Multitasking in forming legal framework for digital economy (national project case)

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Abstract — The article is result of study by the authors to identify and justify new tools for managing industries. Modern management paradigm is based on the creation of conditions for the integration of information flows, cadastres, databases and technologies necessary for analyzing the situation and making managerial decisions. Regulatory environment of the digital economy must rapidly change under changing reality. The more changes occur, the faster the State needs to respond. Meanwhile, transformation of law does not correspond to the speed of ongoing changes in the economy. The authors prove through a set of applied methods, such as matching, strategic, institutional, that in the context of intensive digitalization, informatization, and creation of process platforms, sphere of legal regulation is being modified. It becomes multitasking: within its framework, not only new relationships arise, but the structure of the sphere of legal regulation changes significantly, and existing relationships are modified. The research results presented in the article serve as the basis for further consideration of problems and the development of a model aimed at increasing the adaptability of the control system to rapidly changing environmental conditions.

Keywords — digital economy, digitalization, digital transformation, national project, resource economics, multitasking theory.

I. Introduction

A. Topicality

Processes of digital transformation in the economy are an objective necessity and reality. On the January 1, 2019 the Russian Federation ranks 41st in readiness for the digital economy (Network Readiness Index NRI), and is in the middle of the second group of countries (catching up) in the Digital Economy and Society Index (1-DESI) [1, Section VI2.]. In accordance with the national project “Digital Economy of the Russian Federation” [2], by 2024, Russia should take 5th place in the world economy by achieving certain quantitative indicators. In 2018, proportion of the population with digital skills was only 26% according to the results of the international PIAAC study. In addition, volume of specialized training and compliance of educational programs with the needs of the digital economy are insufficient and make up 13% of the need.

It should be also noted the increasing complexity of technical systems and technological processes introduced in the process of digital transformations into socio-economic systems. The impact of the digitalization process on business competitiveness in the next 3-5 years is enormous. In such a reality, a revision of the management strategy for industrial sectors is necessary, taking into account new technologies and a changing environment. It is necessary to assess the adopted regulations and national projects in the field of digital technologies, adopted and implemented on the example of Russia and a number of states, as well as

Regulatory environment of the digital economy must rapidly change under changing reality. The more changes occur, the faster the State needs to respond. Meanwhile, transformation of law does not correspond to the speed of ongoing changes in the economy. And it is significant not only for Russian economy, but also of other states. It is necessary to remove the existing legislative restrictions, and for this we will need to develop a set of new regulatory acts that should “permeate” all areas of the economy and the state. These legislative acts should define new essences and institutions on which the development of the real and digital economies depends.
B. Feasibility demonstration of the problem

Although role of the influence of digital technologies on transformation of socio-economic systems is quite obvious, many issues remain poorly understood. These are issues of the digital potential of individual sectors of the economy, institutional aspects of the digital economy, place of the digital economy in the general system of modern economic relations.

Digitalization is process of transferring functions and activities (business processes) into a digital environment, that previously performed by people and organizations). Digital transformations (or Digital transition - profound changes in the production and social spheres due to the use of digital technologies) have a significant impact primarily on the sphere of legal regulation. It involves new social relations that are completely new, or that did not require legal regulation before.

Since the digital transformation, the transition to digital platforms complicates technological processes, new corporate and innovative strategies, it is necessary to determine what changes in the legal regulation of economic and industries should consist of, or the legal system and management system must be completely new. In this case, it is necessary to identify the relationship of the main provisions of the proposed in the digital economy bills and other regulatory legal acts. In such a situation, it is necessary to have special legal regulation for the purposes of “test running-in” as new digital products, innovative products, including for introducing innovations in management, new tools for managing industries in the digital economy, and “running in” for the purpose of regulating certain provisions of national projects and regulations.

C. Purpose of the study:

The main goal of the study is to justify the need for transformation in the system of legal regulation of social relations in context of digital transformations of the economy. Since the public relations themselves, which are part of the sphere of legal regulation under the proposed conditions are also changing, goals of the study are also to analyze ongoing processes and develop the main directions for improving the management system of industries based on modern information technologies.

