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Artificial Intelligence and Law: Theoretical and Legal Features^{*}

Elena Tereshchenko¹, Elena Ivanchenko², Valeriy Meleshkin³, Igor Zhuzhgov⁴, Maria Erokhina⁵ North-Caucasian Federal University, Russia



Abstract

Artificial Intelligence (AI) has become one of the most transformative technological phenomena in the modern digital era. This article raises fundamental theoretical and legal issues related to the classification and regulation of artificial intelligence. This study aims to examine in depth the concept, characteristics, legal nature, scope of application, and regulatory framework of artificial intelligence from an information law perspective. This study uses a qualitative method with a literature approach and a legal approach (normative juridical), where data is obtained through a literature review of various scientific literature, laws and regulations, legal documents, and relevant academic articles. In this study, the author explores various approaches in defining the concept of AI, as well as examining its legal regulations in various jurisdictions. One important finding shows that artificial intelligence law can be categorized as a legal institution within the information law framework. In addition, the issue of legal responsibility for AI actions is an important highlight, considering that artificial intelligence can act autonomously but does not yet have a clear legal subject. This article also describes the use of Al in various fields such as health, transportation, and finance, considering each sector's specific characteristics. While the benefits offered, such as efficiency and automation, the article also highlights the potential risks inherent, including privacy violations and algorithmic bias. Overall, this research provides conceptual and normative insights into the legal challenges and opportunities in the development and application of AI.

Keywords: Legal Regulation; Legal Responsibility; Artificial Intelligence

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¹ Elena Tereshchenko, North-Caucasian Federal University. ORCID: <u>https://orcid.org/0000-0003-4422-7488</u>. E-mail: Elena Tereshchenko@mymail.academy

² Elena Ivanchenko, North-Caucasian Federal University. ORCID: https://orcid.org/0000-0002-9778-1565. Email: <u>ElenaIvanchenko@mymail.academy</u>

³ Valeriy Meleshkin, North-Caucasian Federal University. ORCID: <u>https://orcid.org/0009-0000-9417-5722</u>. E-mail: <u>ValeriyMeleshkin@mymail.academy</u>

⁴ Igor Zhuzhgov, North-Caucasian Federal University, NSTU. ORCID: <u>https://orcid.org/0000-0002-3507-4574</u>. E-mail: <u>Zhuzhgov@mymail.academy</u>

⁵ Maria Erokhina, North-Caucasian Federal University. ORCID: <u>https://orcid.org/0009-0002-7126-3150</u>. E-mail: <u>MariaErokhina@mymail.academy</u>

^{**}Corresponding author: Zhuzhgov@mymail.academy

A. INTRODUCTION

Modern computer programming technologies, neurotechnologies, biotechnologies, and robotics are developing rapidly and intensively. (State Duma of the Federal Assembly of the Russian Federation, 2020) Artificial intelligence technologies are among the most promising and applicable technologies across various areas of social relations. Some of them are already in use. These are computer or cyber-physical systems with anthropomorphic (human-like) intelligence (Levit, 2024). In different languages, this concept is referred to as "l'intelligence artificielle" (French), "artificial intelligence" (English), "inteligencia artificial" (Spanish), "intelligenza artificial" (Italian), "künstliche Intelligenz" or "artifizielle Intelligenz" (German), and "inteligência artificial" (Portuguese). AI is also referred to as "machine intelligence", "machine reasoning", "intelligent machines" or "thinking machines" (Sultonova et al., 2023). In Russia, the specific translation of the term has influenced the perception of AI. In the Western context, "intelligence" is primarily used to emphasise the capacity for rational reasoning and constructing appropriate thinking operations. In the Russian discourse, the term "intellect" prevails, which suggests an anthropomorphic subjectivity, i.e., a quasi-human entity. This semantic shift steers the discourse away from the core issues of new technologies. Robotics and AI have become some of our era's most prominent and widely discussed technological trends.

