the consumer environment of the digital economy are determined. The article describes the changes in the preferences and behavior of customers in the post-industrial economy under the influence of digital transformations. The result of the study led to the understanding of the fact that the buyer cannot predict his/her experience, since the participation of the buyer himself/herself in determining the value is increasingly required, which leads to the formation of the phenomenon of “co-creation of the value”.

1 Introduction

The concept of the digital economy is traditionally interpreted quite simply - the economy based on digital technologies. The basis of the digital economy is digital technologies, the transition to which is considered as a digital transformation. According to McKinsey, the digital transformation is a key factor in global economic growth and development. The development and implementation of Internet technologies in the economy can increase China's GDP to 22%, and Russia's GDP - from 19 to 34%. In the United States, the expected increase in value as a result of the introduction of digital technologies may reach 1.6-2.2 trillion US dollars by 2025 [1].

The digital economy cannot function fully without three key factors: information and communication infrastructure, digital technologies themselves and highly skilled workforce.

The main basic features of the digital economy are [2]:

* Corresponding author: fokina_o_v@mail.ru

1. Digital assets that create competitive advantages. Competitiveness is determined by the level of digitalization. The most valuable digital platforms are Internet sites containing large amounts of data that users can use not only to obtain information, but also to communicate, develop new ideas using platform technologies, develop new solutions, strategies, etc.; replace classic intermediate parties (Avito, airbnb, etc.) and innovative platforms (Apple, Microsoft, General Electric, Oracle, etc.).
2. Networks as the main form of organization. This is a product of information and communication technologies and social communications, a set of entities interconnected in the digital environment, openly demonstrating their resources and capabilities, exchanging data in real time, which allows them to coordinate joint activities more effectively.
3. Data processing as the main business process. Big data is a databank, the competent processing of which transforms them into specific new knowledge for delivery of new products and solutions to the market in order to increase competitiveness.
4. Information as the main product. All products acquire digital components. In other words, more and more “smart products” appear on the market.

In addition to the basic features of the digital economy, there are additional trends that are characteristic of the development of changes in the markets. The role of the consumer is growing, since he/she is able to easily access information and compare offers of different companies. The digital economy is more customer oriented. The role of competition is changing.

Companies are united in the framework of business ecosystems. Business ecosystems are an extended version of value networks that unites all entities that are participants or users of a company's digital platform. According to Bailetti [3], the business ecosystem includes “a community of companies, organizations and individuals who share a desire to achieve a high result and contribution at the system level, to provide an advantage to their customers, partners and community members from interaction through the use of various platforms, to invest in wellness management of the entire society.”

Business ecosystems are a modern form of development of networks and markets, they support the health of the entire society, values (value networks) and also prepare new members of the society, attracting those who have ideas or abilities to improve current and create new products. Resulting from growing specialization of markets and business structures due to the need for highly competent employees in narrow areas and industries, enterprises (organizations) cannot achieve complex goals alone (to develop and produce “smart” goods).

Restructuring of the economic space gives rise to a significant number of small innovative enterprises, which are likely to achieve success and rapid growth in the digital environment. At the same time, corporations (Apple, Microsoft, etc.), which still control markets, are highly competitive in the digital economy. Small companies, participating in business ecosystems, have high chances of quick success and becoming such giants. In this sense, the nature of competition is changing. As Trefilova I.N. [4] notes, partnership and the ability to effectively communicate, engage partners in interaction are becoming important factors in competitiveness of companies.

The role of the state in the digital economy is growing, since it requires more regulation, availability of developed systems for protecting intellectual property and economic security, as physical and other assets are increasingly managed through the network (Internet). The state should both participate in the creation of digital infrastructure, training of highly qualified staff, and ensure the effective legal regulation of the virtual and physical worlds [5].

The digital economy is changing behavior of consumers, giving them a number of benefits:

1. free and quick access to information, goods, services;
2. price reduction due to competition of enterprises (organizations) in the virtual environment;
3. improving the quality of goods, works and services as a result of competition and openness of information on the Internet (consumer feedback, feedback, comments, advice and suggestions);
4. availability of the opportunity to receive products and services, news on a free basis.