II. RESEARCH METHODOLOGY

The Russian economy belongs to the category of resource economies. However, practice shows that resource economies can be innovative [3, 4]. Resource industries are able to move downstream industrial chains to related industries - consumers of these same resources [4, 5]. It means that development of new resource and consuming industries depends on the ability of the economy and society to use technology and resources for the transformation of the natural environment and its involvement in economic production. And to organize this ability is one of the main management tasks facing the state.

Using the methods of comparison, strategic, institutional, it is shown that digitalization, informatization of the economic space puts forward new scientific, theoretical and practical tasks of improving the system of legal regulation of public relations in the digital economy.

To achieve the goal of the study, the hypothesis is proposed that in the conditions of intensive digitalization, informatization, and creation of technological platforms, sphere of legal regulation is being modified. It becomes multi-content (multitask), within its borders not only new relationships arise, but its structure changes significantly, as well as existing relationships are modified. In such conditions, the management and legal regulation system in its functioning should develop, move away from the old methods and find fundamentally distinct, innovative methods. Management innovations or innovative management methods can represent both changes and changes in management methods themselves, as well as their elements, including through digital technologies, and the management mechanism should be adaptive, developing, and resistant to the negative effects of internal and external factors.

III. RESULTS OF THE RESEARCH

D. Analyzing the problem

Russia is moving towards a digital platform economy along a rather complicated path due to the lack of global digital platforms and high-tech markets. Basically, digitalization of production and technological processes is in information and communication technologies (ICT), finance, affects logistics. The development of these areas is local. USA, countries of the European Union, Japan, and now China, keep superiority in the production of full-fledged digital platforms in science, telemedicine, and industry. To catch up with competitors and develop digital technologies to solve its socio-economic problems, Russia must quickly and systematically move the entire economy into a digitalization zone, determining a separate pace for each industry.

This is not to say that the government does not understand the need for innovation in management for the country's economy. By the Russian Federation President Decree dated May 7, 2018 No. 204 “On national goals and strategic objectives of the development of the Russian Federation for the period until 2024” [6] 9 national development goals of the Russian Federation are defined, including accelerating the technological development of the Russian Federation, increasing the number of organizations implementing technological innovations, up to 50 percent of their total; ensuring accelerated implementation of digital technologies in the economy and social sphere; creation in the basic sectors of the economy, primarily in the manufacturing industry and agriculture, a sector that is developing on the basis of modern technologies and provided with highly qualified personnel. “Unified Plan for Achieving the National Development Goals of the Russian Federation for the Period until 2024” has been drawn up, which defines the national development goal, consisting of "ensuring the accelerated implementation of digital technologies in the economy and social sphere" [7]. For pursuance of the national development goals of the Russian Federation, “The Main Directions of the Government of the Russian Federation for the Period Until 2024” [1] were approved, instruments of implementation of which are the state programs of the Russian Federation, the most significant areas of implementation of which are highlighted in national projects (programs) [2]. Presidium of the Council under the President of the Russian Federation for Strategic Development and National
Projects on December 24, 2018 (protocol No. 16) approved the project passport. The project is valid from October 1, 2018 until December 31, 2024.

According to the Strategy for Scientific and Technological Development of the Russian Federation [8], research priority, development and creation of innovative products is an important factor in ensuring the competitiveness of the national economy. To implement the priority development scenario, the Digital Economy of the Russian Federation Program (national project) was developed [2], the purpose of which, amongst others, is to create the necessary and sufficient conditions of an institutional nature, to remove obstacles and limitations for the creation and development of high-tech businesses and to prevent the emergence of new obstacles and restrictions.

