DIGITAL ECONOMY: PROSPECTS FOR DIGITAL TRANSFORMATION IN RUSSIA

Abstract: This article discusses the prospects of digital transformation processes in Russia, the Digital Economy of the Russian Federation program, the levels of the digital economy and its main development areas, threats that impede the development of the digital economy in Russia.

Keywords: digitalization, digital economy, digital technologies.

Кошелев Андрей Станиславович
Студент
Научный руководитель: Пономарева Елена Владиславовна
Кафедра иностранных языков и перевода
Уральский федеральный университет
Россия, Екатеринбург

ЦИФРОВАЯ ЭКОНОМИКА: ПЕРСПЕКТИВЫ ПРОЦЕССОВ ЦИФРОВОЙ ТРАНСФОРМАЦИИ В РОССИИ

Аннотация: В данной статье рассмотрены перспективы процессов цифровой трансформации в России, программа «Цифровая экономика Российской Федерации», уровни цифровой экономики и ее основные направления развития, угрозы, препятствующие развитию цифровой экономики в России.
Doctor of Economics, Vladimir Ivanov gives the broadest definition: «The digital economy is a virtual environment that complements our reality» [1].

The Digital Economy of the Russian Federation program, which was developed as a part of the implementation of the Information Society Development Strategy for 2017-2030, approved by the order of the Government of the Russian Federation of July 28, 2017. It is aimed at creating conditions for the development of a knowledge society in Russia, improving the well-being and quality of life of citizens by increasing the availability and quality of goods and services produced in the digital economy using modern digital technologies, raising awareness and digital literacy, improving the availability and quality of public services for citizens, as well as security both domestically and abroad.

In the program «Digital Economy of the Russian Federation», the digital economy is represented by three levels that affect the lives of citizens and society as a whole. Firstly, these are markets and sectors of the economy where interactions between entities are carried out, such as: suppliers and consumers of goods, work and services. Secondly, platforms and technologies where competencies are formed for the development of markets and industries. And thirdly, an environment that creates the conditions for the development of platforms and technologies and the effective interaction of market entities and economic sectors (fields of activity) and covers information infrastructure, personnel and information security.

The main digital technologies that are included in this program are: big data; neurotechnologies and artificial intelligence; distributed registry systems; quantum technologies; new manufacturing technologies; industrial internet; components of robotics and sensorics; wireless technology; virtual and augmented reality technologies.

The Program defined many goals, such as: creating an ecosystem of the digital economy, in which data in digital form is a key factor in production in all areas of socio-economic activity and in which effective interaction is ensured, including cross-
border, business, state and citizens; creating the necessary and sufficient conditions of an institutional and infrastructural nature, removing existing obstacles and restrictions for the creation and (or) development of high-tech businesses and preventing the emergence of new obstacles and restrictions, increasing competitiveness in the global market, both of individual sectors of the economy of the Russian Federation and the economy as a whole.

Next, we consider the main directions of development of the digital economy:

1. Regulatory regulation – the goal of this direction is to form a new regulatory environment that provides a favorable legal regime for the emergence and development of modern technologies, as well as for the implementation of economic activities related to their use (digital economy).

This direction involves the creation of a permanent mechanism for managing changes and knowledge in the field of regulation of the digital economy, the removal of key legal restrictions and the creation of separate legal institutions, the formation of a comprehensive legislative regulation of relations arising in connection with the development of the digital economy. The adoption of measures aimed at stimulating economic activity related to the use of modern technologies, the collection and use of data and the creation of a methodological basis for the development of knowledge in the field of regulation of the digital economy [3, c. 9].

2. Personnel and education – this is the direction of the digital economy development focused on the following goals: creating key conditions for training the digital economy; improving the education system, which should provide the digital economy with competent personnel. And the formation of a labor market, which should be based on the requirements of the digital economy, the creation of a motivation system for the development of the necessary competencies and the participation of personnel in the development of the digital economy of Russia [3, c. 9-10].

3. Formation of research competencies and technological groundwork – aimed at creating a support system for search, applied research in the field of digital economy (research infrastructure of digital platforms), ensuring national security and
technological independence in each of the areas of end-to-end digital technologies that are globally competitive.

