

# New Institutions of the Digital Economy: Goals and Objectives

O. Dyachenko

Institute of Economics of industries, business and  
administration  
Chelyabinsk State University  
Chelyabinsk, Russia  
dyachenko@csu.ru

E. Istomina

Institute of Economics of industries, business and  
administration  
Chelyabinsk State University  
Chelyabinsk, Russia  
dogovor@csu.ru

**Abstract** — Digitalization of the economy in the world and particularly in Russia leads to the complexity of social structures and relations that cause exponential growth of data flows, brings to the forefront the question of the formation of the digital economy and its institutions.

The creation of new institutions within the digital economy will take place in two ways: through new institutions introduced by the state or through evolution, supported by the initiative of business entities. In Russia, the creation of new institutions of the digital economy will take place only at the expense of the state and with its direct participation and influence.

The main goal of the creation of new institutions of the digital economy will be the formation of a system of control over legal entities and individuals involved in the economic cycle. On the basis of the goal the main objectives of the new institutions of the digital economy will be the systematization of information on all individuals and legal entities on the territory of the Russian Federation; control of the production and consumption of all goods, pieces of work and services; the identification of indicators and standards that define violations in the institutional sphere; securing timely and comprehensive control over transactions on digital platforms (online transactions); creating conditions for determining the tax base of business entities both for ordinary activities and for digital ones; providing preferences for the most "loyal" companies.

**Keywords** — digitalization, digital economy, institution of the digital economy, digital infrastructure.

## I. INTRODUCTION

Digitalization of the economy becomes an indispensable attribute of the development of economic relations. The formation of the digital economy in developed countries began in the late 70-ies. Since 1947, the development of the project of cybernetic economics has been carried out. At the same time, the processes of automation of production were actively introduced in the USSR.

The impetus for the further formation of the foundations of the digital economy was the research and implementation of automated control systems for industrial enterprises, under the leadership of Academician V.M. Glushkov [1].

Also, a model was developed that considers the interbranch balance in the dynamics on the basis of a macroeconomic cyber system under the leadership of

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The material was prepared within the framework of the implementation of the scientific project No. 18-010-01035, which received the support of the Russian Foundation for Basic Research

Academician N. Vedot [2].

Other studies related to the digitization of the economic space were also carried out. But in the absence of the necessary institutions at the legislative level, these developments were not applied in the territory of the USSR and other countries. In addition, there was no necessary infrastructure to implement the achievements in the field of digitalization.

The next stage of the rapid growth of the digital segment of the economy was the emergence and widespread introduction of the Internet. At the same time, by 2010, the excitement in the field of Internet commerce was significantly dwindling. A study of the field of digital economy has shown that the contribution to the development of the digital economy is insignificant at that time. The growth of GDP on the basis of the digital economy was carried out only by those industries and companies that themselves were consumers of digital economy services. At the same time, rising energy prices allowed raw materials companies to provide the largest capitalization in comparison with IT companies.

After overcoming the crisis in 2008-2009, the phenomenon of so-called new industrialization arose abroad. The new industrialization assumed that on the basis of digital technologies a transition to post-oil power engineering was needed, and the dependence of the economy on energy resources should be reduced.

Beginning in 2010, there is a process of re-industrialization, which consists of a set of processes aimed at forming a cluster that includes industry, the real economy and digital technologies. As a result, within the framework of digital technologies a monitoring system is formed throughout the entire production cycle and the human factor in production is abandoned [3].

Thus, starting in 2010, an industrial basis for the functioning of the digital economy is being formed, aimed primarily at excluding a person from the production process as the direct executor of works and moving to perform only observational and service functions.

In parallel with the process of industrial digitalization, the prerequisites for the creation of an institutional framework for the digital economy are being formed within the framework of the globalization of economic processes.

The basic document on the institutionalization of the digital economy can be considered the adoption of an informational convention of a single world-wide locally distributed information and cellular society - a new information and space civilization that presupposed the globalization of the world space and the disappearance of states as such [4]. With the use of digital technologies, the transition from individual states to the creation of a single space on the entire planet is envisaged.

According to the concept on the formation of the information society in Russia, adopted in 1999, the initial stage of digitalization of the economy should be the creation of information and communication systems in education, health care, social security [5]. At the same time, the creation of such a system was supposed to be invested at the expense of the state with the further withdrawal of the state from these spheres. In the future, the formation and development of the system should be carried out at the expense of the population's resources, which pays for provided information and communication services. Thus, the state in Russia transfers its functions to private structures, namely owners of various communication systems and databases. At the same time, the state itself will no longer have any duties in these areas before the population of the country [6].

Further development of the institutionalization of the digital economy took place in the following areas:

- in 2003 in Geneva and in 2005 in Tunisia, a declaration on building an information society is being formed;
- in 2013, the "Charter of Open Data" is adopted, which involves the discovery of all information relating to the state and society, each person, industries, government, etc [7].
- in 2016, at the economic forum in Davos, the foundations for the fusion of physical, digital and biological processes are being formed;
- in 2017 in Hamburg, a declaration is adopted, within the framework of which a decision is made to introduce the digital component into the everyday life of citizens of any state. The basis for such an implementation should be the electronic identification of a person's identity.

