

**AMURCON 2021**  
**AmurCon 2021: International Scientific Conference****A NEW MODEL OF CONSUMER BEHAVIOUR IN THE DIGITAL  
ECONOMY**

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**Abstract**

The article attempts to analyse the new economic situation. Digital technologies generate more and more information needs. They are associated with new alternative opportunities based on sustainable digitalization of the economy. This leads to the formation of a new consumer model, more inherent in the digital society. In the context of digitalization, wide access to information gives consumers much more opportunities in the market. An important principle is that the maximization of utility occurs at a higher level of satisfaction of its needs in society. The modern competitive market shows that for every demand, both spontaneous and stimulated, manufacturers react with an instant increase in the output of the corresponding product or service. The market of digital goods and services also operates in this perspective. The demand for digital goods, services and technologies is beginning to dominate the modern market. Satisfaction of newly arisen needs becomes possible because of effective differentiation of economic activity and the development of new industries. Consequently, the emergence of new industries is a response to market demand, a condition for their development and the rational functioning of all its segments. The process of digital transformation of the economy generates more and more information needs. They create new alternative opportunities to meet the needs of society. At the same time, a new model of consumer behaviour is being formed, more in line with modern society.

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## 1. Introduction

As a result of digitalization, wide access to information for consumers opens up new horizons of great opportunities. Maximizing utility is carried out on a more sustainable basis, which corresponds to the principles of creative consumers. The development of "smart" homes, the production of new digital goods and services, significantly facilitate the lives of consumers. High-tech appliances are turning households into digital device platforms. A new type of electronics allows you to turn digital technologies (miniature devices, microphones, switches and sensors) into comfortable means. Home digital technologies will be able to interact with the computers of enterprises, universities, schools and others. Innovations of this kind are especially useful to all consumers. Digital technologies can provide information that contributes to the expansion of the consumer's knowledge. At the same time, the consumer's creative abilities are enhanced and his internal culture is continuously enriched.

The digital economy is characterized by the dynamization of production processes, increasing labour productivity and reducing the costs of using limited economic resources. In the field of production, the engineering and technical level of solved tasks characteristic of the era of the digital revolution is steadily increasing. It is one of the main factors in the radical modernization of the technological structure of production. With the integration of industrial and digital technologies, the functional properties of production systems increase. The functional purpose of new production facilities is to produce unique economic benefits to meet the needs of society at a higher level. New products, services and technologies that are in the circle of consumer interests and that are already in high demand at early stages. Further consideration of the most important element of the market mechanism in the coordinates of the digital economy, which is demand, involves: determining the basic principles of the emerging new model of consumer behaviour. The goal of the consumer is to receive goods and services to satisfy their needs and pleasure. The main factor of consumer choice is the usefulness of a particular product. Note that the consumer maximizes utility by choosing a consumer set that satisfies the budget constraint, in which the ratio of marginal utility to price is the same for all goods and services. Because of such a choice, consumer equilibrium is achieved – a position in which the consumer maximizes the utility he receives from buying various goods with the available budget, which means that any increase in utility from the consumption of one goodwill requires a reduction in utility from the consumption of another good.

The search for effective consumer solutions is based on new economic principles. Increased competition, the need to stimulate individual and aggregate demand for new goods, services and technologies force manufacturers to take effective and rational actions. One of the fundamental points of the producers' strategies is the attempts to remove information processes from subordination to the main imperatives of the socio-economic development of society. However, new goods, services and technologies are not yet able to radically change the fundamental socio-cultural attitudes of consumers, but shifts in the positive direction are taking place and expanding. Expressing the described situation in terms of economic practice, we can say that the interests of the consumer correspond to his social interests. This approach aims at a radical modification of the economic space. At the same time, a market-oriented value system enjoys priority today. The essence of this modification is the purposeful formation

of branches of the digital economy, the productive use of which will ensure the satisfaction of the needs of society.

