



Program for the development of the digital economy: Challenges and prospects

Programa para el Desarrollo de la Economía Digital: Retos y Perspectivas

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ABSTRACT:

The article describes the main problems of digitalization of the Russian economy, highlights the difficulties of transition of the current management of documentary, personnel and other activities on the digital platform. The development and formation of a digital model of innovative development and an integrated system of measures to improve the competitiveness and technological independence of the Russian economy in the context of modern technological megatrends to integrate and harmonize various scientific disciplines and discoveries are substantiated

Keywords: digitalization, innovative development, digital infrastructure, digital economy

RESUMEN:

El artículo describe los principales problemas de la digitalización de la economía rusa, destaca las dificultades de transición de la gestión actual de documentos físicos, falta de personal y otras actividades en la plataforma digital. El desarrollo y la formación de un modelo digital de desarrollo innovador y un sistema integrado de medidas servirá para mejorar la competitividad y la independencia tecnológica de la economía rusa en el contexto de las modernas tendencias tecnológicas para integrar y armonizar diversas disciplinas científicas y descubrimientos.

Palabras clave: Digitalización, desarrollo innovador, infraestructura digital, economía digital.

1. Introduction

The research methodology was analytical in nature, with the focus of the authors on the study of the legislative framework in the field of digitalization of the Russian Federation at the present stage. In practical terms, this will form the basic basis for creating forecasting and analytical tools based on the use of statistical analysis methods for use in government decision support systems on strategic issues of social-economic development, including in a

situational analysis format.

The work resulted in a comprehensive and scientifically based approach to the study of digitalization, the development of theoretical foundations and provisions on the growing role of the digital economy, which directly affects the change in the usual models of industry markets, as well as constantly changing modes of interaction and interaction of all economic subjects.

The scientific value of the publication is the possibility of its use in further research in the development of theoretical ideas about the role and place of the digital economy in conditions of increasing globalization and international competition. Also, the results, conclusions and suggestions of the authors can be used in the development of both current and long-term policy documents, aimed at further improving of the state policy in creating the necessary organizational, managerial, structural, legal, financial and other economic conditions for launching a new model of innovative development in the direction of its digitalization. The main conclusions of the work relate to the need for structural changes in the whole complex of public institutions.

In the conditions of modern reality, based on geopolitical realities, features of foreign policy and global trends, the Russian Federation is seriously confronted with the issue of global competitiveness and national security, the largest role in solving which is the development of the digital economy in the country.

If today, nations rely on an elementary analysis of the digital economy, it can be concluded on the successful functioning of some of its elements. State and municipal management, housing and public utilities, digitalization of media, the massive transfer of documents and communications to digital media, the signing of documents through electronic digital signature, interaction with many public sectors is moving to the stage of digital implementation.

2. Methodology

In preparing this research, the authors applied the following research methods:

- philosophical method, based on which analytical conclusions and dogmas regarding the development of structure of the notion "digitization of society" are based;
- general scientific method: Russian legislation and the global experience of transfer to the digital environment have been analyzed, digitization in the modern society has been abstracted;
- comparative method: analogies have been drawn between the digitization of Russian and global economic systems

3. Results

As noted by some researchers, "Humanity has entered an era of global changes. "In the near future, the main spheres of its life activity, economics and management, science and security, will receive a new form and content. The person will be different, which will entail the transformation of social relations. Further penetration of digital technologies into life is one of the characteristic features of the future world. This is due to the progress in the fields of microelectronics, information technology and telecommunications. Thus, digitalization is an objective, inevitable process and it is impossible to stop it" . The growth of the digital economy in the world is presented in the table 1:

Table 1
The share of the digital economy in GDP of the G20 countries from 2011 to 2017 (values in %) *

State	2011	2017
Great Britain	8,4	12,5

South Korea	7,4	8,1
China	5,6	6,8
India	4,2	5,7
Japan	4,8	5,7
USA	4,8	5,5
Mexico	2,6	4,3
Germany	3,1	4,1
Saudi Arabia	2,3	3,9
Australia	3,5	3,8
Canada	3,1	3,7
Italy	2,2	3,6
France	2,8	3,5
Argentina	2,1	3,4
Russia	1,8	2,9
South Africa	1,8	2,6
Brazil	2,3	2,5
Turkey	1,7	2,4
Indonesia	1,3	1,5

* Source: The Boston Consulting Group

"Digital economy is an economic activity in which the key factor in production is digital data, processing large volumes and using the results of analyzing them in comparison with traditional forms of management can significantly improve the efficiency of various types of production, technology, equipment, storage, sales, delivery goods and services [1,12,14]. In other words, the digital economy is an activity directly related to the development of digital computer technologies, which includes services for the provision of online services, and electronic payments, and e-commerce, and crowdfunding, etc. [2, 8]. Usually, the main elements of the digital economy are e-commerce, Internet banking, electronic payments, Internet advertising, and also Internet games ".

