FEATURES OF USING ARTIFICIAL INTELLIGENCE TECHNOLOGIES IN JUDICIAL ACTIVITY

ZARINA ERBUTAEVA[1]

Post-graduate student of the Department of Civil Law and Process and Private International Law of the Law Institute of the Peoples' Friendship University of Russia named after Patrice Lumumba (RUDN University), 117198, г, 6 Miklukho-Maklaya str., Moscow, 117198

1142220178@pfur.ru , erbutaeva.zari@yandex.ru [1]

Abstract *– this article is devoted to topical issues of the use of artificial intelligence in judicial activity, the study of public relations that have emerged as a result of the transformation of society with rapid digitalization. The article presents the existing approaches to the interpretation of the concept of "artificial intelligence" in relation to the concepts of "natural intelligence", "robot" and "superintelligence". The approaches to the introduction of artificial intelligence in judicial proceedings are being investigated. The author reveals the main types, features and legal nature of artificial intelligence, examines the areas of application of artificial intelligence technologies in judicial activity, identifies possible problems and challenges that may arise when introducing artificial intelligence into judicial activity. The main problems of legal regulation of the use of artificial intelligence technologies in courts are described. The article presents the opinions of various researchers on existing problems, and suggests possible solutions. The author notes that the introduction of artificial intelligence technologies into judicial activities, of course, helps to optimize some routine processes in courts and improve the organization of the court staff as a whole, opens up new opportunities for "predictive justice." At the same time, the author emphasizes that the use of artificial intelligence technologies in court requires the development of an appropriate standard that will outline clear boundaries for the use of this technology, in such a way as to take into account compliance with the principles of justice, as well as the constitutional rights and freedoms of citizens.*

Keywords: *artificial intelligence, digital disputes, justice, digitalization of judicial proceedings, principles of administration of justice, artificial intelligence in courts;*

INTRODUCTION

The ubiquitous transition from Industry 4.0. to Industry 5.0. has led most countries of the world to make strategic decisions on digitalization of society. Over the past eight years, various countries have taken active steps to promote the development of digitalization and digital technologies, including artificial intelligence.

By Decree of the President of the Russian Federation No. 203 of 09.05.2017, the Information Society Development Strategy 2017-2030 has been adopted and is being implemented in the Russian Federation[1]. The Strategy defines the goals, objectives and measures for implementing the domestic and foreign policy of the Russian Federation in the field of information and communication technologies, aimed at developing the information society, forming a national digital economy, ensuring national interests and implementing strategic national priorities[2].

Today, artificial intelligence is actively used around the world in almost all areas of human activity, including in judicial activities. Digitalization of the judicial system has become one of the main state tasks. The introduction of artificial intelligence in judicial activity implies a transformation of

[1] Указ Президента РФ от 09.05.2017 N203 «О Стратегии развития информационного общества в Российской Федерации на 2017 - 2030 годы» // Собрание законодательства РФ, 2017. - N20. - Ст. 2901.

[2] Там же.

traditional approaches to justice, as well as a change in interaction between participants in the process.

1. Methodological basis of scientific research.

General scientific methods of cognition

To conduct the research, general scientific methods of cognition were used, namely: analysis and synthesis, induction and deduction, the method of system-structural analysis, the functional method, the formal logical method, as well as the dialectical method, where the object of research was studied from the point of view of the laws of dialectics. The introduction of artificial intelligence into the dispute resolution process is undoubtedly the result of the development and adaptation of traditional dispute resolution methods to rapidly developing social relations, new technologies and new forms of human interaction. Identifying the contradictions that caused the evolution of traditional dispute resolution methods and led to the transition to other forms of administration of justice is the key to understanding the object of research. That is why, for a complete and comprehensive study of the stated topic, the author turned to the laws of dialectics (the unity and struggle of opposites, the transition of quantity into quality, the negation of negation), which are the driving force behind the development of the material world and the forms and ways of its cognition. In addition, in order to identify possible directions for the most optimal implementation of artificial intelligence in the process of settling private law disputes in the Russian Federation, it is necessary, using dialectical methods of cognition, to comprehensively study innovative ways that already exist around the world to ensure a fast and accessible dispute resolution procedure.

Special legal methods

Special legal methods were of key importance in the study: the method of formal legal analysis, the method of comparative law (comparative), the method of legal modeling.