Obviously, there are serious risks of digitalization of markets and society. First of all, they are the virtual crime, especially in relation to poorly protected social groups (children, pensioners) and development of fraud with the use of digital technologies. Another serious risk is the increase in cases of deviant behavior of virtually dependent individuals, as well as the low efficiency of regulation of the digital economy, especially intellectual property rights, etc.

2 Methods

In order to understand the key trends in consumer behavior in the digital economy, the analytics of various global consulting companies such as McKinsey Global Institute (MGI), the consulting company Gartner, Inc., companies Deloitte, Bain & C, Forrester Consulting were used in this study.

First of all, it is necessary to understand trends in development of technologies, since it is they that determine the future of both markets and consumer behavior. As it was noted above, most of the current trends that have influenced changes in consumer behavior are associated with the development of the digital environment and the rapid growth of consumers' using various gadgets (mobile devices), the formation of the virtual world and virtual market, even the virtual currency.

Based on the conducted analytical work the longitudinal observation made it possible to compare the changes that are taking place and to compare the shifts in consumer behavior in the post-industrial society with the transformation of the service economy into the consumer environment of the digital economy. Basically, the results of the observation were formed through expert assessment. The specificity of the expert assessment is that the analysis is not detailed and has conceptual nature.

3 Results

In 2017, the digital revolution entered a decisive phase - every second inhabitant of the Earth connected to the Internet. Already in the next 20 years, up to 50% of work operations in the world can be automated, and this process will be comparable in scale to the industrial revolution of the 18-19 centuries ". Digitalization does not only change the behavior of consumers, it acts as an engine of economic growth, increases purchasing power of population, radically changes the environment of the consumer. The digital economy requires fundamentally different thinking from companies, the complete transformation of the corporate culture, the introduction of new business models and marketing models of promotion and interaction with consumers, their involvement in cooperation through continuous development of customer experience.

The main technological trends that form digital opportunities for businesses are presented in table 1.

Table 1. Main strategic technological trends

Trends	Prospective opportunities
Development of Wireless Network	Creating a single network space, including integration of communications and allowing receiving any information from any device at any time. This creates the new customer experience - the user experience from the environment, and therefore development of mobile applications is an important strategic task for all companies. Development of new materials for 3D printing contributes to the personalization of products, when consumers can first independently model (design) products and then produce them. This trend ensures the conversion of the buyer into the prosumer (seller + buyer), when people begin to produce goods and services for themselves.
Development of user experience	
Development of 3D printing materials	
Development of a new IT reality	Machines take over processing of huge amounts of information, which people may not even mean, machines increasingly take over tasks of educating users.
Development of new advanced forms of architecture and platforms	
Information algorithms and architectures are becoming more complex	Increased attention to data security, economic security of enterprises (organizations).

The trends listed in table 1 have a significant impact on consumer behavior and formation of consumer preferences. Thus, the consumer is more deeply immersed in the digital environment, the real and virtual worlds are combined and a new mega reality is formed, in which entrepreneurial structures must learn to work effectively.

The active digitalization of the consumer behavior necessitates the regular study and improvement of customer experience, both in the real and digital environments. In this aspect, the “customer experience” means everything that the customer experiences when interacting with the entrepreneurial structure in various ways: using applications on the mobile phone or the website on the computer when ordering goods by phone, coming to the store and receiving the service.

The customer experience is a combination of customer emotions, feelings, sensations, knowledge about the enterprise (organization), which is formed by identifying and summarizing customer subjective opinions at various touch points with the company's staff and its virtual media.

The digital economy assumes that all customers are oriented to interacting with the business in the most convenient place for themselves and at the most appropriate time, as well as in the most convenient way. In addition, interaction with brands is carried out through experience that is unhindered, omni-channel (using different channels), direct, contextual and personalized [6].

Thus, the key strategic business task of any company is to provide the best customer experience that the person wants to share in the virtual space. This is the task of two main divisions of the enterprise: marketing and IT department (information technologies).