Historically, shifts in technological paradigms have led to systemic changes in the functioning of societies undergoing such transformations. These changes have affected not only the economy currently taking on digital form (Kirillova et al., 2021) and social relations but also the socio-cultural and legal spheres. It is reasonable to agree that the digitalization of all aspects of public life is a defining reality of the modern world, permeating every area from education to digital financial assets (Kamyshansky et al., 2019). The rapid development of cutting-edge technologies, AI, the Internet of Things, cloud technologies, etc., is driving significant changes in legislation. While these are still early steps, they may evolve into comprehensive legal and legislative institutions, potentially forming branches and sub-branches of law and legislation. (Kirillova et al., 2021; Malginova, 2021)

The development and use of AI raise various legal and moral-ethical issues. However, applying these technologies not only leads to the emergence of such problems but also offers effective solutions to other existing legal and practical challenges. (Drozdova et al., 2022)

All this highlights the relevance of research on the key features of AI and its legal framework. The research object encompasses social relations arising in AI development, operation, and application and relationships in related fields. The research subject comprises provisions from theoretical and empirical scientific works dedicated to the characteristics of AI and its legal regulation. The research objective is a theoretical and legal analysis of the phenomenon of AI, the state and specific features of its legal regulation, the relationships arising in this field, and the associated risks and legal issues.

The research's scientific novelty highlights AI's legal features and addresses key aspects of its legal regulation. Studies in this area have only recently begun and cannot be considered comprehensive. Based on this objective, a set of specific tasks was identified: to examine the features of legal regulation in AI, analyse the relationships arising from using AI, and explore legal issues resulting from using AI.

B. METHODS

A productive approach to defining the features of a theoretical and legal analysis of AI and its legal framework involves various methods for understanding, researching, describing, and explaining the topic. The research is grounded in a significant misalignment between the application of AI and the existing legislation. This discrepancy threatens legal relationships in this field. It reflects a gap between innovative technological advancements in robotics and computer systems and lagging laws in this area, particularly regarding the legal status of artificial intelligence. The research topic was selected because the application of AI is demonstrative and declarative. In many cases, referring to elements of AI rather than full-fledged artificial intelligence is more accurate, necessitating a deeper study and better comprehension of the topic.

The integral general scientific method of analysis (including system analysis and other specialized analytical methods) was employed as the primary research method. Through this approach, we conceptualised and comprehended the main segments of the topic, ensuring an understanding at the meta-level, i.e., at a fundamental level of understanding AI. The general scientific method of abduction allowed us to identify and substantiate interrelations between various legal aspects of AI's development, production, operation, and application and between possible (projected or interpreted) concepts of AI legal personality and potential legal regimes in this field. The general scientific method of induction (moving from specific to general) enabled formulating several generalised conclusions and evaluations regarding the studied phenomena, processes, and relationships. We also used a range of specific scientific methods, including formal legal, comparative legal, and juridical-teleological. These approaches facilitated an in-depth understanding of the specific features of legal regulation in this field.

C. RESULTS

1. The legal personality of Artificial Intelligence

The legal personality of AI must be defined. Considering the analysis of all potential consequences and risks, the answer to whether AI should be endowed with legal personality is likely negative. Legislators must establish legal regulations governing AI activities, including addressing liability for AI actions, before the technology reaches a significant level of advanced capabilities. A self-learning program will no longer be merely a tool in human hands. There are already precedents where machines have passed the Turing test (<u>Gadzhiev</u>, <u>2018</u>). Theoretically, there is a potential scenario where AI could escape human control. (<u>Vannakh</u>, 2014)

Such prospects condition a self-evident legal task: defining a human being. Fundamental international (e.g., the Universal Declaration of Human Rights) and national legal frameworks do not provide such a definition. The nature of humanity is assumed to be self-evident. However, with the advancement of AI, this self-evidence is disappearing. If one defines a human by the presence of thoughts or the ability to perform certain operations, then an artificially created intelligent mechanism should also be classified as such. Some representatives of postmodern philosophy advocate for this, proposing to expand the boundaries of rights to include machines possessing human-like intelligence. Others suggest developing parallel legal frameworks for humans and AI systems. (Kirillova et al., 2021; Petrov, 2004)

The position that recognizes AI as a special type of personality ("electronic personality") has gained relatively widespread acceptance in futurological literature. However, this approach introduces another issue, the legal delineation between humans and AI. During discussions, it becomes evident that there is no conventional legal definition for AI and humans. (Morkhat, 2018; Ponkin & Redkina, 2018)

The most comprehensive set of arguments explaining why AI cannot, from a legal standpoint, possess the rights held by humans was presented by L.B. Solum. The first argument is based on the characteristic of being born as applied to humans. Solum referred to such a characteristic in the U.S. Constitution. AI is created, not born, which, within this logic, precludes its classification as human. The second group of arguments focuses on the fact that AI lacks feelings, will, and consciousness and has no nationality, which are essential characteristics of a person. Even with advanced intellectual skills, AI lacks self-awareness. Finally, the third group of arguments emphasises that AI inherently belongs to an owner, whereas the human mind belongs to no one.