To identify the main positive and negative aspects of the use of artificial intelligence in the procedure for resolving private law disputes for the first time, the comparative legal method carefully analyzes the experience of foreign countries in using Internet platforms for dispute resolution, as well as Internet courts in China and other countries

Using the comparative legal method, we have studied the positive experience of how various countries around the world resolve the existing difficulties in dealing with digital disputes in court proceedings, the most obvious of which are: the problem of submitting evidence to the court in digital disputes, as well as difficulties in executing a court decision on these disputes, and offer practical recommendations for borrowing this experience. into the Russian reality.

2. The concept and essence of artificial intelligence

Intelligence is a property of the human body that is expressed in the ability to adapt to external factors, perceiving and processing external data in such a way as to solve various tasks, adapt to changing environmental conditions, accumulate experience and apply it when interacting with the environment. It is intelligence that provides a person with the opportunity to create something new, thereby realizing a creative function.

Among the nine million living organisms inhabiting the planet, only humans have developed intelligence. It was the intellectual activity that led to biological changes through artificial selection that helped humans become the dominant species on the planet.

In the 21st century, human intelligence has reached the level at which the implementation of a creative function has resulted in the creation of artificial intelligence.

The concept of "artificial intelligence" is interpreted differently by researchers of various scientific specialties[3].

[3] Frolova E.E., Ermakova E.P. (2022) Utilizing Artificial Intelligence in Legal Practice. In: Inshakova A.O., Frolova E.E. (eds) Smart Technologies for the Digitisation of Industry: Entrepreneurial Environment. Smart Innovation, Systems and Technologies, vol 254. Pages 17-27. Springer, Singapore. https://doi.org/10.1007/978-981-16-4621-8_2

Scientists in the field of information technology believe that artificial intelligence is the subject of computer science research and is interpreted as an information technology that makes it possible to make reasonable judgments using computer systems and other special devices[4].

Legal scientists interpret artificial intelligence as a fully or partially autonomous, self-organizing computer-hardware-software system, endowed with the ability to learn, accumulate experience, and make decisions independently[5].

Not every computer and hardware system is equipped with artificial intelligence. So, at the initial stage of development, robotics was not endowed with artificial intelligence; machines operated only according to pre-set algorithms.

Artificial intelligence is characterized precisely by the ability of technical and software complexes to implement a creative function, that is, to provide the ability to create something new.

Such software packages consist of the following elements:

- a data set is an array of software tools that allow you to store, transform, and research information. Examples of tasks that allow you to accumulate experience. Such tasks can be presented in various forms – in the form of text, photos, audio, and soon.
- algorithm / mathematical model-is a block of code that, using its built-in basic functions, is able to find solutions to certain problems, a program that determines the sequence of actions when solving tasks. An example of the algorithm is linear regression. Using linear regression, the computer is able to automatically determine the linear relationship between two groups of data, revealing a direct proportionality between them.
- intelligent interface (a way of human-machine interaction).

Artificial intelligence is primarily a technological solution. At the initial stages of the development of robotics, robotsы could only perform specific tasks, while doing it exclusively in the same way, using the solution already included in the program.

Modern machines equipped with artificial intelligence are able to develop independent ways to solve problems, while each time improving, accumulating experience from previous solutions. As an example of artificial intelligence, we can cite supercomputers created by IBM, some of which are now used in business processes, financial services, and retail to generate new ideas and improve the quality of customer service[6] .

The main difference between artificial intelligence and a regular robot is the presence of thinking.

The concepts of thinking and mental activity are contained in " GOST R 43.0.5-2009. National standard of the Russian Federation. Information support of equipment and operator activity. Information exchange processes in technical activities. General Provisions" (approved and put into effect by Rostekhregulirovaniya Order No. 959-st of 15.12.2009) (hereinafter referred to as GOST R 43.0.5-2009).

So, according to GOST R 43.0.5-2009:

- thinking is the psychophysiological processes of the operator's brain, including those related to internal speech, memory, and functional mental sensory states, which ensure the implementation of mental activity with the initiation of naturally intellectualized, hybrid intellectualized, artificially intellectualized human–informational interactions that affect the emergence and functioning of information exchange processes, and the conduct of information and intellectual activities corresponding to them. activities;

[4] Osipov G.S. Artificial intelligence: the state of research and a look into the future//Artificial Intelligence news. 2001. N 1. pp. 3-13.

[5] Morkhat P.M. Artificial intelligence: a legal view. Moscow: Buki Vedi, 2017. 257 p.

[6] IBM Watson – watsonx// The official website of IBM Watson - Text: electronic. URL: https://www.ibm.com/watson (Date of request: 22.12.2024).

