The European Proceedings of
Social and Behavioural Sciences
EpSBS

www.europeanproceedings.com
e-ISSN: 2357-1330

DOI: 10.15405/epsbs.2021.07.89

**LEASECON 2020**
**International Conference «Land Economy and Rural Studies Essentials»**

# DIGITAL ECONOMY DEVELOPMENT PROBLEMS IN RUSSIA

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## Abstract

Many countries of the world have moved to the next level in the modern conditions of the information civilization development which is the digitalization stage of all the spheres of public life. This process concerns the economic sphere, first of all. However, without digitalization of other areas of activity, the digital economy will not be effective. The authors conducted the study that showing the problems and their reasons for Russia's lagging behind in the digital economy development. The study of scientific publications on this topic showed the low level of the digital economy development in our country. The Russian scientists and economists noted that the main problem of this process is the lack of highly trained and qualified personnel for the digital economy. The second serious problem is the low level of economy development itself with its raw material nature. The digital economy based on the use of modern information technologies is a breakthrough into the future. In order to develop it in a sustainable mode the country needs to create its own base of science-intensive technologies and involve businesses into this process. It is necessary to provide training, first of all. There is a need for systematic development that takes into account the close interconnection of all public life spheres. It is an integrated approach that will enable the country to actively participate in the global digital economy development.



*Keywords:* Digital economy, digital education, information technology, information civilization, information society

https://doi.org/10.15405/epsbs.2021.07.89
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Selection and peer-review under responsibility of the Organizing Committee of the conference
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## 1. Introduction

The digital economy is the basement for the digital society formation today, which is the next stage of the information age in the civilization development. We considered the definition of this concept in our recent publications devoted to the problems of digital economy (Gryaznova, Goncharuk, Treushnikov et al., 2020; Gryaznova, Goncharuk, Maltseva et al., 2020).

In this article we briefly present the obtained results. Firstly, we came to the conclusion that in modern conditions of development the digital economy is becoming not only an independent branch of the economy, but also an independent type of scientific knowledge. This means that it has its own subject of research, its own theoretical base, its own methods and research methodology, its own laws and patterns of development and access to practical implementation (Gumerova & Shaimieva, 2018; Sudarushkina & Stefanova, 2017).

Secondly, the core of economy as a sphere of public life is the digital economy. An activity that is unique for the entire economic sphere of society is developing that is information economic activity (Kuznetsov, Mizikovsky et al., 2020; Kuznetsov, Garina et al., 2020).

Thirdly, in the digital economy information technologies act as a tool, means of information economic activity. However, this function is not the only one for the new information technologies in the digital economy. As we have shown, information technologies can act in economic relations as objects of activity, and as an environment, and as conditions, and as a result of activity. But it is important to emphasize here on the fact that information technologies in the digital economy are capable to play the role of a subject of economic relations. This aspect is important and relevant in modern social and humanitarian science because we are talking about the problems arise at the man-made machine systems within the digital economy development (Malushko & Lizunkov, 2020; Strokov, 2020).

## 2. Problem Statement

The problem under the study can be described as follows: the problems of the digital economy development in Russia and their causes. These problems arise on the basis of dialectical contradictions between two social phenomena: this is an outdated country' economic structure and the digital economy principles as a new economic model.

## 3. Research Questions

The subject of this research is the reasons that hinder the resolution of the dialectical contradiction between new and old economic phenomena in Russia at the present stage of the transition to the digital stage of civilization development: 1) the problem of personnel shortage in Russia' digital economy; 2) the problem of Russia' low level economic development.

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## 4. Purpose of the Study

The article' purpose is to find answers to the questions: "What are the topical problems in Russia' digital economy which modern scientists and economists discussing?"; "What are the main reasons for the current problems?"

## 5. Research Methods

This study was carried out on the basis of a preliminary study of theoretical issues related to the "digital economy" definition, its concept and its nature as an information society phenomenon. Further, as the reflected results of this work, there was the analysis of scientific foreign and domestic publications devoted to the digital economy development study and their problems in Russia. The work used methods of analysis, comparison, generalization, as well as analysis of statistical data and methods of statistical research of the digital economy development.

## 6. Findings

The concept of "digital economy" is used rather often in the last decade worldwide. It is mentioned even in regulatory documents. However, the definition of this concept has not yet received a common understanding and interpretation.