Currently, Russian legislation does not contain legal norms regulating AI activity. However, there are initial steps toward establishing such regulations in the legislative framework. The concept of AI is defined in Presidential Decree No. 490 of the Russian Federation (October 10, 2019) "On the Development of Artificial Intelligence in the Russian Federation" (together with the "National Strategy for the Development of Artificial Intelligence for the Period up to 2030"). According to this Decree, AI is understood as a set of technological solutions that enable the imitation of human cognitive functions (including self-learning and problem-solving without a pre-defined algorithm) and achieve results comparable, at least, to those of human intellectual activity when performing specific tasks. These technological solutions include information and communication infrastructure, software (including those employing machine learning methods), and processes and services for data processing and problem-solving.

From this definition, the following essential characteristics can be identified: AI is a set of technological solutions that enable imitating human cognitive functions (including self-learning and problem-solving without a predefined algorithm). The results of AI must be at least comparable to the outcomes of human intellectual activity.

As mentioned earlier, the legal status of AI is currently undefined in Russian legislation. However, there are several prevailing positions on this matter: AI as a subject of law, comparable in substance to a natural person, with some proposals advocating for the introduction of a separate legal status of an electronic person; AI as an object of law, which should be equated to animals in legal terms, categorising it as property; and AI as merely a technical tool.

European Parliament Resolution No. 2020 of 2015 on intellectual property rights for the development of AI technologies distinguishes between two types of works: those created by a human with the assistance of AI and those created autonomously by AI. However, the latter type of work is currently not protected by copyright. Moreover, the Resolution emphasises a negative stance on granting legal personality to AI, citing concerns over the potential adverse impact on fostering human creativity.

2. The necessity of defining the status of AI is primarily related to the institution of accountability.

The need to determine the status of AI is primarily linked to holding it accountable. This is not just about punitive measures, but also about creating safe conditions for interaction between AI and human beings, including creating, using, and disposing of intellectual property. When considering the issue of responsibility, it is worth mentioning that when digital technologies are used for illegal activities by a human, the responsible party is clear. However, if AI commits an action due to self-development or malfunction, the clarity of responsibility disappears. When considering the accountability of AI, the question of its legal subjectivity inevitably arises. (Bagdasaryan, 2020; Solaiman, 2017)

It is unclear what types of responsibility should be provided for AI. Specific questions also arise regarding the subject of responsibility (for example, responsibility for medical errors). In this regard, the next question concerns the right of doctors to delegate their functions to AI (Drozdova et al., 2019; Scherer, 2016). When considering the moral and ethical aspects of granting legal personality to AI, it is necessary to take into account all potential risks and consequences associated with the possible equality of humans and AI. The essence of the issue lies not in the reduction of job opportunities for ordinary people, but in far more serious consequences.

Since AI is devoid of biological processes, emotions, and values, including spiritual ones, it may become a dangerous autonomous weapon based on cognitive functions, excluding moral, ethical, and spiritual considerations of its actions. However, failing to grant legal personality to AI and not addressing the issue of holding AI accountable for its actions could also have negative and even terrifying consequences. AI could become a dangerous weapon in the hands of humans. By defining the status of AI and assigning it a certain level of responsibility (if recognised as a subject of legal relations), there is a significant risk of human abuse, manifesting in the shifting of responsibility onto AI.

Therefore, considering all consequences and risks, the answer to the question of whether AI should be granted legal personality is likely negative.

However, lawmakers must establish detailed legal regulations for AI activities, thoroughly examining accountability for AI's actions before its capabilities develop significantly.

Adopting a series of regulatory legal acts at various levels aimed at regulating public relations in AI technologies raises the question of the role of existing legal norms within the Russian law system. Are these norms part of a specific branch of law or an independent branch of law? In response, it can be concluded that the law of AI is an institution within information law, representing a set of legal norms aimed at regulating public relations related to AI.