- mental activity is the information and intellectual activity of the operator's thinking, aimed at developing ideas, concepts, judgments, conclusions, semantic cognitive reflections (semantics of thinking), conducting dissident, comparative, creative thinking activities[7].

Artificial intelligence, as a result of the rapid digitalization of society, as well as a number of other phenomena, has a contradictory legal nature. At the same time, technologies that are somehow developing as artificial intelligence develops today have found their application in almost all areas of human life and activity.[8]

2.1. The concept of artificial intelligence in Russian law

In Russia, the term "artificial intelligence" was first used in the interpretation of one of the priority areas of the country's development in paragraph 20 of Presidential Decree No. 642 of December 1, 2016 "On the Strategy of Scientific and Technological Development of the Russian Federation"[9] and paragraph 12 of Presidential Decree No. 203 of May 9, 2017 "On the Strategy for the Development of the Information Society in the Russian Federation for 2017-2030"[10].

To date, there is no single concept of artificial intelligence developed by the doctrine or the legislator.

The normative interpretation of the concept of "artificial intelligence" in Russian law is enshrined in Decree of the President of the Russian Federation No. 490 of October 10, 2019 "On the Development of artificial Intelligence in the Russian Federation", where artificial intelligence is interpreted as "a set of technological solutions that allows you to simulate human cognitive functions (including self-learning and search for solutions without a pre-defined algorithm) and when performing specific tasks, the results are comparable, at least, with the results of human intellectual activity. The complex of technological solutions includes information and communication infrastructure, software (including those that use machine learning methods), processes and services for data processing and solution search[11]."

Subsequently, the concept of artificial intelligence, which was fixed in 2019, migrated to Federal Law No. 123-FZ of 24.04.2020 "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 subject of the Russian Federation - the Federal city of Moscow and amending Articles 6 and 10 of the Federal Law" On personal data" (hereinafter referred to as "Federal Law No. 123 of 24.04.2020")[12].

Some Russian lawyers believe that the lawmaker's definition of artificial intelligence is extremely vague and inaccurate. So, the phrase "imitation of human cognitive functions" is contradictory in itself - in the 19th century, such an imitation was considered the ability of a machine to keep an ordinary account. In addition, the definition mentions the ability of the machine to self-learn and the ability to solve problems without an appropriate algorithm, but the question arises as to what is

---

[7] ГОСТ Р 43.0.5-2009. Национальный стандарт Российской Федерации. Информационное обеспечение техники и операторской деятельности. Процессы информационно-обменные в технической деятельности. Общие положения" (утв. и введен в действие Приказом Ростехрегулирования от 15.12.2009 N 959-ст)

[8] Ermakova, E.P., Erbutaeva, Z.K. (2023). New Forms of Dispute Resolution in the Russian Federation as a Reflection of Innovation in Law Enforcement: Platform Justice. In: Popkova, E.G. (eds) Sustainable Development Risks and Risk Management. Advances in Science, Technology & Innovation. Springer, Cham. https://doi.org/10.1007/978-3-031-34256-1_28

[9] Указ Президента РФ от 1 декабря 2016 г. N 642 "О Стратегии научно-технологического развития Российской Федерации" // СПС "КонсультантПлюс".

[10] Указ Президента РФ от 9 мая 2017 г. N 203 "О Стратегии развития информационного общества в Российской Федерации на 2017 - 2030 годы" // СПС "КонсультантПлюс".

[11] Указ Президента РФ от 10.10.2019 N 490 «О развитии искусственного интеллекта в Российской Федерации» (вместе с "Национальной стратегией развития искусственного интеллекта на период до 2030 года")»//Собрание законодательства РФ, 14.10.2019, N 41, ст. 5700;

[12] Федеральный закон от 24.04.2020 N 123-ФЗ "О проведении эксперимента по установлению специального регулирования в целях создания необходимых условий для разработки и внедрения технологий искусственного интеллекта в субъекте Российской Федерации - городе федерального значения Москве и внесении изменений в статьи 6 и 10 Федерального закона «О персональных данных»// «Российская газета», N 92, 28.04.2020.

considered such self-learning, provided that there is also no legal interpretation of the term "self-learning".

Other lawyers believe that the definition of artificial intelligence is specifically formulated by the legislator in such a way as to cover the widest range of activities and not draw a strict framework for future activities related to the use of artificial intelligence.