First of all, let's take the official documents that are the source of new terms and concepts in the digital economy. Thus, we see the following definition in the national program of Russia: "... the digital economy is an economic activity, the key production factor in which is data in digital form" (Program, p. 4-5).

The basis for the Russian national program of the digital economy development "Strategy for the Development of the Information Society in the Russian Federation for 2017-2030" contains the broader definition:

> ... the digital economy is an economic activity in which data in digital form, the processing of large volumes and the use of the analysis results of which, in comparison with traditional forms of management, can significantly increase the efficiency of various types of production, technologies, equipment, storage, sale, delivery of goods and services (President of the Russian Federation, 2017).

The semantic filling of the "digital economy" concept in the scientific and economic literature is slightly different. In this paper we proceed from the foundations or rather the reasons for the emergence of the "digital economy" concept. We comprehend one of them as a concept of a post-industrial society. It is rather briefly disclosed in the works of both foreign and domestic authors. The primacy in this matter belongs to foreign scientists. We should mention here the works of Bell, Castells, McLuhan, Toffler and others. Among Russian scientists these are the works of Abdeeva, Moiseeva, Rakitova and others.

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The phenomenon of the Russia' digital economy is studied not only on the platform of Russian research methods but also foreign ones. For example, the Chinese company "Huawei Technologies Co" has developed a method of digital economy development assessing leaned on the global connectivity index (Global Connectivity Index, 2016).

This index shows that Russia is in the 26th place out of fifty countries (The place of Russia in the global digital transformation, 2016).

This is a low indicator for a country with enormous economic potential which remains ineffective and used in the frame of the digitalization of the economy. First of all, researchers associate the current situation with the low level of application of information technologies in education when training specialists in the digital economy (Ershova et al., 2019; Khankhunova, 2019).

The urgency in improving the quality of education in the field of the digital economy development is substantiated in foreign publications (Hennings, 2011; Tran et al., 2020; Vlieghe, 2014).

As a result, our country lags behind the world' developed countries in the IT field and in the implementation of unique digital technologies. There is also a problem of the Russia' domestic economy in the lagging behind in the usage of digital economy in business (Trusova, 2019).

We present here the modern international system' study results for the digital economy development, for comparison. They are depict the modern trend in information society which makes possible the informatization and digitalization assessment of the world economies on the basis of statistics and various analytical calculation methods (Abdrakhmanova et al., 2019, p. 15; I-DESI).

In 2018 Russia, according to the data, did not enter the world' top ten developed countries in terms of the digital economy development level. In terms of ICT development, our country takes only 45th place in the ranking. In addition, in the ICT development in the economy, Russia lags behind in a number of parameters, such as the export of ICT services - 72nd out of 126, the creation of business models using ICT - 94 out of 126, the impact of knowledge in economic development - 80th out of 126.

As the researchers note, conducting analytical studies and calculations by various organizations, the use of different methods gives different results (Kuzovkova et al., 2020).

However, according to the basic indicators of the digital economy development in our country, the rating does not reach the level of the developed countries of the world. Nevertheless, scientists note that Russia needs to develop its own analytical systems that take into account the specifics of our country (Kuvayeva, 2019).

These measures will help to conduct more accurately the analysis, and therefore, to identify the causes of the detected problems. But these measures are clearly not enough. The main reason in the delayed digital economy development in Russia is the lacking of highly qualified and educated personnel. There is a problem in modern Russia of personnel shortage, associated primarily with the low quality of education and low wages.

The reason for this problem lies in the shortcomings of the modern education system in our country. In particular, it aims to train executing specialists, not creative-minded people. The second point that affects the formation of the personnel problem is the popularization of professions that do not require lengthy and complex training and education. This is facilitated by the outdated labour remuneration system in our country, which is weakly connected with career prospects and the qualifications of a

specialist. For example, a bus driver is paid twice as much as an engineer, teacher or doctor (Petrov, 2017; Petrov, 2018).

## 7. Conclusion

The undertaking work showed that the scientists' and economists' opinions agree for the main reason of the digital economy low level development of the country: the education system is not ready to train highly qualified and creative personnel.

To solve these two mentioned above problems, it is necessary - at the state level - to resolve issues of economic well-being of citizens, improving the quality of education alongside with the level of its digitalization. The current critical situation with the COVID-19 pandemic has shown that the Russian pedagogical system is not ready to use the effective modern information technologies for organizing the pedagogical process in a distance form. The economy, business, and social management as a whole were not ready to work in digital format.

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