Adopting a series of regulatory legal acts at various levels indicates active work by legislative bodies in this direction. In the last two years, Russia has adopted the following documents: the previously mentioned Decree of the President of the Russian Federation No. 490 of October 10, 2019 "On the Development of Artificial Intelligence in the Russian Federation" (along with the "National Strategy for the Development of Artificial Intelligence until 2030"); Federal Law No. 123-FZ (April 24, 2020) "On the Conduct of an Experiment for Special Regulation to Create Conditions Necessary for the Development and Implementation of Artificial Intelligence Technologies in the Constituent Entity of the Russian Federation - the Federal City of Moscow" and amendments to Article 6 and Article 10 of the Federal Law "On Personal Data"; Order of the Government of the Russian Federation No. 2129-r (August 19, 2020) "On Approving the Concept for the Development of Regulation in the Field of Artificial Intelligence and Robotics Technologies Until 2024"; and the list of instructions approved by the President of the Russian Federation No. Pr-2242 (December 31, 2020), "List of Instructions Following the Conference on Artificial Intelligence."

Since the listed legal acts aim to regulate a specific area of public relations (the relations in the field of AI), it becomes clear that there is a need to define the role of these legal norms within the Russian law system. Do these norms represent the institute of a specific branch of law, or do they form an independent branch of law?

First, it is necessary to decide on terms. We share the viewpoint of Mishina (2020), who proposed introducing the term "artificial intelligence law". According to this author, this term, unlike such terms as "robot law", "robotics law", or "robolaw", is better because it more fully reflects the nature and essence of the public relations that form its subject. Thus, AI law can be defined as the set of legal norms regulating public relations related to AI.

Second, the approach common to the theory of state and law, which distinguishes a normative array as a separate branch of law based on two main criteria (subject and method of legal regulation) seems incomplete. Any method of legal regulation consists of three main ways of influencing human behaviour: permission, prohibition, and obligation. Moreover, if we assume that each branch of law has its method of legal regulation, it would be difficult to identify enough methods and ways of influencing public relations and their subjects (considering the dynamics of the emergence of many new branches of law).

The primary factor in the emergence of a new branch of law is the subject, i.e., homogeneous social relations that require legal regulation. The viewpoint of Professor Pobedkin (2020, p. 68), who argues that "the most fundamental characteristic determining the specifics of criminal procedural law is the method of criminal procedural regulation", is debatable. According to Pobedkin, the subject is highly flexible within the system of procedural branches and is "secondary for the self-identification of a branch of law" (Pobedkin, 2020, p. 68). The method of legal regulation can indeed be considered for the "self-identification" of a branch of law, but this is possible only when a particular sphere of public relations has gone beyond the stage of differentiation and the relevant normative array has successfully undergone the stage of integration and firmly established its place within the legal system as a branch of law.

The recognition of AI law as an independent branch of law requires the differentiation of homogeneous public relations within the broader array of public relations, the integration of norms aimed at regulating these relations into the legal system, and the development of techniques and methods through which public relations in the field of AI will be regulated.

Third, it is emphasized that a branch of law regulates public relations, while a legal institution regulates a specific form of public relations (Smirnov, 2022). Under a systems theory, the concepts of type and form relate to each other as higher and lower-order systems. If we assume that the law of AI is an independent branch of law, the question arises about the existence of legal institutions within this branch. However, determining the legal institutions that make up the branch of AI law appears arbitrary or even incorrect. Any proposed institution would intersect with the domain of public relations, regulated by other branches of law.

In this context, AI law should be considered a legal institution within the framework of information law. Information law emerged much earlier than the law of AI. In addition to the primary criteria for distinguishing this branch (subject, method, systemic features), information law has already gone beyond

the stage of expanding its regulatory scope. Public relations regulated during the initial stages of adopting legal acts in the information field have significantly expanded and now encompass nearly all areas of society. Apart from the guiding principles and the relevant body of law, legal responsibility within information and information technology has been established, which is also crucial for developing this branch of law.