The definition of artificial intelligence provided by the legislator allows us to distinguish the following features:

- First, artificial intelligence is a "set of technological solutions", and not a single specific technology.
- secondly, artificial intelligence has the ability to self-learn, which cannot be planned in advance by integrating the appropriate algorithms of actions;
- Third, it seems that the results of artificial intelligence activities should be more perfect than the results of human intellectual activity, since the results of human intellectual activity are the minimum threshold for the results of artificial intelligence activities.

It is worth agreeing with researchers who note that the normative definition of the term "artificial intelligence" is clearly technological in nature and does not reflect existing legal problems. It seems that the concept of artificial intelligence, formulated on the basis of the description of its technical features in jurisprudence, is useless, because it does not have a special impact on legal regulation[13].

2.2. The concept of artificial intelligence in the United States

The most detailed concept of artificial intelligence in the United States is presented in the draft law " On the Fundamental understanding of the Applicability and realistic evolution of Artificial Intelligence "(the Law on the Future of Artificial Intelligence)[14], which was introduced in the US Senate in 2017.

According to article 2 of the Law on the Future of Artificial Intelligence, artificial intelligence is interpreted as:

(A) Any artificial systems that perform tasks in changing and unpredictable circumstances, without significant human control, or that can learn from their experience and improve their performance. Such systems may be developed in computer software, physical hardware, or other contexts that are not yet considered. They can solve tasks that require human perception, cognition, planning, learning, communication, or physical actions. In general, the more human-like a system is in the context of its tasks, the more we can say that it uses artificial intelligence.

(B) Systems that think like humans, such as ccand systems that think like humans, such as cognitive architectures and neural networks.

(C) Systems that act like humans, such as systems that can pass a Turing test or other comparable test through natural language processing, knowledge representation, automatic reasoning, and learning.

(D) A set of methods, including machine learning, that aim to approximate some cognitive task.

(E) Systems that operate rationally, such as intelligent software agents and embedded robots that achieve goals through perception, planning, reasoning, learning, communication, decision-making, and action.

3. Types of artificial intelligence: weak and strong artificial intelligence, superintelligence

Depending on the complexity of the tasks being solved, proximity to human intelligence and human abilities, artificial intelligence is divided into the following types:

1. Weak (explicable, limited*) Artificial Narrow Intelligence.*

[13] Spitsyn I.N., Tarasov I.N. The use of artificial intelligence in the administration of justice: theoretical aspects of legal regulation (problem statement) // Actual problems of Russian law. 2020. N 8. pp. 96-107.

[14]The official website of the U.S. Senate - Text: electronic. URL: .https://www.cantwell.senate.gov/imo/media/doc/The%20FUTURE%20of%20AI%20Act%20Introduction%20Text.pdf (Date of request: 22.12.2024).

Weak artificial intelligence is a technology that can only solve a specific type of problem. Such artificial intelligence is also called explicable, because it is designed so that a person watching from the outside can understand why in a particular situation artificial intelligence solved the problem in a specific way. Weak artificial intelligence relies on humans for its training and is not capable of self-learning.

Some researchers attribute the emergence of weak artificial intelligence to the initiation of the Advanced Research Projects Administration program by the US Department of Defense in 2018.

In Russia, weak artificial intelligence is successfully used in medicine, mechanical engineering, logistics and other fields of activity.

So, in 2020, Lobachevsky Nizhny Novgorod State University won the competition of scientific projects from the Ministry of Education and Science of the Russian Federation with the project "Reliable and logically transparent artificial intelligence: technology, verification and application in socially significant and infectious diseases". The main breakthrough of the project was the development of new ways to overcome two main problems of weak artificial intelligence: the problem of artificial intelligence reading mistakes made and the problem of explaining their solutions. In 2022, Plekhanov Russian University of Economics won the Russian Science Foundation project "Hybrid Decision Support Models based on Augmented Artificial Intelligence, Cognitive Modeling and fuzzy Logic in personalized medicine tasks", dedicated to the creation of a new generation of medical systems based on the use of explicable AI methods for нейросетейdeep learning neural networks in medical diagnostics tasks.

Examples of a weak type of artificial intelligence include programs that can simulate an opponent to play chess or checkers, algorithms for recognizing voice and text from an image, various chatbots and voice assistants, such as Alice (created by Yandex), Salyut (a system developed by Sber)[15].

2. Strong (general) artificial intelligence (*Artificial Narrow Intelligence*).

Strong artificial intelligence – provides an opportunity to create a set of technological tools that will be able to solve any tasks, regardless of their complexity.

