MSC 2020
International Scientific and Practical Conference «MAN. SOCIETY. COMMUNICATION»

ANALYSIS OF SCIENTIFIC RESEARCH OF THE REGULATORY FRAMEWORK FOR DIGITAL ECONOMY REGULATION

Elena Makarova (a)*, Olga Kalpinskaya (b), Tatiana Doroshenko (c)
*Corresponding author

(a) Yaroslav-the-Wise Novgorod State University, Veliky Novgorod, Russian Federation
elena.makarova@novsu.ru
(b) Yaroslav-the-Wise Novgorod State University, Veliky Novgorod, Russian Federation
olga.kalpinskaya@novsu.ru
(c) Yaroslav-the-Wise Novgorod State University, Veliky Novgorod, Russian Federation
tatyana.doroshenko@novsu.ru

Abstract

This publication provides an overview of sources in the field of legal regulation of the digital economy in Russia. The aim of the study is to conduct a comprehensive analysis of scientific studies of the regulatory framework for digital economy regulation in Russia. The paper reviews approaches of national and international lawmakers in the formation of the regulatory framework in the digital economy using the methods of comparative legal and system-structural analysis, the need for universalization of approaches to overcome the fragmentation, conflict and non-imageness of regulation is highlighted. Attention is paid to approaches to creating legal investment structures for the digital economy in a market and planned economy. The authors draw attention to the works devoted to the emergence of digital objects and services, analyzing the legislative experience of foreign countries, and determining the possibility of its use in Russia. Particular attention is given to structural changes in the world of work in the context of digitalization, as this process leads to a decrease in the number of production workers and an increase in management areas personnel. The article describes the works of Russian scientists considering the features of labor relations regulating in the digital economy and the problems of fixing the integration of artificial intelligence in production in the labor legislation. The opinions of scientists on the impact of digitalization on the employment sector in the face of the threat of replacing personnel with digital technologies and the transformation of the Russian labor market are analyzed.

Keywords: Digital economy, legal regulation

1. Introduction

At the present stage of the development of society and the formation of new social relations, mankind has entered the next phase of its development, which is commonly called the era of digitalization. The digital economy as a new vector of development is beginning to take an active position in all areas of public life. The use of the latest digital technologies in connection with the strategic orientation of the global and domestic development of the digital economy, the digitalization of various fields of activity has led to an increasing scientific interest in general theoretical and scientific and practical research, including in the field of legal regulation of property circulation of digital technology results and digital rights (Makarova, 2020).

The first serious comprehensive studies in the field of the regulatory framework for the regulation of the digital economy in the Russian Federation appear in the scientific community in 2017-2018, when program documents on the development of the digital economy in the Russian state were adopted, including regulatory legal regulation. Collective monographs devoted to the legal regulation of economic relations, and articles by individual authors declaring the need for an integrated approach to the legislative regulation of digitalization are among them. There are works based on the analysis of progressive foreign experience on the prospects of developing new legal investment structures for the digital economy. Many works are devoted to the transformation of industry legislation under the influence of global digitalization.

2. Problem Statement

The high interest in scientific research in the field of legal regulation of the digital economy in the Russian Federation is due to the use of new forms of information technology in the field of entrepreneurship, the emergence of new contractual designs in the form of smart contracts, the need to create a system of state control of cryptocurrency circulation and blockchain technology, as well as the "digitalization" of the main areas of entrepreneurial activity: investment, public procurement, credit agreements, insurance and advertising. The old legal tools are not only ineffective but inhibit actively developing economic processes in the existing new "digital" economic reality. One can often find a critical review of the regulatory framework for the development and implementation of digital technologies in the economy, in entrepreneurship as a social activity, in public administration, in the social sphere, and in urban management in the scientific literature. From the point of view of the authors, there is an obvious lag of legal regulation from the needs of practice. The authors criticize the violation of the internal hierarchy of legal norms, the imbalance and conflict of program documents of digital development.

3. Research Questions

Studying scientific research in the field of legal regulation of the digitalization process, it is necessary:

3.1. to provide an overview of various approaches to the legal regulation of the digital economy;

3.2. to highlight the need fixed by lawyers for the consolidation of new digital objects and new digital services in law;

3.3. to analyze the works on the features of the legal consolidation of structural changes in the world of work in the context of digitalization.

4. Purpose of the Study

The aim of the study was to conduct a comprehensive analysis of scientific research in the field of the regulatory framework for the regulation of the digital economy in the Russian Federation.