The analysis of the previously effective scientific speciality passport "12.00.13 – Information Law" offers another argument in favour of recognising AI law as an institution of information law. The research directions in this speciality included: information environment and information technologies; legal provision of information security; and information legal culture. These are areas where AI can be applied. This specialty passport has lost its validity, and individual aspects of AI, information technologies, information law, etc. are now addressed in the scientific specialty passport "5.1.3 - Private Law (Civil Sciences)", with a research focus on the private law aspects of applying biotechnology, information (digital) technologies, including AI. In the passport for scientific speciality "5.1.5 - International Law Sciences", research focuses on international legal cooperation in the scientific and technical sphere, including international law, new technologies (digital economy, AI, biotechnology, etc.), and international information law. This suggests that the current nomenclature of scientific specialities somewhat dilutes the field of information law and the institution of AI across separate specialities, which is not the best approach. Thus, AI law is an institute of information law, representing a set of legal norms regulating public relations related to AI.

The following relevant concepts can be identified to resolve the issue of ownership rights to the results of intellectual activity created with the factual or legal involvement of an AI unit or entirely autonomously by the AI unit: machine-centric concept, hybrid authorship concept, work-for-hire concept, anthropocentric concept, "vanishing" (zero) authorship concept, and contamination concept. According to J. Kaur, with progress in AI, the idea of granting copyright (in one form or another) to machines is justified. However, the laws regulating creative innovation still do not consider the possibility of protecting the values of non-human (non-anthropocentric) creativity. The law encourages creative work rather than hinders it by restricting access to creative capital. (Kaur, 2016)

Ponkin and Redkina (2018) classify all the intellectual deliverables created using AI as follows:

1). Intellectual property objects created by AI under the direct supervision of a human and/or with a significant contribution from a human (AI merely facilitates the process of creation by a human, but also makes a meaningful contribution to the process);

2). Intellectual property objects created autonomously by AI, independent of human involvement (in these cases, the human contribution may consist in selecting the generated works based on criteria of their value and whether they are worthy of subsequent distribution, especially relevant for musical works, or the human may not participate in such selection); a). Intellectual property objects independently created by AI, designed explicitly for producing such works; b). Intellectual property objects are independently created by AI and initially intended for other purposes, but they have mastered the ideas and technologies of creativity and are engaged in creative work.

From these perspectives, the following key concepts are highlighted in resolving the issue of the holder of rights to intellectual deliverables produced with significant factual or legal involvement of the AI unit or produced autonomously by the AI unit: Machine-centric concept (the AI unit as a fullfledged author of the works it creates, i.e., intellectual deliverables); Hybrid authorship concept (the AI unit as a co-author of a human in the creation of intellectual deliverables); Work-for-hire concept (the AI unit as an employee creating results of intellectual activity, presumed and positioned as a work-forhire); Anthropocentric concept (the AI unit simply as a tool of the human in creating intellectual works); Vanishing (zero) authorship concept; Contaminated concept, reflecting complex intersectional (overlapping) situations of these concepts (in various combinations and with different weights). Without these concepts, it is impossible to resolve the meta-problem of determining the role and significance of the AI unit in the context of intellectual property law.

D. DISCUSSION

The study of the relationship between AI and legal consciousness has increasingly become a focus of academic research. Its relevance is driven by the rapid integration of digital technologies into all aspects of social life. While analysing the development of AI in the legal sphere, particular interest is drawn to the experience of China as discussed in the scientific work by E.Kh. Gubaidullina and I.A. Gavrilov. China has been actively using the Smart Court system. This system leverages the technological capabilities of AI in legal proceedings. The article mentions the Hangzhou Internet Court, which handles civil cases related to online data dissemination, including copyright disputes, disputes over the invalidation of transactions conducted on online platforms, etc. This court conducts all judicial procedures online. (<u>Gubaidullina & Gavrilov</u>, <u>2023</u>)

A logical question arises: to what extent can such an experience be applied to the Russian legal system, and are its participants prepared to use AI in areas where human involvement has traditionally been unavoidable? In addressing this question, we inevitably encounter the concepts of law, legal consciousness (<u>Kubrak, 2022</u>), the nature of AI and humanity, and their existence in the so-called VUCA world characterised by four elements: volatility, uncertainty, complexity, and ambiguity.

E. CONCLUSIONS

Given the research topic, AI refers to the totality of objective knowledge about AI's essence, form, and functioning and cases and experiments with this knowledge. A specific use of such technology, an applied or experimental technological solution characterised by rationality and autonomy, is called an AI system. AI can and should be understood in a multifaceted manner: 1) as an applied computer system; 2) as a field of fundamental scientific knowledge; 3) as an object of scientific research; 4) as a method for solving scientific and other problems; 5) as a characteristic of a technological system.