By and large, strong artificial intelligence is a system that maximally duplicates the work of human intelligence, characterized, in this regard, by the ability to think, analyze and interpret accumulated knowledge[16].

However, as the researchers note, every year humanity is getting closer to creating a strong artificial intelligence.

So, some companies (OpenAI and DeepMind) have created artificial intelligence technologies that are capable of self-learning and solving some common tasks.

In view of the fact that strong artificial intelligence-in essence, it should be on the same level as human intelligence, it involves the implementation of a creative function, and therefore there are significant ethical and philosophical problems in the way of the formation of this type of artificial intelligence, problems of determining the essence of such AI, as well as security.

Today, no strong artificial intelligence has been created that can independently find solutions to multi-faceted, complex problems. According to the researchers ' forecasts, strong artificial intelligence will appear no earlier than 2040

3. Artificial Superintelligence.

This type of artificial intelligence is an intelligence that can surpass human intelligence, and this superiority should be manifested in all aspects.

Some researchers note that the transition of society to superintelligence can occur suddenly, this phenomenon is called a technological singularity. However, determining at least a hypothetical time frame for the emergence of superintelligence is still a subject of debate among scientists[17].

[15] Gorodnova N.V. Modeling the development and implementation of "weak" and "strong" artificial intelligence systems: socio-economic aspects // Issues of innovative economics. – 2022. – Том 12. – № 1. – С. 123–140. doi: 10.18334/vinec. 12.1.113717

[16] Там же.

[17] Vinge V. Singularity. Moscow: AST. – 2022. – 224 p.

4. Areas of possible application of artificial intelligence in judicial activity

It is impossible not to agree with the already firmly established opinion of the scientific community that leaders in the development of artificial intelligence will rule the world.

However, the rapid introduction of artificial intelligence technologies into everyday life requires a rapid transformation of social relations arising from the use of such technologies.

In this context, the proposals of the Supreme Court of the Russian Federation and the Council of Judges and the need to introduce the use of weak artificial intelligence in courts to automate at least some part of the process of administration of justice seem quite logical[18].

At the moment, in the context of a constant increase in the number of appeals to the court, and in this regard, the growing burden on the court staff, optimization of some routine processes in the courts is one of the main directions of development of the domestic judicial system. It seems that artificial intelligence technologies can act as a means of optimizing legal proceedings.

In the question of the possible limits of the introduction of artificial intelligence in the judicial process, the authors were divided into two groups:

- the first group of authors adheres **to a narrow approach**, according to which it is possible to use artificial intelligence for automating court records management and maintaining court statistics[19];
- the second group considers it possible to use artificial intelligence, including directly in the administration of justice, such **an approach** to the introduction of artificial intelligence in court proceedings is considered **broad**[20].

Having studied the existing scientific works devoted to different approaches to the introduction of artificial intelligence technologies in judicial proceedings, having studied the domestic experience of using artificial intelligence in the administration of justice, as well as the experience of foreign countries, we can identify a number of areas of possible application of artificial intelligence in judicial activities.

1. Using artificial intelligence to optimize court records management and organize data.

Today, weak artificial intelligence technologies are already used to automate and simplify some actions of the court apparatus. For example, the Supreme Court of India actively uses SUVAS software, which is able to recognize the text of procedural documents and translate them from English/French/Russian and other languages into local ones and vice versa.

Domestic developers are preparing for the final launch of the super service "Justice Online", which will also use artificial intelligence systems.

In the countries of Anglo-Saxon law, artificial intelligence is actively used to study a large number of judicial precedents and prepare appropriate recommendations as a result of such research.

Weak artificial intelligence technologies are objectively capable of processing and organizing a large amount of information faster than humans. At least physiological factors influence a person's work and concentration. Therefore, we believe that the introduction of artificial intelligence technologies in judicial activities to automate routine functions is simply necessary, as it will significantly relieve the already busy court apparatus.

---

[18] Speech by Chairman of the Council of Judges of the Russian Federation V.V. Momotov at the plenary session on the topic "Prospects for the use of artificial intelligence in the judicial system of the Russian Federation", Qatar// Official website of the Council of Judges of the Russian Federation http://www.ssrf.ru/news/lienta-novostiei/36912

[19] Poskryakov R.S. The use of artificial intelligence in judicial activity // Ogre-Online. 2019. N 16(137). URL: https://cyberleninka.ru/article/n/ispolzovanie-iskusstvennogo-intellekta-v-sudebnoy-deyatelnosti (date of request: 20.08.2023).