5. Research Methods

The study is based on an interdisciplinary approach to the analysis of publication material studying the process of legal regulation of the digital economy using the method of comparative legal analysis and system-structural analysis.

6. Findings

6.1. Overview of various approaches to the legal regulation of the digital economy

The conceptual issue of creating an effective legal base for digitalization is the choice of a specific methodological approach to regulating this process, as well as the universalization of such approaches at the national and international levels to overcome fragmentation, conflict and non-imageness. Professor of RUDN Belikova (2018) highlights two main approaches of legislators. The first approach is characterized by gradual reform aimed at regulating existing social relations, and not predicted in the future (the author indicates the risk of being late with this approach). The second approach involves the use of not specific legislative and prescriptive nature of regulation of new digital technologies and business models, but guidelines to ensure timeliness and flexibility of regulation at a high rate of variability of the digitalization process.

The need for an integrated approach to legislative regulation of digitalization is declared in the work of Kuznetsov (2018). The author points out that the integrative nature of digital information as an object of public relations is manifested in the filling of legislation with system-forming and system-organizing norms that govern public relations of the information type, which is manifested in the need to transform the essential foundations of industry regulation due to the expansion of the composition of objects and subjects of legal relations (Kuznetsov, 2018).

The opinion of Zaloilo and Pashentsev (2019) and Pashentsev (2020) is interesting in terms of the inverse effect of digital technology on law enforcement. In particular, the authors say that digitalization affects the individual and collective legal awareness of the subjects of law enforcement, thereby determining the nature and results of law enforcement. The impact of digital technology on law enforcement is related to automation and algorithmization of the legal sphere, partially moving the rule of law into virtual space (Pashentsev, 2020; Zaloilo, & Pashentsev, 2019). It is important to develop a system of measures that contribute to security in this area to encourage citizens to use digital technologies (Bukalerova et al., 2019). And this is impossible without the legal regulation of digitalization.

Today, the legislator, the courts and the legal doctrine have a single task – to improve the private-legal regulation of relations on the Internet (mainly in terms of the realization and protection of personal rights) (Sherstobitov, & Ulbashev, 2019). In this regard, researchers note that the use of artificial intelligence provides the development of technological jurisprudence in Russia in terms of the objective establishment of legal facts, the economic situation in a corporation and its performance indicators (balance sheet currency, transaction price, amount of losses, etc.) (Andreev et al., 2020).

Researchers also note the different approaches of lawmakers to create new legal investment designs for the digital economy. Authors often characterize in detail two approaches in international and foreign practice based on progressive foreign experience: the market one, in which the state acts as a business stimulator for investing in digital technologies (USA), and the planned one, which provides for the creation of a digital infrastructure under state leadership (China). Market and planning approaches are used not only for investment, but also for strategic planning and legal regulation of the digital economy as a whole forcing researchers to predict the choice of a specific strategy in our country. So, Mikhailov (2018) believes that it is more correct to act according to the Chinese model, assuming, where possible, market mechanisms, justifying their position with a high degree of monopolization of markets in Russia, the creation of most of the GDP by organizations with a significant share of state participation, and the lack of technological and economic advantages over other countries.

6.2. Fixing the need to secure new digital objects and new digital services in law

The introduction of new digital objects (cryptocurrencies and tokens, artificial intelligence, digital counterparts, big-data, etc.) and new digital services (computer cloud computing and services, smart devices, smart contracts, etc.) into property circulation entailed activation of virtual network communication. These issues also cause objective interest researchers in the context of the complex process of consideration of the draft law "On digital financial assets", the purpose of which is to enshrine definitions of the currently most widely used financial assets created and/or issued using digital financial technologies in the Russian legal field. Since the regulation of these issues is relatively new to the Russian legal space, the authors objectively study in detail the legislative experience of foreign countries with the determination of the possibility of its use in Russia.

The researchers attach great importance to the genesis of the development of cryptocurrency and blockchain technology in the digital economy to determine the main areas of legal regulation of relations in the field of digital technologies used in distributed registry systems, analyzing, in particular, the basics of the operation of blockchain technology and cryptocurrency emissions in foreign countries, consider approaches of different states in determining the legal nature of cryptocurrencies (Babkin et al., 2017). Foreign experience in legislative regulation (including the USA and China) of the main components of the digital economy, such as cryptocurrency, ICO (initial coin placement), blockchain and mining, is the basis for the determination of the need for an early detailed and effective regulatory definition in our country by lawyers (Yelokhova et al., 2019). The authors note the ambiguity of the practice of cryptocurrency regulation in different countries from a complete ban to a liberal legal absence of restrictions on the circulation of tokens, as well as the activities of crypto currency exchanges and crypto platforms (Maksurov, 2018).

Mosechkin (2019) addresses the study of the influence of self-learning programs in human life in connection with their high intensity of development in his article. He notes the absence of any offenses related to the commission of socially dangerous acts through the use of neural networks, artificial intelligence or artificial intelligence itself in the legislation (Mosechkin, 2019). The work proves that the activities of self-learning programs can pose a public danger and cause harm to public relations protected by criminal law.

Digital objects and services are transforming not only substantive, but also procedural law. Thus, a number of authors talk about possible legal regulation of the procedure for using electronic media as evidence (Chadnova et al., 2017).

6.3. Analysis of works devoted to the peculiarities of the legal consolidation of structural changes in the world of work in the context of digitalization

Digitalization inevitably leads to an increase in the "information capacity" of management activities, a decrease in the number of production workers and an increase in employees in management areas, which implies a transformation of the HR policies of companies. This conclusion was made by the researchers Svistunov and Lobachev (2017) in the work "Labor relations in the context of the digitalization of the economy" a few years ago.

Special attention is paid to the actual problems of documenting labor relations, including in electronic form in the monograph "Peculiarities of regulation of labor relations in the digital economy", (Belitskaya et al., 2018). The authors analyze the norms of the Labor Code of the Russian Federation to determine the creation of conditions for the use of information technologies in the regulation of labor relations; consider the features of various types of employment contracts in the digital economy; identify the indefinite nature of the legal category "labor function" and determine the negative impact of this on the regulation of labor relations. In a separate chapter of the book, an international legal and comparative study of the regulation of electronic HR workflow is carried out based on the study of the legal positions of the International Labor Organization and other international organizations on the use of electronic HR workflow, considering the risks of digitalization, as well as the regulation of electronic HR workflow in the EAEU and the BRICS countries. This chapter discusses approaches to the regulation of electronic document flow in general and personnel document flow in the context of the transition to its electronic form, implemented at the international level, as well as in the countries of the BRICS and the EAEU.

The problems of fixing the integration of robots in production in labor legislation are discussed in detail in the article by Filippova (2018) "Legal regulation of labor 2020: a paradigm shift as a consequence of the digitalization of the economy". The author considers it necessary to resolve the labor legislation of the problems associated with the introduction of artificial intelligence into the world of work through the restriction of labor performed by robots, the creation of safety standards for the joint work of people and robots. It is necessary to regulate the inadmissibility of discrimination in the use of big data, restrictions on the use of devices that track the actions of employees, etc. by labor law from her point of view.

The object of research is the direction of changes in the professional structure of the workforce, formed by the expansion of the use of digital technologies. It is argued that the introduction of digital technologies will not lead to an aggravation of the employment situation, and the possible release of

personnel in most cases will be covered by the creation of new jobs. However, such transformations will require rapid retraining of workers or their replacement by workers who already have the appropriate knowledge and skills. (Tomashevsky, 2020). The new digital economy requires the development of software trends and products in the formation of a network of digital competencies and a system of new professions in the labor market, which, in turn, dictates the need to form an ecosystem that creates conditions for professional and personal growth of a highly qualified specialist (Andreev et al., 2020).

7. Conclusion

In the modern world, radical transformations are taking place that affect all spheres of life. The study confirms the need for further comprehensive analysis of scientific research in the field of the regulatory legal framework for regulating the digital economy in the Russian Federation. For the benefit of the development of society and the progress of legal science, it seems necessary to rely on the experience of predecessors in the field of research activities and consider the positions of contemporaries to objectively construct scientific novels (Petrov, & Zyryanov, 2019).

The relevance of creating a new regulatory legal field for regulating the digital economy and hence a large number of scientific and scientific-practical research in this area have entailed new forms of publication reviews and platforms for discussing areas of work, their area of application, and the target audience to which they are addressed.