New knowledge is being created within the framework of the modern economic space. The logic and direction of economic development correspond to the coordinates of digital transformation. The digital revolution has created a society that understands events much better than ever. Consumers in the market use electronic communications means of circulation and accounting-credit cards, electronic promotions, bar codes, which significantly speed up and simplify calculations. Visualization, visibility, imagery of information and its processing, which open up the possibility of invading a new virtual world, like other multimedia devices, make consumers' thinking more synthesizing. At the same time, the growing effectiveness of their efforts is changing the model of consumer behaviour. Maintaining and analysing household finances has become a typical computer task, and the corresponding software products have long and firmly occupied the top lines of sales ratings.

## **2. Problem Statement**

The sustainable development of the digital economy is changing the model of consumer behaviour. The innovative space of the consumer, who himself is actively involved in economic activity, is the basis of the ongoing production processes in the economy. The use of innovative and prudent functional connections at the production level is the result of the interaction of producers and consumers. From now on, they began to appeal not so much to producers as to consumers as innovators in the development of new economic benefits. Thus, digitalization and the use of new knowledge, resources and technologies in production acquires the features of universality, globality and concreteness. From these principles, a holistic image of the creative consumer grows, changing the paradigm of the development of modern production through innovative demand. Innovative demand is focused on stimulating the release of new technologies, goods and services by expanding the market space. This is a new hotbed of development, generating new factors at all levels of production. The continuity of the transformation of production on a qualitatively updated technological basis supports the sustainable development of the digital economy.

## **3. Research Questions**

The systemic crisis caused by the logical completion of the limits of industrial production is resolved with the help of a new growth factor. Socio-economic progress is associated with the intensive accumulation of intellectual potential information. The emergence of such a factor revolutionizes the structural properties of the economic system, ensures an increase in the efficiency of the production-distribution-exchange-consumption chain and the rational use of resources. The system-forming dominant is this new factor-information. The information sector becomes the basis of the economy (Yap et al., 2018). In the same years, the information sector and information goods and services were implemented (Schwab, 2016). The contribution of the information processing industry was further evaluated (Mazhar & Jafri, 2017). With the development of the information sector, its structure is being clarified and specified (Tomchuk-Ponomarenko, 2017). At the same time, a quantitative description of the contribution

of an information resource is carried out (Huang, 2017). This approach has been substantially developed (Engelbrecht, 1988; Karunaratne, 1986). The goods and services produced in the information sector in many cases have a system-forming and innovative character (Castells, 1996). With the development of the economy, conditions and opportunities have been created for the implementation of qualitatively new ideas for reproducing information and accessing it. Digital technologies have created new opportunities for translating texts and transmitting information, as well as access to an infinite variety of information. The development of digital communication has reached the point where it can help manufacturers and consumers act on a global scale (Tapscott, 2014). Dynamic changes in the industry structure and the formation of a new technological basis of the digital economy based on the latest technologies determine the conditions for breaking the previous equilibrium and the possibility of transition to a new dynamic structural transformation, which determines the new principle of sustainable development (Zhironkin et al., 2020). In the new conditions, digitalization is the process of creating, becoming a qualitatively new convergent structure adequate to the principles of sustainable development (Zhironkin et al., 2019a). Digitalization in this sense is ensuring the reproduction of the highest organization and efficiency of production and a new model of consumer behaviour. In the new conditions, there are varieties in the types of consumer activity that form consumption technologies (Lancaster, 1966a). The technology of consumption, the subject of constant changes and innovations, as well as the technology of production. Lancaster proposed a new method of analysing consumer behaviour and the formation of consumer demand, which is based on the division of goods into homogeneous groups and is called the analysis of characteristics (Lancaster, 1966b). Based on modern approaches, the theory of consumption is updated, which takes into account the modernization of the economy based on new technologies (Light & Miskelly, 2019). Digitalization introduces new changes in society's consumption system (Zubarev et al., 2017).

#### **4. Purpose of the Study**

The purpose of this study is to develop the theoretical principles of a new model of consumer behaviour in the coordinates of sustainable development of the digital economy.