[20] Momotov V.V. Artificial intelligence in legal proceedings: status, prospects of use // Bulletin of the O.E. Kutafin University. 2021. N 5(81). P. 189; Andreev V.K., Laptev V.A., Chucha S.Y. Artificial intelligence in the electronic justice system in corporate disputes // Bulletin of St. Petersburg State University. Right. 2020. Vol. 11. N 1. P. 22.

2. The use of artificial intelligence for conducting analytical work and performing predictive analysis.

Among modern researchers, the concept of "predictive justice" and the possibility of its application by the courts has caused a heated discussion.

Predictive justice is the process of processing by artificial intelligence of the judicial practice that has developed in specific relationships in order to predict, as a result of the analysis, the decision on a specific case.

The probable decision presented by artificial intelligence as a result of the implementation of predictive justice can be used both by representatives of the parties to build a judicial strategy, and by courts to make decisions and ensure the principle of uniformity of judicial practice.

However, the decision presented by an artificial intelligence based on an analysis of the existing practice on a particular issue cannot always be considered fair and therefore, such a decision is only advisory in nature and requires verification by a human judge.

The People's Republic of China was among the first countries to apply predictive justice in court proceedings. So, in China, the Smart Court program operates, which, using artificial intelligence technologies, is able to analyze the array of established judicial practice in certain categories of cases and propose specific norms to be applied, as well as law enforcement practice.

In Kazakhstan, artificial intelligence technologies are used as tools that simplify the process of studying a large array of judicial acts. So in the republic there is a Service "Digital analytics of judicial practice". With the help of the service, judges can quickly select judicial practice that is suitable for a specific case under consideration, and get a probabilistic decision based on the analysis of selected judicial acts.

Predictive justice technologies are examples of weak artificial intelligence, which is able to use certain algorithms to perform specific actions with the existing database (in our case, with the existing law enforcement practice). The program can only issue a recommendation decision – the judge has the last word.

3. The use of artificial intelligence for the administration of justice.

There are still discussions among the scientific community about whether artificial intelligence can replace the judge.[21]

Taking into account the existing principles of the administration of justice, as well as the constitutional rights of citizens, today the prospect of using robots in the administration of justice seems possible only in a narrow range of cases, for example, in cases related to writ proceedings.

In 2024 of the Russian Federation, as an experiment, artificial intelligence was introduced in some courts of general jurisdiction of the Belgorod region. The experiment lasted for two months. The implementation goal was to automate the process of studying applications for issuing court orders and, as a result, create drafts of the court orders themselves. For two months, the artificial intelligence processed the relevant applications of the Federal Tax Service and prepared draft court orders, which were later transferred to the judge for making a final decision.

As a result of the experiment, the researchers identified the main advantages and disadvantages of artificial intelligence. The main advantage of implementing artificial intelligence was the saving of time spent on drafting a court order (the time spent writing a court order was reduced by 80%). However, not in all cases artificial intelligence was able to quickly recognize the content of the document submitted by the applicant[22].

[21] Speech by Chairman of the Council of Judges of the Russian Federation V.V. Momotov at a meeting of the D.N. Zamyatnin Expert Club on the topic "World justice: status, problems, prospects" // Council of Judges of the Russian Federation. URL: http://ssrf.ru/news/vystuplieniia-intierviu-publikatsii/44495 (date of request: 09.01.2023).

[22] Kabatskaya E.A. The use of artificial intelligence as a means of optimizing judicial activity // The Russian judge. 2023. N 10. C. 51 - 55. DOI: 10.18572/1812-3791-2023-10-51-55 (www.doi.org).

We believe that artificial intelligence will never be able to completely replace the judge. Judicial activity, by virtue of its essence, has a certain specificity, which is mostly built on a number of qualities inherent only to humans, which cannot be formalized and reproduced by a robot[23].
At the same time, the fragmented implementation of artificial intelligence in individual judicial processes can significantly simplify, speed up and automate the process of justice.

4. Using artificial intelligence to provide consulting services.
Artificial intelligence technologies are used by trial participants to get detailed comments on certain issues. Artificial intelligence's legal advice can be useful not only for individuals who are directly involved in the legal process, but also for any other citizens.
As an example of such technologies, you can cite chatbots of ships that are ready to answer users ' questions in real time.
In Russia, among arbitration courts, there is an "Arbiter Bot"-a self - learning technology that, based on already processed requests, is able to form an answer to a particular user's question[24].
Thus, the introduction of artificial intelligence in judicial activity is possible in various processes. However, in any case, for the painless integration of digital technologies into the court, it is necessary to comply with specific standards and regulations.