According to domestic researchers, "... the core of the digital economy is the sector of the production of digital goods and the provision of services related to digital technologies. Statistics of OECD countries, despite the global instability, indicates a steady growth in world trade in digital economy products (on average, growth is about 4%), the volume of services rendered is growing at an accelerating pace (up to 30% per year) " [6, 16]. The expenses of enterprises for research related to the digital technologies are increasing, which indicates that the digital technology sector plays a key role in innovation [5]. The digital infrastructure

is developing and becoming more accessible [11], the quality of communication networks improves as 4G technologies and fiber-optic data transmission systems are introduced, while prices for mobile communication services are reduced, the possibilities for using mobile devices to access the Internet are increasing, ultimately, it allows to predict the increasing coverage and development of digital technologies in the world [4, 7, 9].

There is significant potential for the use of modern digital technologies in the activities of firms. It is important to pay attention to such aspects as the use of modern computing equipment, software, and the availability of qualified specialists. It is necessary to take into account that digital technologies have significant potential to accelerate innovation processes, therefore the indicators of investments in the development of the digital potential of a company are an important factor in its competitiveness in modern conditions. Emerging new business models, network structures based on collective methods of production and consumption, transform traditional market relations and require the development of new solutions in the field of modern company management. Further development of digital technologies is important for the economy as a whole [15]. If now the share of retail trade on the Internet accounts for about 10% of all transactions, in the future their number will only grow. Many governments, predicting such changes, are increasingly striving to develop the digital economy, using its advantages to respond to the key challenges of our time, such as reducing unemployment, fighting poverty, environmental degradation [13,18].

4. Discussion

Modern national digital strategies relate to the development of the economy, the creation of innovative enterprises, increasing employment, the formation of an effective public sector. The importance of the development of the digital economy is increasingly being announced in Russia.

The following list of measures implemented by states and aimed at the development of the digital economy can be highlighted: "the development of infrastructure, which is the basis for the formation of new business models and the construction of scientific and social networks; reducing barriers in the digital economy; increasing the level of digital technologies, training and retraining of specialists"; ensuring confidence in the reliability and security of digital infrastructure, risk assessment; development of the digital sector of the economy [3].

In addition to the basic fundamentals of the development of the digital economy, it is also necessary to note the target indicators originally incorporated into the development program, which, unfortunately, have both a number of advantages and certain disadvantages [10]. These "problem" indicators should include, for example:

1) "The number of graduates of educational institutions of higher education in areas of training related to information and telecommunication technologies - 120 thousand people a year" looks like an exorbitant figure. Now in the direction of "Information Security" is trained five thousand people, and in the direction of "Computer Science and Computers" - 36.1 thousand. That is, to achieve an indicator of 120 thousand, it is necessary to increase graduates three times. This brings both advantages and disadvantages of the development of the educational system and educational infrastructure[17].

2) The thesis "successful operation of at least 10 leading companies (ecosystem operators) competitive in global markets" laid down in the program is difficult to implement in the conditions of modern reality, when the main guideline of the state's development direction is the oil and gas industry's raw materials export. Without a change in this orientation, the fulfillment of this thesis is unlikely.

3) Well, the main problem point will be the thesis about the "successful functioning of at least 500 small and medium enterprises in the field of creating digital technologies and platforms and the provision of digital services." In Russia, a complex system of R & D, and the costs of this area, as a rule, are accumulated in state corporations and near government structures, and are not initiated at all by small and medium-sized businesses.

Despite the above mentioned disadvantages, there are also a number of advantages,

because the transition to digitalization optimizes costs, there is a decrease in real, high-paying transactions in the direction of increasing virtual, much cheaper interaction. The sector of medicine, education will release the labor and material resources - and the program describes "the adoption of regulatory legal acts that ensure the regulation of flexible labor relations, including distant ones". On the other hand, the same point can be interpreted as a threat to the labor market - as a promising increase in unemployment. Accordingly, there are certain risks of digitalization, and they are reflected in the development program.

In turn, for the implementation of the digitalization program, social-economic conditions should be ensured, since at the present stage both human and industrial relations, economic structure by industries, environmental realities, information systems are accelerating and changing. A new value unit appears - data, and their value is constantly changing and carries with it various alternatives of use.

5. Conclusions

For the digital economy to function successfully, the state-municipal management system should change in the transition to digitalization of service delivery platforms, the education system to train qualified personnel, and an information and innovation infrastructure should be created consisting of such development institutions as technology parks and business incubators. Digitalization also implies the creation of a digital organization (as a unit of business functioning), which involves analytical, production, and managerial processes in a digital format of conducting in a real-time system.

From the above, a number of risks and problems are logically reproduced, ranging from the ability to control the private life of digitalization participants a violation of sovereignty and privacy, and the threat to the country's digital sovereignty and revision of the role of the state in the cross-border world of the digital economy. Based on this, there is also a risk of data security and security; there is a decrease in the level of employment, rising unemployment, a decline in the skills and intellectualization of society. There will be a decrease in jobs of low and medium qualifications on the background of the complexity of business models and interaction schemes. There will be significant changes in the patterns of interaction and behavior of consumers and sellers (manufacturers). And the main thing is the need to adapt legislation to the reality of the digitalization of society (in many respects in terms of administrative and tax codes).

The planned changes in the field of digitalization will quite seriously affect the education system, which in Russia is developing more slowly than the Western educational systems, and in the systems of state and municipal government, economic structures, industry and production. The question of the limitation of the time factor here will play a major role, because the success of digitalization is first of all the tight deadlines for its implementation. Accordingly, introducing something, the main resources are intellectual and financial, on the basis of which the soonest transition of the Russian economy to digitalization will take place.

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