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# RISKS AND PROSPECTS FOR THE DEVELOPMENT OF THE DIGITAL ECONOMY OF RUSSIA

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#### Abstract

The article describes the need for the digital economy of Russia as a driving force of social progress and increasing the competitiveness of the country's industry, identifies the main directions and prospects of digitalization, pays special attention to digital literacy of a person and society, its achievement and adaptation to digital reality as decisive factors contributing to the achievement of strategic goals and the implementation of the tasks. The successful functioning of the digital economy of Russia is impossible without the digital transformation of the state and its structures. The digital economy ensures the availability of public and commercial services, actually reduces the cost of producing and promoting commercial products, optimizes payments, and helps to find various sources of funding. Entering the digital world and the willingness to master rapidly developing technologies is becoming an integral and inevitable part of our everyday life, on which depend both the life, professional, career, financial success of an individual, and the economic, political, defense and environmental sustainability of the state as a whole.

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# 1. Introduction

The gradual transition from an analogue to a digital economy is leading to the use of digital technologies that are changing people's activities: the traditional worker is replaced by an information specialist. The main direction of digitalization is the implementation of artificial intelligence in the decision-making process (Tolstykh et al., 2020) based on software, the algorithm of which is adjusted using the specific data of a customer company as a consumer of a unique product in the market of artificial intelligence technologies. Its development is achieved on the basis of three components: human resources, capacities and data. Data is currently a value in itself, the "circulatory system" of the digital economy, and the possession of a large amount of diverse data is one of the components of a competitive advantage in any industry in a modern economy, a kind of "digital capital" of a company in the conditions of the 4th industrial revolution.

The existence of a modern information society is determined not only by digitalization in the economy, but also in its other areas. (Kolesnikov et al., 2020).

## 2. Problem Statement

Solving the problem of the development of the digital economy contributes to an increase in labor productivity, an increase in the competitiveness of corporations, and a decrease in production costs through digitalization of the production process based on the use of computer equipment and the introduction of digital modeling and design technologies. The digital economy should be considered not as a separate industry, but as a sphere of the whole society, which is in the interaction and use of digital information and communication technologies created by the previous socio-economic development of Russia.

#### 3. Research Questions

The object of the research is the digital economy of Russia, since digitalization captures not only the economy, but also the political, social and spiritual spheres. Thus, the information society reaches a new qualitative stage of its own development becoming digital. Cyberspace appears as a new habitat for a modern person, and, regardless of will and consciousness, each individual is a part of this environment, since interactions in the modern world take place through information and consulting technologies, the product of which is this all-encompassing digital reality. Cyberspace can be viewed alongside physical and social space, revealing the features of the former and the latter. In this new environment, a global system of social production is being created, which makes it possible to use natural and intellectual resources in a new way.

The subject of the research is the analysis of the use of information systems in the economy, medicine, education and other spheres of society that turns them into a digital economy, digital medicine, digital education of a digital society. Society is becoming digital through deep digitalization and transformation of all spheres and processes of life of a modern person.

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The scientific novelty of the study lies in the development of recommendations for improving methods of reorienting consumer behavior from acquisition to sharing, eliminating intermediaries in the relationship between the client and the contractor, strengthening the role of online reputation and community self-regulation in improving the quality of services provided. Today, the digital economy is growing due to the growth of innovation, increased competitiveness and attractiveness in establishing economic ties. The digital economy ensures the availability of public and commercial services, actually reduces the cost of producing and promoting commercial products, optimizes payments, and helps to find various sources of funding.

# 4. Purpose of the Study

The aim of the work is a modern overview of the driving force of social progress and increasing the competitiveness of Russian industry. The main directions and prospects of digitalization of the country are determined. The information society is reaching a new qualitative stage in its own development, becoming digital.

# 5. Research Methods

The National Program "Digital Economy of the Russian Federation" defines the digital economy as a complex of opportunities for using digital technologies in the socio-economic sphere as a new way of activity based on data that has become a key factor in production (Gontareva et al., 2018). The digital economy is based on digital data, large amounts of digital data, methods for analyzing large amounts of digital data in real time, increasing the efficiency of activities related to the use of big data (Yurchenko, 2018). The owners of big data, on the basis of which software is prepared in the digital economy, on the one hand, are government agencies that receive a wide variety of data through government bodies and the state information system for interacting with citizens, and, on the other hand, corporations engaged in communications and provision of information services, social networks, financial, transport and trade enterprises, organizations and companies. They have significant potential for the development of the digital economy based on combining their information resources into an aggregate information system and creating publicly available tools for their complex application (Zhuravleva, 2018).

It is the digitalization of activities in the digital economy and the society corresponding to it that shows how much humanity has stepped forward, stepping from an informational to a digital society, from an analogue economy to a digital economy. For example, in medicine, there has been a leap from simply filling out a database of diseases to digitalizing treatment, conducting operations, and various operational manipulations. In transport, there has been a transition from the automation of individual processes and automation of the dispatch service to the creation of unmanned vehicles, the connection of artificial intelligence to driving and control of unmanned vehicles – road, rail, air. In industrial production, there has been a transition from not only the use of automatic control systems for technological processes, but also to software for production processes through the use of the industrial Internet. In education today, modules that simulate the behavior of a particular technical system are widely used to teach how to work in real conditions, for example, when training pilots of civil and military aviation. In domestic, housing

and communal conditions, artificial intelligence allows optimizing the supply of water to consumers'

homes, create conditions for organizing transport services for residents of various microdistricts of the

city, correlate and optimally link different traffic flows at different times, which is especially important

during rush hour, i.e. here are the foundations for the implementation of the concepts of a smart city,

smart home, smart apartment for their successful functioning as elements of the entire digital economy

system are built up (Kail et al., 2019).