Russia adopts the "Strategy for the Development of the Information Society in the Russian Federation for 2017-2030" and the program "Digital Economy of the Russian Federation", based on international declarations on building a global information society [8].

Thus, at present, both in Russia and in international practice, the foundations for further institutional development of the digital economy have been formed. In the framework of this article, we will analyze the emergence of new institutions of the digital economy in terms of goals and objectives and propose a forecasted version of their development.

## II. GOALS AND OBJECTIVES OF ECONOMIC DIGITALIZATION

Let us consider the basic goals of digitalization of economy through a prism creation of an institutional basis.

Within the framework of the Russian economic system, it is assumed that the digitalization of economic relations must be conducted under state control. This will lead to the creation and introduction into the activities of all economic entities of certain rules of economic behavior that will regulate the relationship, ensure predictability and stability of such behavior [9, 10].

The state will form the so-called rigid institutions, which imply the application of immediate sanctions in violation of the rules of conduct in the digital economic system [11]. Economic behavior of economic subjects will be limited, that is, the choice of subjects and decision - making will be carried out by the state, using the full amount of information provided within the digital economy [12].

At this time, the goal of creating a digital economy in Russia is to create favorable organizational and regulatory conditions for the effective development of institutions within the digital economy with direct state participation [13]. State participation assumes that various bills will be adopted by the state bodies, within the framework of which the formation of both the digital economy itself and the participants' behavior patterns will take place. This will lead to the fact that the state will receive additional instruments to control the activities of each economic entity, which will lead to the loss of an independent choice of the subject within the existing economic alternatives.

Thus, proceeding from the goals of the development of the digital economy of Russia, we can assume that there is an institutional system for electronic control over the activities of economic entities. Considering the tasks for the development of the digital economy in Russia, this conclusion is even more confirmed.

Various scientists around the world are exploring the digitalization process. Among the domestic scientists are Alekseev IV, Budanov VG, Dyachenko OV, Evtianova DV, Ekhlakova EA, Zubarev AE, Istomina EA, Kapmar V.V. ., Keshalava AV, Lushnikov SV, Minibaeva DR, Rummyantsev V.Yu., Solozhentsev ED, Timofeev RA, Yakutin Yu.V. and others [14, 15, 16]

Let's analyze the tasks of digitalization of the Russian economy from the position of institutional analysis. The structure of analysis in the framework of the new institutions of the digital economy is proposed as follows:

- forecast of the emergence of new institutions in the implementation of the task;
- analysis of the interest of economic entities in the performance of the new institution;
- analysis of the effectiveness of the institute in the context of economic entities at the theoretical level.

The main tasks of the development of the digital economy in Russia are:

- Russia's technological leadership in the global digital space. Within the framework of this task, it is possible to assume the emergence of new programs for the innovative and investment development of the digital economy. From the position of firms, these institutions assume the provision of additional funding, from the position of the state - the emergence of their own national digital programs and platforms, from the perspective of the individual - the emergence of new jobs in the digital economy. At the same time, there is a difficulty with the introduction of technological developments in the activities of economic entities. It can be assumed that the restructuring in the existing technological chains for the use of domestic software and digital products will meet with resistance, this is due to the high level of transaction costs. Overcoming resistance can go in two directions: by coercion and the consciousness of the conditions under which the transfer to technological innovations will be paid by the subject himself, despite the effectiveness of such implementation; another way is the introduction of these technologies on the basis of a market mechanism, that is, subjects will introduce new digital technologies of domestic development, if they are more effective and cheap. At the same time, in order to ensure leadership in the field of technology on a global scale, it makes us think about the fact that the introduction of digital technology improvement in Russia will take the first path. This will allow the state to test the most effective technologies and offer them to the world market.

- creation of a qualitatively new infrastructure component of economic assets. The creation of a new economic asset infrastructure will require a new institution, which will clearly define the list of such assets, their classification and typification. In addition, the creation of such assets will require re-industrialization from economic entities, which will lead to a reduction in the existing level of efficiency of the functioning of economic entities. At the same time, this creates a necessary condition for monitoring the creation of such infrastructure, which is the responsibility of the state. An institution will be created to monitor this infrastructure and assets, with the help of which the state will be able to solve the problem of economic growth, but the effect from the development and implementation of such infrastructure and assets will be revolutionary. Economic entities in Russia are not able at the current stage of development to form such an infrastructure and assets, it will be possible only at enterprises with state participation.

- implementation of new approaches in the organization of production, trade, services [17]. New approaches to the organization of production, trade or services will lead to the formation of a new system of relationships between the employer and the employee, which will require the development of new institutions for interaction within the labor market. The state will be obliged to protect the employee in the framework of new organizational approaches, which will lead to a revision of the existing institutional framework of labor legislation. Within the framework of changing labor institutes, it is possible to predict the appearance of new types of contracts and labor contracts that take into account the specifics of labor relations in the digital economy. This will

lead to an increase at the initial stage of the cost of creating and implementing a system of electronic contracts between stakeholders or creating a single platform for ensuring labor relations.