#### **5. Research Methods**

The general theoretical basis of the article is the concept of ordoliberalism. This approach is complemented by the main ideas of the theory of the knowledge economy and evolutionary-institutional theory. Methods of systematic, causal and logical analysis, analogies and comparisons are used as scientific tools. In the course of the study, methods of expert assessments, logical-structural and situational analysis were used. To substantiate the proposed provisions, systematic, adaptive, process approaches were used, based on the principles of interconnectedness, measurability, consistency, and others.

## 6. Findings

In the new conditions, digitalization of all types of consumer activities is taking place. In their economic actions, consumers are increasingly focused on working with knowledge structures and signal systems, on processing and interpreting information, and are increasingly relying on scientific forecasting (Basaev, 2019). Digitalization minimizes consumer costs. Saturation of the market, expansion and deepening of the range of goods and services, increased competition presuppose information support for consumers. Information support refers to the activity of bringing complete information to the consumer.

Thanks to digital technologies, streams of diverse information have become an indispensable element of consumers' daily lives. Digital technologies create prerequisites and conditions for the fundamental enrichment of collective, group, individual information activities of consumers. This expands the scope of the social communication of consumers. Digital technologies determine the parameters, qualities and prospects for the continuous well-being of society. Information abundance has led to social and economic changes and the openness of society (Zhironkin et al., 2019b). At the same time, the information equipment of social processes increases dramatically. Consumers have the opportunity to choose information. This was the result of the comfortable information conditions created. Digital technologies have become an indispensable attribute of consumers. Digitalization has provided many different information services. The unified information system provides prompt access to complete information about goods and services. Consumer product information is information about a product intended to create consumer preferences. It shows the consumer the benefits resulting from the use of this product and is aimed at ensuring high-quality customer satisfaction. This information contains information about the attractive properties of the goods. High-quality information services ensure the speed of product promotion through distribution channels, the intensity and stimulation of sales, the creation and maintenance of consumer preferences. The Internet takes over not only many functions of the market, but it also integrates these functions with others:

- 1) weight is the process of buying goods and services;
- 2) conducting financial transactions;
- 3) support of economic relations;

For consumers who use digital technologies, a new comfort zone is being created and the consumption model is changing.

In the coordinates of the sustainable development of the digital economy, qualitative shifts are more noticeable. They are large because the Internet, mobile phones and digital technologies still bring new opportunities to consumers. Equally, we can talk about fundamental changes in the algorithms for using various sources of new information or about a noticeable increase in the time spent on mass communication. A certain part of the costs includes fixed costs (the costs of acquiring digital technologies and software, training, etc.) and variables (Internet connection, payment for communication services, etc.). A positive result is ensuring equal access to information, acquiring the necessary skills to use digital technologies. At the same time, conditions are created that facilitate the orientation of consumers in various situations of social activity. Consumers operate in difficult market conditions. They constantly have to make an increasing number of economic decisions over time. The situation becomes more

complicated under the influence of the rhythmization of labour and other spheres of consumer activity. All this makes it a matter of principle to decide at this time. This circumstance underlines the need for quick access to complete information to make timely and effective decisions. As part of the sustainable development of the digital economy, digital technologies regulate the activities of consumers. These technologies are filled with deep content, which has a decisive impact on consumer decisions. They can change the character traits of consumers and contribute to rapid adaptation to the conditions of rapidly changing reality.

Consumers have physical and intellectual abilities and make their own decisions. Digital technologies create a single technological, economic and market space and ensure the translation of all forms of information into digital format. At the same time, a single digital space is being created in society. This stimulates the convergence of technologies and leads to the growth of innovation. As a result, a stable and expansive integrated market is being created, in which all spheres of production and all consumers are held together by inextricable ties. The accelerated diffusion of innovative technologies activates the intellectualization of production. The technological basis for continuous improvement of consumer welfare is being formed. In the new economic and technological situation, unique competencies of producers and consumers are being formed.

In modern conditions, those features of consumers, continuity, worldview and age culture that have proved to be conducive and compatible with new digital technologies have become important.