89% of companies plan to compete by providing the best customer experience to their customers. More and more scientists in the field of entrepreneurship and marketing argue that improving customer experience is the next field in which the competitive advantages of companies will be built [7- 12].

Moreover, most advanced consulting companies have recently introduced services related to improving customer experience strategies - Bain and Company, Accenture, McKinsey, Deloitte, BCG, PWC and many others.

Experts note that positive customer experience and popularization contribute to the formation of a competitive advantage, which in its turn leads to faster organic growth of the company and lower cost. The customer-oriented approach to branding, channel strategies, and a marketing mix can more than double increase the company's revenue growth rate.

Forrester Consulting conducted a study of the efforts of global companies in providing the best customer experience for the global digital consulting company Accenture [13]. 702 respondents took part in the online survey; 11 in-depth interviews were conducted as part of the personal survey. Based on the results of the studies, it was concluded that the vast majority of enterprises (organizations) are increasing their efforts to digitalize interaction with customers, and are building their own digital ecosystems.

Besides, during the study, leaders in the field of providing customer experience were identified. These companies explained that for them the implementation of the customer experience strategy is not so much a project as an important component of the transformation mechanism of the company's mental attitudes. The study showed that digital technologies are considered as drivers of innovation, all methods of work of the staff as well as methods of working with the client are updated with their help, which creates new customer experience.

Digital technologies bring fundamental changes to the company culture, and the organization itself is united around common goals to improve customer experience.

In addition, leaders in the field of providing customer experience, unlike competitors, use more complex management and strategic decisions. The maximum emphasis is on the use of data and analytics (in particular, marketing analytics), availability of an effective system of metrics and performance indicators, stimulation and competent motivation of staff in the framework of using data on customer experience.

Comparison of the results of the analytical work made it possible to compare the shifts in consumer behavior in the post-industrial society with the transformation of the service economy into the consumer environment of the digital economy (table 2).

The comparative table shows that the lifestyle of consumers is changing and, first of all, this affects the methods of obtaining information and other news. The largest operators (Yandex, Google) are being replaced by specific applications that can supply customers with new and necessary information. Social networks are the most important source of information, as well as instant messengers. A person surrounds himself/herself with content that he/she most trusts and most often uses. In the digital economy, value moves from services to customer experience as an integral part of goods (work, services). The experience should be personal, unique and contextual. Unlike the product, the purchasing experience cannot be standardized. The customer experience directly affects the customer satisfaction, brand loyalty, and his/her desire to recommend this brand to friends, acquaintances, relatives, and other contact audiences.

4 Discussion

McKinsey conducted a Data Matics study to analyze the use of information and communication technologies for analyzing customer information, which showed that the regular use of customer information keeps profit performances higher than market average. Such companies are ahead of competition at all stages of the client's life cycle: they are nine times more likely to provide the maximum level of customer loyalty, 23 times more often than others acquire new customers. The conclusion of McKinsey is as follows: by analyzing the customer information, you can increase the return on investment in marketing by 10-20%, as well as provide average profit growth by 14%. The problem is that only 30% of companies are well aware of customer needs in order to understand what measures need to be implemented to ensure business growth.

Table 2. Key shifts in consumer preferences in the digital economy.

Consumer expectations	Post-industrial economy (service economy)	Post-industrial economy (consumer environment of the digital economy)
The main source of information for the consumer	Internet, Internet news (yandex, google, etc.)	Mobile applications, social networks, various instant messengers
Consumer value	Service	Personalized value co-creation experience
Product	Serial (standard)	Customized
Price	Lowest total costs	Willingness to pay a premium for more choices and time savings
Communications	Relationship marketing (CRM) - standard communications	Personalized interactive online communications. The consumer wants to be recognized
Sales channels	Multi-channel sales system	Omni-channel marketing channel management system
Service system	Service standards	Personalized, contextual service (customer travel arrangements)
The importance of atmosphere of the point of purchase	Matters, but standardized	The context (atmosphere) is critical to gaining unique buying experience
The Importance of Online Communication Channels	Desirable, provide benefits	Essential, round-the-clock character (24/7)
Consumer platforms	Desirable	A necessary element of competitiveness, free access to content at any time, convenient for the buyer, i.e. around the clock
Market perception	Market as a network of buyers and sellers	Forum for Co-Creation Experience

However, it is very precipitant to be limited only by quantitative methods when working with the client base and information. It is necessary to personalize methods, create correct algorithms for working with clients (real and potential customers), clearly group and structure all the knowledge gained (research results).