***5*. Possible problems and challenges in implementing artificial intelligence in court proceedings**
As a result of the study of the experience of using artificial intelligence technologies in judicial activities, the following mandatory requirements for artificial intelligence can be identified, which must be met to minimize the risks of using artificial intelligence in the administration of justice.
First, we believe that the legislator should determine specific cases in which the use of artificial intelligence in judicial activities is permissible. For example, for systematization of judicial practice, preparation of draft court orders.
Secondly, the process of how artificial intelligence came to a particular conclusion must be explicable, as well as justified and motivated.
Third, of course, any artificial intelligence solution must be verified and controlled by a human. Depending on the scope of application, such a person may be a judge (in the case when artificial intelligence prepares draft judicial acts), or an employee of the court staff (if artificial intelligence is used to systematize existing judicial practice, etc.).
Fourth, the fundamental principles of the administration of justice should be the criteria for the permissibility of the use of artificial intelligence[25].
Thus, the introduction of artificial intelligence in judicial activity is possible, digital technologies can optimize the process of administration of justice, saving the court staff from a number of routine procedures.
However, to minimize the possible risks of such implementation, it is necessary to develop an advisory standard that will take into account the observance of the principles of justice, as well as the constitutional rights and freedoms of citizens.
The current judge of the Moscow Arbitration Court, in his research in 2021, identified three prospective stages of introducing artificial intelligence into the domestic justice system.
1. **At the initial stage**, it is planned to use artificial intelligence as a judge's assistant to automate some office-keeping processes when considering certain categories of cases on the merits.

[23] Kleandrov M.I. Reflections on the topic: can a robot be a judge? // Russian justice. 2018. N 6. C. 25
[24] What is an Arbiter bot and how to work with it? URL: https://my.arbitr.ru/#help/4/1 (date of request: 22.12.2024).
[25] European Ethical Charter on the Use of Artificial Intelligence in Judicial Systems and their environment. Adopted at the 31st plenary meeting of the CEPEJ (Strasbourg, 3 - 4 December 2018). URL: https://rm.coe.int/ethical-charter-en-for-publication-4-december-2018/16808f699c (date of request: 20.07.2024).

2. **The second stage,** which according to the researcher should be revealed within 5-10 years, involves the use of artificial intelligence as a companion for a human judge, including in order to automate the process of evaluating some evidence in a case.

3. **The third stage** presents a possible perspective in which artificial intelligence can replace a human judge in some of its functions or even some categories of cases[26].

To date, the introduction of artificial intelligence in the domestic judicial system is still at the first of the above-predicted stages of development. In order to move on to the next stages, technical developers and legislators need to do a lot of work.

There is no doubt that the use of artificial intelligence in the organizational work of the court and office management can be organized without a number of significant restrictions. Of course, working with personal data of citizens requires meeting the requirements of the relevant federal laws[27].

At the same time, it is impossible to say that artificial intelligence will be able to replace the judge in the near future.

Judicial activity should be transparent, open and accessible, which means that citizens should be provided with access to any information related to both the activities of the court as a whole and hotel trials[28]. In this regard, we will try to identify and assess the risks of introducing artificial intelligence into judicial activities.

Artificial intelligence is nota subject of legal relations[29]; when used in courts (regardless of its function), it will always be a technology that acts as an additional information processing tool.

However, taking into account the characteristics that artificial intelligence is a priori endowed with, it is essentially a "black box", the solutions of which are not always possible to explain and understand. Such uncertainty and non-transparency of the artificial intelligence operation process can lead to an increase in the degree of distrust of the courts among the population, and an experienced lawyer, under the pretext of imperfect artificial intelligence technology, will be able to question any of his decisions.

The use of artificial intelligence in the administration of justice raises the question of compliance with the principle of direct judicial proceedings. So, the use of artificial intelligence technologies actually creates a kind of «layer» between the presented evidence and the court[30].

A number of well-founded questions arise. If the court makes a decision in the form that was proposed by artificial intelligence, how much can we judge about compliance with the principle of direct investigation of the case material by the court? Is it necessary for the court to motivate acceptance or rejection of the conclusions formulated by artificial intelligence? In addition, an additional problem will be the fact that it will be difficult for an observer uninitiated in the technology of artificial intelligence to assess the judge's contribution to the decision.