The main criteria for operating an AI system are rationality (instrumental and factual) and autonomy (energetic and informational). Artificial neural networks, as the primary form of implementing AI, can be viewed as software or hardware systems consisting of simple computational units (artificial neurons, data processors) capable of exchanging signals with one another. With a sufficiently developed structure and well-tuned interaction logic, these networks can solve complex tasks using machine learning. The technological features of artificial neural networks, distinguishing them from conventional programs, lie in the simplicity of each network element (the artificial neuron) and their interchangeability and interconnectedness.

Even if not entirely accurate, new concepts and theories always contain specific tools that can be beneficially utilized. This is the logic behind the development of scientific knowledge. AI can be understood in ways different from those described in this article. However, the proposed model is significant for contemporary legal theory and comprehensive research in cognitive science and machine learning, creating opportunities for further theoretical-legal and interdisciplinary studies. The future of AI is unpredictable. Nonetheless, developing future-oriented models and conducting experimental research is essential to hasten its arrival and ensure it evolves favourably for science and practice.

REFERENCES:

- Bagdasaryan, V. E. (2020). Cognitive matrices of manipulation technologies in wars and revolutions of a new type. Vestnik Moskovskogo gosudarstvennogo oblastnogo universiteta. Seriya: Istoriya i politicheskie nauki. No. 1, 8-23.
- Decree of the President of the Russian Federation No. 490. (October 10, 2019). "On the development of artificial intelligence in the Russian Federation" (together with the "National Strategy for the development of artificial intelligence for the period up to 2030"). President of the Russian Federation. Retrieved from: https://www.kremlin.ru/acts/bank/44731
- Drozdova, A. M., Tereshchenko, E. A., Ivanchenko, E. A., Dolgopolov, K. A., & Vorotilina, T. V. (2019). Conciencia legal personal en la sociedad moderna de la información. *Revista Dilemas Contemporáneos: Educación, Política y Valores*. Vol. 7, No. Especial, 109. https://doi.org/10.46377/dilemas.v30i1.1055
- Drozdova, A. M., Vorotilina, T. V., & Zhuzhgov, I. V. (2022). Contemporary information society and higher legal education: Formation of a professional and a personality of prospective lawyer. In E. G. Popkova, & B. S. Sergi (Eds.), *Economic issues of social entrepreneurship* (pp. 457-467). Cham: Palgrave Macmillan. https://doi.org/10.1007/978-3-030-77291-8_42
- Federal Law No. 123-FZ. (April 24, 2020). On conducting an experiment to establish special regulation in order to create the necessary conditions for the development and implementation of artificial intelligence technologies in the constituent entity of the Russian Federation (the federal city of Moscow) and amending Article 6 and Article 10 of the Federal Law "On personal data". Retrieved from: https://rg.ru/documents/2020/04/28/tehnologii-dok.html
- Gadzhiev, G. A. (2018). Whether the robot-agent is a person? (Search of legal forms for the regulation of digital economy). *Journal of Russian Law*. No. 1, 15-30. https://doi.org/10.12737/art_2018_1_2
- Gubaidullina, E. Kh., & Gavrilov, I. A. (2023). Iskusstvennyi intellekt v tsivilisticheskom sudoproizvodstve Kitaya [Artificial intelligence in the

Chinese civil litigation]. In *Sovremennye strategii i tsifrovye transformatsii* ustoichivogo razvitiya obshchestva, obrazovaniya i nauki: Proceedings of the 8th International scientific conference, February 10, 2023, Moscow, Russia (pp. 59-63). Moscow: Izdatelstvo "Alef".