The existing regulatory environment does not meet the tasks of giving flexibility to the regulation of public relations, their readiness to perceive the constantly changing technological context. The basic institutions of the digital economy as an economic system have not been formed. For example, in the text of the national project there is no definition of a digital economy. Founder of the term, Don Tapscott, defined the digital economy as an economy based on the use of information computer technologies [9]. The Information Society Development Strategy contains the following wording: “The digital economy is an economic activity in which the key to production is digital data, processing large volumes of the information and using analysis results which, compared with traditional forms of management, can significantly increase the efficiency of various types of production, technologies, equipment, storage, sale, delivery of goods and services [10]. This definition in Russia is considered official. And there is the third definition that defines the digital economy as a system of economic, social and cultural relations based on the use of digital information and communication technologies.

E. Regulatory tools

Among the elements that make up the change management system in the digital economy, we highlight the main ones:

- regulatory tools,
- regulatory decision-making procedures.

Regulatory tools are laws and bylaws. It can be assumed that in length of time, change management tools are likely to expand with regulatory tools based on digital technology. However, it is currently impossible to clearly define what these tools will be and what role they will play in management due to the insufficient development of relevant technologies.

The change management system also includes the procedure of development and adoption of regulatory decisions embodied in the form of one of the above regulatory tools. Regulatory decisions should be understood as the creation of new rules and requirements addressed to participants in regulated economic activity, as well as to regulatory and supervisory authorities. Regulatory decisions may also concern the repeal or modification of existing rules and requirements. Procedures for making regulatory decisions cover the entire cycle of the process of creating rules (in the form of law, by-laws), from identifying a problem requiring regulation or deregulation, to developing and adopting an appropriate norm or rule, its implementation and identifying the consequences of its implementation and the need for adjustments.

Within the framework of the current system, the main tools are:

- normative legal acts establishing the regime for conducting a particular economic activity and the rules for monitoring compliance with this regime,
- control and supervisory activity, which should ensure implementation of the rules by market participants.

F. Criteria for distinguishing the digital economy from other areas of activity

Digital economy is formed at three levels, which in their close interaction affect the living of citizens and society as a whole:

- markets and sectors of the economy (traditional areas of activity) where direct interaction of specific entities (suppliers and consumers of goods, works and services) is carried out, and also production of electronic goods and provision of electronic services;
- platforms and technologies where competencies are formed for the development of markets and sectors of the economy (fields of activity), in other words, it is economic production using digital technologies;
- an environment that creates the conditions for the development of platforms and technologies and the effective interaction of market entities and sectors of the economy, and covers regulatory actions, information infrastructure, personnel, and information security.

In this format, the tasks in the national project [2] are not formulated. There may be problems with the implementation of other national projects - health care, science, education. Achievement of indicators in this format does not contribute to the formation of highly qualified specialists, including the management sphere.

G. The relevance of testing new legal products

Under the influence of digitalization and the content of law is undergoing changes. Features of the digital economy are such that instead of real processes of distribution of material goods and relations arising from their regulation, it creates a virtual world that has an artificial, intangible nature, where digital data, information systems, Big Data have the greatest value [11, 12]. Concept of organizing digital production is of great interest to Russian industrial enterprises. However, most often at enterprises the process of automation of work sites and digital business processes is implemented. Digital economy contemplates building a digital society with a previously unexplored, little-studied structure, system of institutions, new types of social ties, for example, network ties. [13].

Legal norms created before the development of digital technologies turn out to be non-adaptive to the new reality. Regulatory requirements that do not take into account the features of digital technology may slow their development. At the same time, certain areas of economic activity based on new technologies may find themselves in a legal vacuum.

Thus, the state is faced with the task of finding a balance between goal of promoting the development of digital technologies and the need to protect public interests. Finding this balance requires the correction of existing legal norms and managerial approaches. However, such a correction should be systemic. Digital economy is characterized by the high rate of
emergence of new technologies and products and practices based on them, therefore, regulation must be flexible enough to constantly adapt to rapid changes. In this regard, in the framework of the national project, it is set as the task of eliminating gaps and barriers to the development of a business based on the use of digital technologies and working with data, and the task of developing a change management system in the field of regulation of the digital economy, which allows for timely response to new problems. For such a case, the national project provides for the creation of "regulatory sandboxes" [14].