It involves: the formation of an institutional environment for the development of research and development in the field of the digital economy; formation of technological groundwork in the field of digital economy; building competencies in the digital economy [3, c. 10].

4. Information infrastructure – the formation of a digital economy is impossible without the creation of an appropriate infrastructure that contributes to the development of science and innovation, the development and implementation of digital technologies, and the expansion of access to the Internet.

The objectives of this area are to develop communication networks that meet the needs of the economy for the collection and transmission of data from the state, business and citizens. The development of a system of Russian data centers, which ensures the provision of safe and cost-effective data storage and processing services to the state, business and citizens in the implementation of digital data platforms to meet the needs of government, business and citizens. And in creating an effective system for collecting, processing, storing and providing consumers with spatial data that meets the needs of the state, business and citizens in relevant and reliable information about spatial objects [3, c. 10-11].

5. Information security – the development of digital technologies inevitably entails certain risks and threats that must be taken into account when developing the digital economy: issues of the preservation of digital data, threats to individuals, businesses and the state, the growth of computer crime. The lack of effectiveness of scientific research related to the creation of advanced information technologies, the low level of domestic development, the insufficient level of staffing in the field of information security.

That is why the development strategy of the digital economy also includes a fifth area related to information security and aimed at achieving a state of security of the individual, society and the state from internal and external information threats. This task will be solved through ensuring the unity, stability and security of the information
and telecommunication infrastructure of the Russian Federation at all levels of the information space, ensuring organizational and legal protection of the individual, business and state interests during interaction in the digital economy creating conditions for Russia's leading positions in the field of export of services and information security technologies, as well as taking into account national interests in international documents on information security issues [3, c. 11].

According to information sources, an increasing number of citizens of the Russian Federation admit the need for digital knowledge, but the level of use of personal computers and the Internet is still lower in Russia than in Europe, and there is a serious gap in digital skills between different groups of the population.

As a result, according to the study, the Russian Federation ranks 41st in terms of readiness for the digital economy, with a significant margin from dozens of leading countries, such as Singapore, Finland, Sweden, Norway, the United States of America, the Netherlands, Switzerland, Great Britain, Luxembourg and Japan. In terms of the economic and innovative results of using digital technologies, the Russian Federation ranks 38th with a large lag behind the leading countries such as Finland, Switzerland, Sweden, Israel, Singapore, the Netherlands, the United States of America, Norway, Luxembourg and Germany [2, c. 8].

Such a significant lag in the development of the digital economy from world leaders is explained by gaps in the regulatory framework for the digital economy and an insufficiently favorable environment for doing business and innovations and, as a result, the low level of use of digital technologies by business structures.

The development of the digital economy of Russia today is hindered by new challenges and threats, first of all: the problem of ensuring human rights in the digital world, including the correlation of a person with his digital image, the safety of digital user data, as well as the problem of ensuring citizens' trust in the digital environment; threats to the individual, business and the state; remote (cloud) data storages, as well as heterogeneous communication technologies and terminal devices; enhancing the capabilities of the external information and technical impact on the information infrastructure, including critical information infrastructure; the growth of computer
crime, including international crime; lagging behind leading foreign countries in the development of competitive information technologies; the dependence of socio-economic development on export policies of foreign countries; insufficient effectiveness of scientific research related to the creation of advanced information technologies, low level of implementation of domestic developments, as well as insufficient level of staffing in the field of information security.

Thus, we can conclude from the above that at the moment Russia, according to research, is not well prepared to use the digital economy, since one of the reasons is the low level of use of digital technologies and many threats to development. But, nevertheless, in the future, the completion of digital transformation, the use of technology will change the daily life of a person, industrial relations, the structure of the economy and education, as well as new requirements for communications, computing power, information systems and services.

REFERENCES


2. Программа «Цифровая экономика Российской федерации» от 28 июля 2017 г. № 1632-р — С.8

3. Деловой портал «Управление производством». Выпуск «Цифровое производство: сегодня и завтра российской промышленности». Декабрь 2017 г. — С.9-11