D. O. Drozd in his research notes: «For the purposes of proper resolution of the case and to avoid judicial errors, it is reasonable to use artificial intelligence systems immediately during the trial, providing participants in the process with the opportunity to timely review and submit comments similar to those on the court record. So, if an artificial intelligence has analyzed written evidence, then the corresponding report should immediately become available for review, including online[31]."

---

[26] Laptev V. Artificial intelligence in court: how it will work_// Официальный сайт журнала «Право» - Текст: электронный URL: https://pravo.ru/opinion/232129/ (дата обращения: 22.12.2024)

[27] Speech by Chairman of the Council of Judges of the Russian Federation V.V. Momotov on March 11, 2023 at the XVIII Meeting of Chairmen of the Supreme Courts of the SCO Member States in Delhi, Republic of India on the topic "Smart Courts" and the future of the judiciary"// http://www.ssrf.ru/news/vystuplieniia-intierviu-publikatsii/50081

[28] Stanovkina M.V. Transparency of judicial activity: a meaningful characteristic // New University. The series "Economics and Law". 2013. N 11(33). C. 40.

[29] Afanasyev S.F. On the problem of the material and procedural legal personality of artificial intelligence // Bulletin of the Civil Procedure. 2022. N 3. C. 12 - 31.

[30] Drozd D.O. The immediacy of judicial proceedings when using artificial intelligence // Russian Law Journal. 2022. N 4. C. 87 - 98.

[31] Drozd D.O. The immediacy of judicial proceedings when using artificial intelligence // Russian Law Journal. 2022. N 4. C. 87 - 98.

We believe that taking into account all the above-mentioned issues, in the near future we will be able to see the use of artificial intelligence only in hotel types of judicial activity, but not in the process of administration of justice in general.

We must not forget that justice is one of the main benefits that reflect the level of development of society[32]. The task of the court is to ensure the protection of violated or disputed rights and interests. Legal proceedings are closely linked to such concepts as justice and compassion. Such qualities are inherent only to humans, and if we decide to completely replace a human with a robot in the process of administering justice, we risk losing the moral component. Even the most successful artificial superintelligence is not able to fully understand the consequences of the decision made, the correlation of moral and legal norms, the application of the principles of justice and reasonableness. The problem of "introducing artificial intelligence into the dispute resolution process" is quite multifaceted, deep and complex and cannot be resolved only with the help of a legislator[33]. We believe that a balance in the relationship between artificial intelligence and human intelligence can be achieved only by using the former as a technology that acts as an assistant to the latter.

CONCLUSION

A number of scientific problems that arise in the study of the introduction of artificial intelligence in court proceedings have long been of particular interest to the scientific community, and some authors have a complex of concerns.

The rapid development of artificial intelligence technologies makes it necessary to adapt public relations to them, and in this regard, to develop the legislative framework in this area.

As a result of the study, the following conclusions can be drawn:

1. To date, the Russian Federation does not have a unifiedconcept of artificial intelligence developed by the doctrine or legislator. The normative interpretation of the concept of "artificial intelligence" in Russian law is enshrined in Presidential Decree No. 490 of October 10, 2019 "On the Development of Artificial Intelligence in the Russian Federation". However, the existingnegative definition of the term "artificial intelligence" is clearly technological in nature and does not reflect the existing legal problems. It seems that the concept of artificial intelligence, formulated on the basis of its technical features, is useless in jurisprudence, because it does not have a special impact on legal regulation.

2. Depending on the complexity of the tasks being solved, their proximity to human intelligence and human abilities, artificial intelligence is divided into three types: weak artificial intelligence (*Artificial Narrow Intelligence*), strong artificial intelligence (*Artificial Narrow Intelligence)* and superintelligence *(Artificial Superintelligence)*. Ha Today, we can witness the emergence of weak artificial intelligence, development is actively underway to create technologies for strong artificial intelligence, according to researchers ' forecasts, strong artificial intelligence will appear no earlier than 2040.

3. Among the areas of possible application of artificial intelligence in judicial activity, the following can be distinguished:

- use of artificial intelligence to optimize courtproceedings and organize data;
- and the use of artificial intelligence for conducting analytical work and performingpredictive analysis;
- and the use of artificial intelligence for the administration of justice.

4. The introduction of artificial intelligence technologies in judicial activity certainly helps to optimize some routine processes in courts and improve the organization of the work of the court staff as a whole, opens up new opportunities for "predictive justice". At the same time, the author emphasizes that the use of artificial intelligence technologies in court requires the development of

[32] Mirza L., