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**RELEVANT PROBLEMS OF LEGAL REGULATION AT THE**  
**DIGITALIZATION OF ECONOMY IN RUSSIA**

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*Abstract*

This authors discuss certain issues of legal regulation in times of digitalization of the economy in the Russian Federation. The authors study the need to regulate certain issues in the digital economy such as robots, robotics, artificial intelligence, cryptocurrency technologies and block chain. The authors analyze the current legislative regulation of the circulation of cryptocurrencies, artificial intelligence and robotics in the Russian Federation. Parallels with other states that are already using blockchain technologies as new platforms for the digital economy are drawn. The position of the Central Bank of the Russian Federation on the issue of turnover and investment in cryptocurrencies is given. The article provides and analyzes significant points of view on the legal status of robots and robotics. The authors study the experience of research and building blockchain systems by scientists from China, Estonia, Italy, France. They note the numerous economic and legal advantages of blockchain technology. Researchers from China explore the possibilities and offer their solutions for using blockchain technology in conjunction with the Internet of Things, which is causing a huge wave of digitalization in traditional industries. Researchers from Italy believe that digital notarization is one of the most promising services offered by modern blockchain-based solutions.

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**Keywords:** Cryptocurrency turnover regulation, robotics regulation, artificial intelligence regulation, digital economy.



## **1. Introduction**

Russian Federation pays great attention to the development of digital economy in the country. In order to ensure conditions for the development of the information society in the Russian Federation, the President approved the Strategy for the Development of the Information Society in the Russian Federation for 2017-2030 (Decree of the President of the Russian Federation of 05.09.2017 No. 203 "On the strategy for the development of the information society in the Russian Federation for 2017-2030", 2017). In accordance with norm 21 of this strategy, the formation of digital economy is one of the national interests of the Russian Federation. In the article, the authors try to understand the progress in the legal regulation of public relations of the digital economy in the Russian Federation. Researchers note that there is a need to develop economic relations in a competitive environment between different countries and manufacturers, the need to reduce the cost of goods and services (Guryanova, Korotaeva, & Chedzhemov, 2019).

## **2. Problem Statement**

The rapid development of digital technologies and the emergence of new platforms for the interaction of entities in the digital economy is taking place against the backdrop of a very poor regulation of relevant legal relations by the legislator. So the legislator does not define artificial intelligence and cryptocurrency, and the question of the possibility or impossibility of a turnover of cryptocurrency is not completely resolved. It is necessary to study the question of the sufficiency of the existing legal regulation of these issues, to determine the range of immediate tasks facing the legislator and the scientific community.

## **3. Research Questions**

Given the degree of novelty of the topic of digitalization of the Russian economy and poor regulation of the relevant legal relations, the following questions are subject to study:

1. Does the existing legislative framework meet the sufficiency criterion?
2. What issues of the digital economy are most in need of regulation?
3. How is the regulation of primary issues possible?

## **4. Purpose of the Study**

The purpose of this study, in accordance with the issues listed in this article, is the study of the need for legal regulation of digital economy issues in the Russian Federation. Also, the aim of the study is to develop the main directions of such regulation.

## **5. Research Methods**

The research methodology involves the use of general theoretical and special methods of cognition. The study uses regulatory legal acts, analyses the legal regulation of the sphere in question. Also, the work is based on the conclusions and proposals of Russian and foreign scientists.

## 6. Findings

While the world's largest corporations such as Google, Kamaz, Yandex are testing unmanned vehicle management systems in the Russian Federation, there is practically no legal regulation of the relevant public relations. There is no legal definition of artificial intelligence, questions of the legal status and turnover of robotics, artificial intelligence as a commercial product are practically not resolved, issues of responsibility for damage caused by the robot or artificial intelligence are not resolved

Currently, the scientific community has developed two main approaches to the regulation of artificial intelligence and robotics: either the creation of a single legal regime for robots and artificial intelligence is proposed, or it is proposed to regulate them separately.

As Baranov (2018) mentions China, USA, Japan, South Korea and the EU acknowledge that the future of robotics is thoroughly approaching its legislative regulation. He points out that issues of legal regulation of robotics can lead to tangible technological and economic results.

At the same time, the concept of "robot" in the Russian Federation is mentioned only in GOST R 60.0.0-2019 / ISO 8373-2014 "Robots and robotic devices. Terms and definitions" (2019). And the specified standard is identical to the international standard ISO 8373: 2012 "Robots and robotic devices - Vocabulary, IDT". GOST establishes that the robot is an actuator programmable in two or more degrees of mobility, having a certain degree of autonomy, and able to move in the external environment in order to perform tasks as intended (GOST R 60.0.0-2019 / ISO 8373-2014 "Robots and robotic devices. Terms and definitions", 2019). The previous edition of GOST provided for the division of robots into industrial and service in accordance with their purpose.

Meanwhile, modern legal reality requires a more detailed and accurate consolidation of "robot" concept. So, for example, Sberbank (2019) proposed such key characteristics of the robot as the physical nature, autonomy, programmability, the ability to perceive the environment, interaction with the environment, the presence of a drive. Some researchers propose to legislatively introduce a new subject of civil law - a robot agent. The authors propose that the following rule be enshrined in the Civil Code of the Russian Federation: "the robot agent has separate property and meets its obligations, can acquire and exercise civil rights on its own behalf and bear civil obligations. In cases established by law, the robot agent may act as a participant in civil proceedings (Arkhipov & Naumov, 2017).

Researchers believe that the bill was a clear indicator that the work in the field of formation of legal regulation concepts on relations with the participation of robots is currently gaining exceptional relevance (Danilov, 2019). We agree with researchers who believe that governments need to take structural measures to create, use and develop the benefits of digital economy to ensure increased competitiveness both domestically and abroad (Korobeynikova, Ermoshkina, Kosilova, Sheptuhina, & Gromova, 2019).

Meanwhile, in our opinion, legislative consolidation of the legal personality of the robot and artificial intelligence seems to be somewhat untimely and hasty. In addition, the concept of the limited legal personality of robots seems to be currently unfinished.

It is also impossible not to consider that technologies are currently far ahead of the development of law and the state in the legal sense will simply not be ready to accept such technologies as unmanned vehicles, robots with a high degree of autonomy, technologies with signs of artificial intelligence, etc. A

similar situation has developed in the Russian Federation with cryptocurrencies and blockchain technologies. Thus, the President of the Russian Federation has repeatedly pointed out the importance of developing a digital economy and blockchain technology in particular.

Meanwhile, while other states are creating electronic notary systems or, for example, civil registry systems, based on blockchain, in Russia the technology is mainly used by private users, and application systems are not being created or are not functioning at present. For example, in Estonia there is positive experience on this matter - the provision of part of notarial services is based on blockchain technology, which changes the way information is authenticated (Sullivan & Burger, 2017).

Scientists note the numerous economic and legal benefits of blockchain technology (Lasmole, 2018). Researchers from China explore the possibilities and offer their solutions for using blockchain technology and the Internet of things, which causes a huge wave of digitalization in traditional industries (Jiang, Wang, Huang, Long, & Huo, 2018). Researchers from Italy believe that digital notarization is one of the most promising services offered by modern blockchain-based solutions (Meneghetti, Quintavalle, Sala, & Tomasi, 2019). In addition, the legal status of the most common technology, built on the principles and functionality of blockchain - cryptocurrencies, is not legally defined.

The official position of the state stated by the Central Bank of the Russian Federation on this issue is set forth in a letter from the press release of the Central Bank of Russia dated 04.09.2017 "On the use of private "virtual currencies" (cryptocurrencies)" (2017). The Central Bank indicates that it considers it premature to allow cryptocurrencies or related instruments in circulation and use them in organized tenders and in the settlement and clearing infrastructure in the Russian Federation to service transactions with cryptocurrencies and derivative financial instruments on them (Central Bank of Russia, 2017).

Thus, the question of the legality of the cryptocurrency turnover on the territory of the Russian Federation remains open. However, the authors have already drawn attention to the ambiguity and insufficiency of regulation of the legal status of cryptocurrencies (Ageeva, Lang, Loshkarev, Chugurova, & Churakova, 2019).

## **7. Conclusion**

The study allows us to draw the following conclusions.

The concept of "robot" is regulated only by state standards and only on the technical side. The issue of the status of the robot or artificial intelligence is not resolved. There are several proposals for the regulation of artificial intelligence and robots as subjects or objects of law. Meanwhile, these proposals either appear premature or do not have the character of completed legal concepts.

There is a number of opinions on understanding the legal status of artificial intelligence and robots, coming both from the scientific community and from commercial organizations. Technologies are currently much ahead of the development of law and the state in the legal sense will simply not be ready to adopt such technologies as unmanned vehicles, robots with a high degree of autonomy, technologies with signs of artificial intelligence, etc.

In the Russian Federation, the status of cryptocurrencies and issues of its circulation remain unclear. The legislator took a waiting position and does not legalize cryptocurrency circulation and its trading, but does not prohibit it. There is also no legislative consolidation and use of blockchain

technology. While in other countries such technologies have already been developed and are being implemented. Given the rapid development of technologies and platforms of the digital economy, there is probably no time left for thought.

## References

- Ageeva, G. E., Lang, P. P., Loshkarev, A. V., Chugurova, T. V., & Churakova, E. N. (2019). Peculiarities of protecting the rights of participants of financial markets in court. In E.G. Popkova (Ed.), *International Conference Project "The future of the Global Financial System: Downfall of Harmony"*. *Lecture Notes in Networks and Systems*, 57 (pp. 545-552). Cham: Springer. [https://doi.org/10.1007/978-3-030-00102-5\\_57](https://doi.org/10.1007/978-3-030-00102-5_57)
- Arkhipov, V. V., & Naumov, V. B. (2017). Artificial intelligence and autonomous devices in legal context: On development of the first Russian law on robotics. *SPIIRAS Proceedings*, 6(55), 46-62. <https://doi.org/10.15622/sp.55.2>
- Baranov, P. P. (2018). Legal regulation of robotics and artificial intelligence in Russia: Some approaches to solving the problem. *North Caucasian Legal Bulletin*, 1, 39-45. [in Rus.].
- Central Bank of Russia (2017). *Central Bank of Russia press release dated 04.09.2017 "On the use of private" virtual currencies "(cryptocurrencies)"*. Retrieved from: [https://www.cbr.ru/press/pr/?file=04092017\\_183512if2017-09-04T18\\_31\\_05.htm](https://www.cbr.ru/press/pr/?file=04092017_183512if2017-09-04T18_31_05.htm) Accessed: 10.10.2019. [in Rus.].
- Danilov, I. B. (2019). The main approaches to the legal regulation of relations involving robots. *Legal Research*, 6, 7-15. <https://doi.org/10.25136/2409-7136.2019.6.29150>
- Decree of the President of the Russian Federation of 05.09.2017 No. 203 "On the strategy for the development of the information society in the Russian Federation for 2017-2030" (2017). Retrieved from: [http://www.consultant.ru/document/cons\\_doc\\_LAW\\_216363/942772dce30cfa36b671bcf19ca928e4d698a928/](http://www.consultant.ru/document/cons_doc_LAW_216363/942772dce30cfa36b671bcf19ca928e4d698a928/) Accessed: 10.10.2019. [in Rus.].
- GOST R 60.0.0-2019 / ISO 8373-2014 "Robots and robotic devices. Terms and definitions" (2019). Approved by order of the Federal Agency for Technical Regulation and Metrology of February 14, 2019 No. 31-art. Retrieved from: <http://docs.cntd.ru/document/553803991> Accessed: 10.10.2019. [in Rus.].
- Guryanova, A. V., Korotaeva, T. V., & Chedzhemov, G. F. (2019). Digital economy as a social phenomenon: Ethical challenges and perspectives of development. In V. Mantulenko (Ed.), *Proceedings of the International Scientific Conference "Global Challenges and Prospects of the Modern Economic Development". The European Proceedings of Social & Behavioural Sciences*, 57 (pp. 263-273). London: Future Academy. <https://doi.org/10.15405/epsbs.2019.03.27>
- Jiang, Y., Wang, C., Huang, Y., Long, S., & Huo, Y. (2018). A cross-chain solution to integration of IoT tangle for data access management. In J.E. Guerrero (Ed.), *Proceedings of the International Conference on Internet of Things (iThings) and IEEE Green Computing and Communications (GreenCom) and IEEE Cyber, Physical and Social Computing (CPSCom) and IEEE Smart Data (SmartData)* (pp. 1035-1041). New Jersey: IEEE. [https://doi.org/10.1109/Cybermatics\\_2018.2018.00192](https://doi.org/10.1109/Cybermatics_2018.2018.00192)
- Korobeynikova, E. V., Ermoshkina, C. N., Kosilova, A. F., Sheptuhina, I. I., & Gromova, T. V. (2019). Digital transformation of Russian economy: Challenges, threats, prospects. In V. Mantulenko (Ed.), *Proceedings of the International Scientific Conference "Global Challenges and Prospects of the Modern Economic Development". The European Proceedings of Social & Behavioural Sciences*, 57 (pp. 1418-1428). London: Future Academy. <https://doi.org/10.15405/epsbs.2019.03.144>
- Lasmoles, O. (2018). Difficulties faced by the legal system in coming to terms with blockchains. *Revue Internationale de Droit Économique*, xxxii(4), 453-469. <https://doi.org/10.3917/ride.324.0453>
- Meneghetti, A., Quintavalle, A. O., Sala, M., & Tomasi, A. (2019). Two-tier blockchain timestamped notarization with incremental security. *CEUR Workshop Proceedings*, 2334, 32-42.
- Sberbank (2019). Analytical review of robotics market. Sberbank robotics laboratory. Retrieved from: [http://www.sberbank.ru/common/img/uploaded/pdf/sberbank\\_robotics\\_review\\_2019\\_17.07.2019\\_m.pdf](http://www.sberbank.ru/common/img/uploaded/pdf/sberbank_robotics_review_2019_17.07.2019_m.pdf) Accessed: 10.10.2019. [in Rus.].
- Sullivan, C., & Burger, E. (2017). E-residency and blockchain. *Computer Law and Security Review*, 33(4), 470-481. <https://doi.org/10.1016/j.clsr.2017.03.016>