Regulatory sandboxes are generally open to all market participants. However, the claimant must prove the need to test his product or service in the sandbox, and also justify the innovative nature of his decision.

In the world there are not yet developed a unified approach to the restrictions that apply in the regulatory sandbox. Such restrictions may include: service limit, when it comes to services, disclosure of information to the regulator, licensing, etc.

In the world, regulatory “sandboxes” began to appear in 2015. Regulatory “sandboxes” are an invention of the UK Government and financial regulator (FCA). Similar modes exist in Canada, Australia, UAE, Singapore. In the United States, the first "sandbox" appeared in August 2018. At that time, 12 regulatory authorities from different countries, including those listed, announced the creation of a global network of financial innovations (Global Financial Innovation Network), on the basis of which they create an international “fintech sandbox” [11, 15].

Table 1 shows countries where "regulatory sandboxes" are present.

Foreign researchers, having analyzed the existing approaches to regulation in the digital economy, believe that the sandboxes are part of the ecosystem of smart regulation [11, 17]. In their opinion, “smart” regulation is such regulation that ensures the proportionality of the activities of market actors and legal "coercion", as well as various restrictions. There are three main regulatory approaches applied in different countries: 1) do nothing, 2) careful solution, 3) experiments [11, 18]. But not one of them can act as a standard. "Sandboxes" really allow you to evaluate the quality of the application of innovative solutions, including legal aspects, but they also create new conditions for interaction between participants and regulators. If you look at the American experience, in the USA there are territorial capsules and development centers, for example, Boston. Russia should also take into account regional specifics, both territorial and industrial specialization. As an example, Skolkovo, where there is a special legal regime, or territories of accelerated development (PSEDAs) [19].

<table>
<thead>
<tr>
<th>Countries</th>
<th>&quot;Sandbox&quot; development phase</th>
<th>Individual approach to fintech companies</th>
<th>License to participate in the &quot;sandbox&quot;</th>
<th>Testing terms in the &quot;sandbox&quot;</th>
<th>&quot;Sandbox&quot; restrictions for fintech companies</th>
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</thead>
<tbody>
<tr>
<td>Great Britain</td>
<td>Effective since 2015</td>
<td>Implemented</td>
<td>Simplified licensing required</td>
<td>3-6 months</td>
<td>Limited number of participants</td>
</tr>
<tr>
<td>Singapore</td>
<td>Advisory document on establishment adopted in 2016</td>
<td>Implemented</td>
<td>“Sandbox” is open to licensing and unlicensed companies</td>
<td>Individual</td>
<td>A limited number of participants, limits on the size of operations and the amount of obligations to customers</td>
</tr>
<tr>
<td>Australia</td>
<td>Advisory document on establishment adopted in 2016</td>
<td>A universal approach to all companies</td>
<td>“Sandbox” is open only to unlicensed companies</td>
<td>Up to 6 month</td>
<td>Not more than 100 clients. The company must be a member of the pre-trial dispute resolution system. Size of obligations is limited to one client and on terms of the amount</td>
</tr>
<tr>
<td>UAE</td>
<td>Advisory document on establishment adopted in 2016</td>
<td>Implemented</td>
<td>“Sandbox” is open to licensing and unlicensed companies</td>
<td>Up to 2 years</td>
<td>Individual restrictions</td>
</tr>
</tbody>
</table>

In the conditions of digitalization of economic and management processes, according to the authors, the state refuses to control the behavior of market participants in favor of such regulation, which allows to control the implementation by it of automated processes. As a result, high-quality monitoring and control of the legal behavior of participants.

The authors agree with a number of researchers [11, 17, 18] and propose to consider “smart” (“digital”) regulation, in accordance with the theory of multitasking and the new economic theory - “development blocks” [20], as a process of four successive stages: 1) piloting the solution itself, 2) creating a regulatory "sandbox", 3) limited licensing, 4) full licensing to enter the market.