Under the influence of digital transformation, the information infrastructure of society is constantly being updated. Universal digital service technologies are being actively introduced. With the help of digital technologies for creating, storing, transmitting and receiving a variety of complete information, a whole range of information services is provided. As a result of the digitalization of the household, the information base of daily activities performed in various spheres of everyday life, recreation, typical for creative consumers, is significantly expanded.

Speaking about rational consumer expectations related to digitalization, we emphasize their breadth. They reflected desires:

- 1) have full information about the purchased goods and services;
- 2) exchange opinions on the qualitative characteristics of the purchased goods and services;
- 3) receive professional advice on the use of purchased goods and services;
- 4) learn the effective use of purchased goods and services;
- 8) acquire skills in using digital technologies;
- 9) participate in discussions of mutually interesting issues with manufacturers.

The main part of consumer requests is satisfied. Global best practices show that digital technologies are consistently viewed by consumers as a means of dialogue and two-way communication. The main sources of information, data and information on various issues have become available to consumers. Digital space:

- 1) promotes the dissemination of complete information and increase the competence of consumers;
- 2) promotes the development and acquisition of practical skills;
- 3) activates participation in the production process;
- 4) provides information on various areas of socio-economic life at the request of consumers.

Under the influence of digital technologies, contacts between producers and consumers are developing. These contacts are updated especially on the issues of the release of a new product and its improvement (the acquisition of new connections, the appearance of topics and items for a production nature, increasing mutual attentiveness, exchange of opinions, and others).

The optimality of access and access to information makes it a very effective and promising queuing system through the network. Great prospects are opening up for consumers who are more active and rational people. These consumers have become choosing, efficient, developing social factors in a competitive market. They are capable of effective implementation of goals and concretization of their economic interests. This fits into the framework of a new model of consumer behaviour due to new technologies. New technological, social and cultural changes have a direct impact on the structure and motivation of needs. In these conditions, there is a democratization of the composition of consumers, which is more consistent with the goals of sustainable economic development. Under the influence of digital technologies, the diffusion of a new model of consumer behaviour is accelerating and it acquires a global dimension. The globalization of a new model of consumer behaviour has a positive impact on the sustainable development of the digital economy. The development of new consumer competencies is part of human capital in the form of a unique experience, new knowledge and an innovative approach (Gasarov et al., 2019). Acculturation, socialization and cognitization become the basic principles of consumer development and behaviour (Gasarov, 2021). Consumers acting based on these principles are experiencing competition, so they are more or less innovative. The innovative activity of consumers is determined by the direction of their driving force and its power, which is determined by the amount of accumulated and used knowledge and skills, as well as the number of new ideas, concepts, proposals and innovation projects. In general, consumers are characterized by innovative behaviour, which includes:

- 1) a new attitude to fashion and preferences;
- 2) positive attitude to new technologies;
- 3) tolerance to the values of a new way of life;
- 4) the demand for a positive style of leisure and behaviour.

In modern conditions, there is a constant updating of behaviour patterns and consumers. The established model of consumer behaviour is receptive to innovation. At the same time, consumers have competing behaviours. The development of exclusive styles among consumers is associated with innovation and the growth of continuous well-being. Under the influence of digital technologies, new markets are being created, primarily aimed at innovative consumer demands. Increasing consumer income reduces the limits of the budget constraint. This increases the demand for innovation. Satisfaction of needs at a higher level is a necessary condition for the creative development of consumers themselves, which is a necessary condition for the sustainable development of the digital economy.

## **7. Conclusion**

In the conditions of continuous changes generated by digital transformation, information about the latest processes in the market is becoming more and more relevant for consumers. At the same time, the mechanism of effective decision-making by consumers is being modified through new technologies. The influence of consumers on dynamic changes in the sphere of production is increasing. Elements of

organization in the market (conscious behaviour, social, emotional, cognitive factors, informal rules, and others) have more practical significance, as well as elements of the structure. The goals of consumers can increasingly align with the goals of producers. However, consumer goals exist and influence the actions of producers when making decisions. There has always been a certain interdependence, mutual understanding and interaction between consumers and producers in the market. They are constantly being corrected and specified in real mode. The orderly movement towards joint action in a competitive market proceeds from the main goals of consumers.

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