For example, the consulting agency Gartner reports that by 2020 smart personalization mechanisms will allow digital companies to increase their profits by 15%. So, on the basis of the stated research results of leading consulting agencies, we can draw the following conclusions that determine the main changes in consumer behavior.

Consumers want to be recognizable, i.e. the probability of making a purchase will be significantly higher in that organization (company) that has complete information about the buyer (name, birthday, place of residence, interests, etc.). According to surveys conducted by Accenture, 75% of buyers purchase only from those sellers who contact them by name and know their previous shopping experience, i.e. they know the potential needs of the buyer.

Consumers want personalized shopping experience. Researches by Infosys, Marketo, RaptMedia show that most consumers want the individual content of the site and individual (personal) messages that organizations send them. When fulfilling these wishes, their attitude towards the brand, company and its offers will be positive and they will be ready to recommend it. The statistics on this issue is as follows: 59% of customers say that personalization determines their decision to purchase (<https://www.infosys.com>); 77% of consumers buy and recommend brands that provide personalized service (<https://www.forrester.com>); more than 78% of consumers give consideration only to personalized offers from brands with which they have dealt before (<https://www.marketo.com>).

Digitalization of consumer behavior significantly influenced the style of purchasing goods, the decision-making process on the purchase, which necessitated the transition from a multi-channel sales system to an omni-channel sales management system. The retail business was the first to experience it [14]. In this regard, Bryngolfsson, Hu and Rahman [15] note: “In the past, brick and cement stores were unique, allowing customers to touch and feel the goods, providing instant satisfaction; Internet sellers, meanwhile, have tried to inspire customers with a wider range of products, low prices and complete product information, such as reviews and ratings. As the retail business evolves into a seamless omni-channel customer experience system, the differences between physical and online channels will disappear, plunging the world into a huge showroom without walls.”

The validity of these statements is emphasized by the fact that the modern buyer easily uses all available sales channels, often combining them, i.e. the selection process begins with a product selection on the Internet, then the selection continues in a real store where the buyer can see it, try on and buy it. There exists a reverse algorithm: the buyer finds the product in the store, evaluates its characteristics and purchases it at the cheaper price on the Internet.

The consumer experience plays a decisive role in choosing a model of the consumer behavior, which, when accumulating, allows to develop one's own individual style of shopping and consumption. The decision-making process on the purchase of goods (works, services) is a journey for the buyer with a specific number of points of contact, in each of which he/she receives positive or negative experience, which then affects his/her attitude to the product and organization.

Marketing channels should be prepared to provide the customer with a super customer experience. This is only possible if omni-channel management is implemented as a synergistic management of numerous available channels and points of contact between the buyer and the company, the purpose of which is to optimize the customer experience.

5 Conclusion

The analysis showed that customer preferences and behavior have changed significantly and continue to change under the influence of constantly evolving digital technologies. In other words, there is a complication of the customer behavior from the standpoint of its analysis and research. Consequently, for effective work, marketers and managers of organizations are looking for new ways to assess customer expectations and preferences.

The review of the main ideas, examples, and results of conducted studies allowed to summarize these changes and identify the main shifts in the consumer behavior and preferences.

The lifestyle of consumers is changing and, first of all, this affects the methods of obtaining information and other news. The largest operators (Yandex, Google) are being replaced by specific applications that can supply customers with new and necessary information. Social networks as well as instant messengers have become the most important source of information. The person surrounds himself/herself with the content that he/she trusts and uses more often.