However, digital transformation of the entire economic life of the country involves a systematic transition of the national economy to a new technological and economic structure, creation of new sectors of the economy, which, in general and in the aggregate, is a change in the economy structure. And from this point of view, the authors understand that we need to include new work tools. Because traditional methods, when we have being developing and adopting regulatory legal acts for a long time, are no longer suitable.

IV. CONCLUSIONS

Analysis of the ongoing processes allows us to draw the following conclusions regarding the characteristics of dynamics of the sphere of legal regulation in the context of digitalization.

1. There is modification of the scope of legal regulation In the context of digitalization and digital transformations. It becomes multitasking: within its framework not only new relationships arise, but its structure changes significantly, and existing relationships are modified. This is due to the development in
new conditions of such social relations, which may exclude the direct participation of a person.

2. Business must be sure that, using new technologies, it does not violate the law - neither Russian law, nor any other foreign state law. Now there is much talk about big data technologies, distributed data registries, or machine learning. These are new mechanisms and tools. Also there are new terms used that have not yet received the status of definitions: digital market, digital environment, digital agenda. It is necessary to determine how legitimate their use in companies or public authorities. Transformation of institutions in the digital economy is needed

3. It is necessary to ensure compliance of new legal decisions with international standards, which will allow Russian companies to more actively promote their services in the international market. For this the normative digital act within the EEU shall be designed that will allow to move close the legal status of member country of EEU. In many counties the normative acts in the area of digital economy is just accepted. For example, in Great Britain has the UK Digital economy Act, contained the Position about intellectual property protection within the usage of electronic message; Position about change of data and others; In the USA the Digital millennium copyright act (DMCA) is acting (Low about law of copyright in the digital era); in the Republic of France - law "About credibility of digital economy" [11, 18].

4. Errors of national project "Digital economy" due to the fact that basis tasks placed a bet on achievement of certain indexes rather than on creation of high technology medium for purpose of digital transformation of control. It is necessary to creation of conditions for growth of real economy with usage of digital technologies. Tasks accepted according to national project of draft law "About experimental legal status in the area of digital economy" is just accepted. Risks of national project "Digital economy" due to the fact that basis tasks placed a bet on achievement of certain indexes rather than on creation of high technology medium for purpose of digital transformation of control. It is necessary to creation of conditions for growth of real economy with usage of digital technologies. Tasks accepted according to national project of draft law "About experimental legal status in the area of digital economy" is just accepted.

5. Forming of digital economy shall proppse the general technological modernization of all economic realm and it is possible only during forming of innovation driven growth development and incorporation of advanced manufacturing technology of new technological mode.

Consistent solution to the problems of digitalization of the economy requires a clear goal-setting, and an end-to-end connection of the target setting for the formation of a digital economy with such strategic documents, for example, as a strategy for technological development, with other national projects. It is necessary to place greater focus on digitalization of real sector of economy, today a lot of attention is given to form of digital government, the usage of digital technologies in the financial sector. But in the real sector digitalization just gives a special economic effect for growth, because it is in the real sector the prerequisites for economic growth are formed. A very important issue that is not being resolved today is who will assess the changes in legislation. According to the authors, specialized centers for the preparation and assessment of legislation in the digital economy should be created on the basis of leading law schools. It is necessary to train qualified legal personnel who must possess skills not only in the field of jurisprudence, but also knowledge in the field of information technology. Creation of such a competent, expert environment is also aimed at solving the problem of constant updating and improvement of legislation for the development of the digital economy. The multitasking legal regulation of new social relations requires special centers of competence.

Regulatory environment of the digital economy must rapidly change under changing reality. The more changes occur, the faster the State needs to respond. It is necessary to change approaches to the process of adoption of regulatory legal acts. Decision-making regulations should be reviewed. And here that optimization is necessary, which can be achieved by creating a digital environment in the activities of the State.

Digital economy is not a recipe for all troubles and the “well-developed digital segment of the economy” is just support for the economy as such [21].

References


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