- Instruction of the President of the Russian Federation No. Pr-2242. (December 31, 2020). List of instructions following the conference on artificial intelligence. Retrieved May 30, 2024 from <u>http://www.kremlin.ru/acts/assignments/orders/64859/print</u>
- Kamyshansky, V. P., Rudenko, E. Y., Solovyev, A. M., Kolomiets, E. A., & Dudchenko, A. V. (2019). Electronic commerce in the modern economy: Legal aspect. In E. Popkova, & V. Ostrovskaya (Eds.), *Perspectives on the use of new information and communication technology (ICT) in the modern economy* (pp. 904-910). Cham: Springer. https://doi.org/10.1007/978-3-319-90835-9_101
- Kaur, J. (2016). Intellectual property law in times of artificial intelligence: Is it a misnomer to consider the Bot a possible IP right holder? *Journal of Legal Studies and Research*. Vol. 2, No. 6, 45-47.
- Kirillova, E. A., Zulfugarzade, T. E., Blinkov, O. E., Serova, O. A., & Mikhaylova, I. A. (2021). Prospects for developing the legal regulation of digital platforms. *Jurídicas CUC*. Vol. 18, No. 1, 35-52. <u>https://doi.org/10.17981/juridcuc.18.1.2022.02</u>
- Kubrak, V. (2022). Limitations of the scope of exclusive rights in relation to results created using artificial intelligence technologies. *Legal Bulletin*. Vol. 3, No. 7, 121-129. <u>https://doi.org/10.5281/zenodo.11189432</u>
- Levit, D. (2024). The legal regime of the results created by artificial intelligence technologies. *Legal Bulletin*. Vol. 2, No. 9, 108-119. <u>https://doi.org/10.5281/zenodo.12683332</u>
- Malginova, Y. N. (2021). Osnovnyye napravleniya tsifrovoy ekonomiki v kontekste gosudarstvennogo upravleniya i administrirovaniya [The main directions of the digital economy in the context of administration and public administration]. NB: Administrativnoye pravo i praktika administrirovaniya. No. 4, 9-14. https://doi.org/10.7256/2306-9945.2023.4.68829
- Mishina, N. V. (2020). Artificial intelligence law as a new area of legal regulation or a new branch of law. *Evraziiskii soyuz uchenykh*. No. 3-5(72), 62-65.

- Morkhat, P. M. (2018). *Pravosubektnost yunitov iskusstvennogo intellekta: grazhdansko-pravovoe issledovanie* [Legal personality of artificial intelligence units: civil law study]. Moscow: Yuniti-Dana, 113 p.
- Order of the Government of the Russian Federation No. 2129-r. (August 19, 2020). On approval of the Concept for the development of regulation of relations in the field of artificial intelligence and robotics technologies until 2024. Government of the Russian Federation. Retrieved from: https://government.ru/docs/all/129505/.
- Petrov, D. E. (2004). Otrasl prava [Legal branch]. Saratov: SGAP, 192 p.
- Pobedkin, A. V. (2020). Criteria for the legality of applying the analogy in criminal proceedings. *Trudy Akademii upravleniya MVD Rossii*. No. 4, 66-77.
- Ponkin, I. V., & Redkina, A. I. (2018). Iskusstvennyi intellekt i pravo intellektualnoi sobstvennosti [Artificial intelligence and intellectual property law]. Intellektualnaya sobstvennost. Avtorskoe pravo i smezhnye prava. No. 2, 35-44.
- Scherer, M. U. (2016). Regulating artificial intelligence systems: Risks, challenges, competencies, and strategies. *Harvard Journal of Law & Technology*. Vol. 29, No. 2, 353-400.
- Smirnov, D. A. (2022). K voprosu o ponyatii tsifrovykh finansovykh aktivov v usloviyakh sovremennykh realii [On the concept of digital financial assets in the context of modern realities]. In D. A. Smirnov, & A. A. Biryukov (Eds.), Lichnost, obshchestvo, gosudarstvo v usloviyakh tsifrovizatsii: Proceedings of the 3rd International scientific conference (pp. 201-205). Stavropol: Izd-vo SKFU.
- Solaiman, S. M. (2017). Legal personality of robots, corporations, idols and chimpanzees: A quest for legitimacy. *Artificial Intelligence and Law*. Vol. 25, No. 2, 155-179. https://doi.org/10.1007/s10506-016-9192-3
- Sultonova, L., Vasyukov, V., & Kirillova, E. (2023). Concepts of legal personality of artificial intelligence. *Lex Humana*. Vol. 15, No. 3, 283-295.
- Vannakh, M. (2014, June 9). Kak odessit Gustman proshel test Tyuringa [How Odessan Goostman passed the Turing test?]. Kompyuterra. Retrieved May 10, 2024 from <u>https://www.computerra.ru/182183/kak-odessit-gustmanproshel-test-tyuringa</u>