Acknowledgments

References

Andreev, V. K., Laptev, V. A., & Chucha, S. Yu. (2020). Artificial intelligence in the e-justice system in corporate disputes. *Bulletin of St. Petersburg University. Series: Right*, *11*(1), 19-31. https://doi.org/10.21638/spbu14.2020.102

Babkin, A. V., Burkaltseva, D. D., Pshenichnikov, V. V., & Tyulin, A. S. (2017). Cryptocurrency and blockchain technology in the digital economy: the genesis of development. *St. Petersburg State Polytechnical University Journal. Economics*, *10*(5), 9-22.

Belikova, K. M. (2018). Features of the legal regulation of the digital intellectual economy. *Law and legislation*, *8*, 26-30.

Belitskaya, I. Ya., Kuznetsov, D. L., Orlovsky, Yu. P., & Chernyaeva, D. V (2018). *Features of the regulation of labor relations in the digital economy*. Law Company "Kontrakt".

Bukalerova, L. A., Muratkhanova, M. B., Ostroushko, A. V., & Simonova, M. A. (2019). Protection of the interests of minors in the digital economy in the Russian Federation and the Republic of Kazakhstan. *Bulletin of St. Petersburg University. Series: Right*, *10*(1), 149-165. https://doi.org/10.21638/spbu14.2019.111

Chadnova, I. V., Sokolovskaya, N. S., & Kirsanov, A. Yu. (2017). On the issue of the use of "electronic data carriers" in criminal proceedings. *Bulletin of Tomsk State University. Series Right*, *23*, 90-99. https://doi.org/10.17223/22253513/23/10

Filippova, I. A. (2018). Legal regulation of labor 2020: a paradigm shift as a consequence of the digitalization of the economy. *Lawyer, 11*, 31-35.

Kuznetsov, P. U. (2018). An integrated approach to the legal regulation of public relations in the field of the digital economy. *Russian legal journal*, *6*(123), 154-161.

Makarova, E. A. (2020). Analysis of the specifics of antimonopoly regulation of the digital economy in scientific research. In V. R. Kovalev, & T. O. Boziev (Eds.). *Novels of Law, Economics and Management. Collection of scientific papers based on the materials of the V international scientific and practical conference. 2020* (pp. 102-107). State Institute of Economics, Finance, Law and Technology.

Maksurov, A. A. (2018). Legal regulation of the circulation of cryptocurrency abroad. *VSU Bulletin. Series*: *Right, 3*, 287-296.

Mikhailov, A. V. (2018). Problems of the formation of the digital economy and the development of business law. *Actual problems of Russian law*, *11*(96), 68-73.

Mosechkin, I. N. (2019). Artificial intelligence and criminal responsibility: problems of the formation of a new type of crime subject. *Bulletin of St. Petersburg University. Series: Right*, *10*(3), 461-476. https://doi.org/10.21638/spbu14.2019.304

Pashentsev, D. A. (2020). Features of law enforcement in the context of digitalization of public relations. *Bulletin of St. Petersburg University. Series: Right*, *11*(1), 35-49. https://doi.org/10.21638/spbu14.2020.103

Petrov, A. V., & Zyryanov, A. V. (2019). On some methodological approaches in legal research (philosophical, naturalistic, positivist approaches). *Tomsk State University Bulletin*, *438*, 227-235. https://doi.org/10.17223/15617793/438/31

Sherstobitov, A. E., & Ulbashev, A. Kh. (2019). Civil regulation of personal rights of citizens: theoretical foundations and problems of improvement in the era of informatization. *Tomsk State University Bulletin*, *440*, 231-243. https://doi.org/10.17223/15617793/440/31

Svistunov, V. M., & Lobachev, V. V. (2017). Labor relations in the context of the digitalization of the economy. *Upravlenie*, *4*(18), 29-33.

Tomashevsky, K. L. (2020). Digitalization and its impact on the labor market and labor relations (theoretical and comparative legal aspects). *Bulletin of St. Petersburg University. Series Right*, *11*(2), 398-413. https://doi.org/10.21638/spbu14.2020.210

Yelokhova, I. V., Akhmetova, M. I., Krutova, A. V., & Tetenova, A. V. (2019). Approaches to determining the legal status of cryptocurrencies in the leading countries of the world. *Bulletin of the Perm National Research Polytechnic University. Socio-economic sciences*, *1*, 201-209.

Zaloilo, M. V., & Pashentsev, D. A. (2019). National legal order in Russia in the context of digitalization. *Bulletin of St. Petersburg University. Series: Right*. *10*(2), 196-209. https://doi.org/10.21638/spbu14.2019.201