In a digital economy the value shifts from services to customer experience as an integral part of goods (works, services). The experience should be personalized, unique and contextual. Unlike the product, the customer experience cannot be standardized. The customer experience directly affects customer satisfaction, brand loyalty, and his/her desire to recommend this brand to friends, acquaintances, relatives, and other contact audiences.

Online channels are becoming increasingly important and should be available 24 hours a day and 7 days a week, i.e. be day-and-night. One of the key tools is platforms (sites) that allow to collect all the information that the consumer needs to select, purchase, use the product and its service, create the customer's own content, attract friends and even make

money and provide consumers with the opportunity to create, participate in the development of new products or customization of existing ones.

Thus, the market is becoming a forum, the emphasis shifts from characteristics of products to the experience and impressions, that is, to the characteristics of the interaction environment. The demand is becoming contextual. The buyer cannot predict his/her experience, since the participation of the buyer himself/herself in determining the value is increasingly required, which leads to the formation of the phenomenon of “co-creation of the value”.

Thus, the market is becoming a space of the potential experience of co-creation, in which individual restrictions and choices determine the willingness of consumers to pay for the experience.

Management of the customer experience and strategies for its personalization should be an integral part of the work of marketing and information technology services of any organization (enterprise) that are interested in successful results of competition. To do this, it is necessary:

1. To rebuild corporate thinking and the level of organizational culture;
2. To form a new vision of the organization in the digital economy;
3. To adopt digital transformations and restructuring strategies for many business processes in order to create an effective cross-functional team of specialists capable of developing client-centric solutions based on marketing intelligence and accurate knowledge of customers.

The customer experience should be considered as one of the most important research issues and challenges in the coming years due to an increase in the number and complexity of points of contact with customers (both existing and potential). Creating a strong and positive customer experience in the process of decision-making on the purchase by the buyer will lead to an improvement in both the effective indicators of financial and economic activities of organizations and an increase in customer loyalty.

References

1. E.H. Shane, *Organizational culture and leadership*, (2013)
2. O. U. Yuldasheva, *Cognitive marketing* (2006)
3. T. Bailetti, *TIM Lecture Series: Ecosystem Approach to the Commercialization of Technology Products and Services. Open Source Business Resource*, (2008)
4. I.N. Trefilova, *Tools of strategic management of integration of network partners and customers into the innovation process* (2017), <http://www.vestnik-ku.ru/index.php/arkhiv-nomerov/2017-god/vestnik-2-2017>
5. O.V. Fokina, *Kaz. Soc. Humanit. Bull.* **5 (28)**, 74-777 (2017)
6. Gartner Identifies the Top 10 Strategic Technology Trends for 2016. <http://www.gartner.com/newsroom/id/3143521>
7. V. Alpatov, A. Lukin, D. Chernyshev, V. Shirokov, *IOP Conference Series: Materials Science and Engineering* **456(1)**, 012010 (2018). DOI: 10.1088/1757-899X/456/1/012010.
8. T. Keiningham, et al. *J. Serv. Market.*, **31(2)**, 148-160 (2017)
9. P.C. Verhoef, K.N. Lemon, et al. *J. Retail*, **85(1)**, 31-41 (2009)
10. P.C. Verhoef., P.K. Kannan, J.J. Inman, *J. Retail.* **91(2)**, 174-181 (2015).
11. B. Schmitt *Experience Marketing: Concepts, Frameworks and Consumer Insights. Foundations and Trends in Marketing Vol. 5, No. 2* (2010). Pp.55–112.

12. Expectations VS Experience: the good, the bad, the opportunity.
https://www.accenture.com/t20160620T025510__w__us-en/_acnmedia/PDF-23/Accenture-Expectations-Vs-Experience-Infographic-June-2016.pdf
13. A. Mottaeva, N. Kalinina , A. Kuzmina, O. Olenina and A. Glashev, *E3S Web of Conferences*, **91**,08072, (2019), DOI: 10.1051/e3sconf /20199108072.
14. D. Rigby, *Harv. Bus. Rev.***89(12)**, 65-76.
15. Hu. Bryngolfsson, *MIT Sl. Manag. Rev.* **54(4)**, 9-23. (2013).