In the presented context, it is especially important to focus on the concept of a smart city. And this

is due to the fact that today it is still impossible to talk about the existence of a digital city as a kind of

new ecosystem, but this value today arises in the form of a set of "digital archipelagos", in other words,

digital islands that exist in a non-digital space, correlating traditional and smart infrastructure with

fragmentary technological intervention that changes the type of interaction between space, technology,

social structures, people (Bandurin et al., 2018).

Today we still cannot talk about the mass transformation of cities in the direction of total

smartification, i.e. digital intellectualization, creation, implementation, penetration of artificial

intelligence into all spheres of life of modern cities and the citizens living in them. All cities in Russia are

at different stages of this process, which is largely due to the influence of technological, social, economic,

cultural problems, as well as the activity of the population living in them. In the context of the formation of a Humane Smart City in Russia as a human-centered one, interactive interaction of citizens, business

structures and the state, represented by certain structural entities, is necessary (Kapitonov et al., 2019).

The successful functioning of the digital economy of Russia is impossible without the digital

transformation of the state and its structures. Digital technologies are being introduced into all areas of

government and social regulation. The digital transformation of the state provides high-speed information

and communication between citizens and state structures, providing quick access to society data, creating

qualitatively new living conditions for people and increasing the efficiency of state organizations and

business (Levi, 2019). Such a state is unthinkable without gradual implementation digitalization of

document circulation in the state apparatus and the implementation of electronic forms through which the

government will be able to carry out information communication with society. In these conditions, the

introduction of electronic government in the near future becomes extremely relevant.

6. Findings

In the modern conditions of the digital economy, one of the effects of global technological

transformations has become the development of a new business model of trade and property relations -

the shared economy (Savina, 2018). Many economists cite its distribution in the world as one of the

characteristics of the digital economy.

It is safe to say that in today's Russia there is a set of basic prerequisites for the development of the

digital economy, among which are: the presence of a highly educated population, the emergence of new

points and areas of economic growth, ensuring social, economic, military security, a developed Internet

network, the need for trade and financial transactions in the form of online sales, online transactions, the

existence of nano-technology centers (Bandurin et al., 2018).

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An important factor and prerequisite for the development of the digital economy is digital literacy of a person and society, its achievements and adaptation to digital reality. The digital economy needs relevant digital actors. Today, inclusion in the digital world and the willingness to master rapidly developing technologies is becoming an integral and inevitable part of our everyday life, on which both the life, professional, career, financial success of an individual, and the economic, political, defense, and environmental sustainability of the state as a whole depend (Gulamov & Shermukhamedov, 2018).

However, there are different rates and levels of digital literacy and digital sensitivity in society at different levels, spheres, in different social strata and groups of people. Such unevenness significantly increases the risk of the development of a digital society, increasing social differentiation and social differences in terms of their digitalization capacity for innovative development. The emerging resistance to the need for digital changes is expressed in the existence of the "digital gap" effect (Kuzovkova et al., 2019), which means the existence of a new type of social inequality in society – digital one. This term is applicable not only to characterize the current situation in society and the digital economy of a country, but also to identify its place and rating in terms of this indicator at the international level characterizing the degree of involvement in the information and communication environment (Shkarlet et al., 2020), as well as the ownership of society and, especially, the population of the possibilities of using social guarantees provided by the digital economy in the field of employment, provision of services, satisfaction of social needs, obtaining the necessary information from government agencies, conducting financial transactions and payments for housing and communal services (Yurchenko, 2018).

The development of artificial intelligence in the space of the digital economy sharply limits the employment of millions of workers, since it becomes possible to replace them with robotic and automated, artificially intelligent systems that perform the necessary work within the boundaries of a certain algorithm. There is a risk of ousting the employee of non-creative, routine professions from the production of the digital economy, and, conversely, the need for advanced workers, carriers of non-standard professional functions, are growing. In connection with the growth of the digital economy, there has been a tendency for a kind of "separation" between people who fulfill the needs of the digital economy and those who have been pushed out of it to the outskirts, the periphery of the digital economy and the digital society. This happens due to the division into those who remained in the analogous society, not having time to take at least the first steps into the digital economy and the digital society, and those who successfully master new digital capabilities.

# 7. Conclusion

The realization of the capabilities of the digital society and the digital economy is associated with the payment of orders, goods, utility bills, fines, the ability to provide audio-visual communication with other people, government agencies, corporations, organizations, creating a comfortable living environment by using consumer electronics and building "smart apartment" or "smart house" using artificial intelligence. It should also be noted that the vital activity of a modern person both in everyday life and in the professional sphere is impossible without the use of information and communication technology and technologies for its application. In this regard, the digital economy needs the formation of

digital abilities in every person as a citizen of a modern digital society and as a worker of a particular area of the digital economy.

Thus, the digital economy is associated not only with changes in information technologies that change modern production, the social sphere, social relations of people, but also with the development of an individual and his professionalization.

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