On the other hand, the state will be able to monitor the dynamics of employment in real time. The organization of new approaches to production, trade or services will lead to the release of a large mass of the population and will lead to an increase in unemployment. Within the framework of unemployment, two main ways of overcoming will be considered: the creation of new forms of training for the needs of the digital economy or the provision of the state with job security [18].

- identification of basic approaches to the management of economic assets or resources. The definition of principled approaches to the management of economic assets or resources will lead to the development of lean manufacturing institutions within the digital economy. At the same time, the creation of such principles will allow the state to monitor and control the very process of creation, that is, the state will have an opportunity to determine in principle the technological process at all manufacturing enterprises to create the most effective forms of managing economic assets or resources. Ultimately, this will lead to the formation of a new institutional component, such as the institution of rational development and deployment of enterprises or resource support. Most likely this will be realized in the form of creating a new state structure and determining the main directions of its activities and control.

- involvement of business and citizens in the space of the digital economy at the expense of the consciousness of institutions of confidence in the digital environment [19, 20]. Formation of the institution of trust in the digital environment will occur through the formation and development of institutions for the protection of economic entities, first, to protect the personal data of all subjects. At the same time, digitalization of the economy will lead to the formation of databases on all subjects, that is, the state will own information about each individual and will be able to track the model of his behavior. Business and citizens are somehow already involved in the space of the digital economy. Virtually no resident of Russia can not do without technical means, programs and technological solutions. In the future, we can talk about the full immersion of the individual in the space of the digital economy. This will make it possible to use the knowledge, skills and abilities of individuals more rationally with their involvement in various types of work. A data bank will appear for each individual, from which all stakeholders will be able to gather the necessary information, but with direct institutional control of the state.

- forming conditions for the emergence of new opportunities for entrepreneurs, as well as improving the quality of life of the population. Considering this problem, the question arises about the main participants in the formation of conditions for business development in Russia. The question remains unclear on the basis of what factors the quality of life of the population will grow. Within the framework of this task, it is possible to forecast the emergence of institutions for

supporting economic entities using digital technologies in their activities. Economic entities will be interested in using digital technologies only in cases of rising incomes or lowering costs. Thus, we can talk about creating a system that ensures the growth of business processes efficiency on the basis of state intervention and following the established principles of the digital economy. Business itself will not form the conditions for the emergence of new opportunities, as well as it is not interested in the growth of the quality of life of the population. These tasks will be solved by the state using methods of compelling companies and creating a system to monitor the level of provision of the population.

In addition, there will be a phenomenon to ensure preferences for the most "loyal" companies. Those companies that will create new conditions and contribute to the growth of the quality of life will be able to receive state preferences, which will entail the formation of a layer of companies that are resistant to various economic shocks due to state support.

- ensuring the necessary level of independence of the national digital economy. Within the framework of this task, there is a contradiction between the global trends of globalization of figures the national economy and the protection of national interests. Independence of the national digital economy is possible only in the case of a sharp restriction of the use of foreign technologies in the digital economy and creating a barrier to their use. State structures will be most interested in this direction. At the same time, the creation of institutions for counteraction and protection of the national digital economy will be carried out within the framework of further import substitution. At the same time, the institute of import substitution will lead to negative consequences, namely, in the short and medium term, there may be a relative decrease in the incomes of the population, further interference in the economy of the state. The resistance of economic entities to various development programs is out of protectionism. All this can lead to the closure of the economic space of Russia from the rest of the world and, as a result, the level of competitiveness in the digital economy will decrease.

- Russia's participation in the ongoing activities to create a single global digital space. Russia's participation in programs for the formation of a single global space will gradually lead to the adoption of institutes of ubiquitous information disclosure across the country. This institution is built on the WTO principle, which will not lead to significant effective shifts in both the digital economy and the functioning of the economy as a whole. Globalization within the digital economy will lead to the control of Russia's activities by the world community. A specific monitoring body will be created to ensure the rational activities of all countries, including Russia.

### III. CONCLUSION

Thus, consideration of the problems of the institutional component of the digital economy made it possible to draw a number of conclusions and observations.

First, within the framework of the institutionalization of the digital economy, it is possible to forecast further expansion

of the government apparatus and creation of a system for monitoring the activities of each economic entity

Secondly, the digitalization of the economy will entail a transition from controlling the owners of enterprises to state control.

Thirdly, there is an opportunity to develop an institutional system for systematizing information on all persons, both legal and physical, located in Russia.

Fourthly, a basic scheme of work of all enterprises and institutions will be formed, which will be controlled by the state. In case of violation of this system, the tools of the digital economy will allow to block the irrational behavior of subjects.

Fifthly, the state will be able to form a system necessary to monitor the income and expenditure of any individual, which will entail a general control over the movement of financial resources in the economy.

Sixthly, the creation of an institutional control system will lead to the closure of the Russian economy from other countries. Russia will not become a member of the single global digital market and will rely on its own resources.

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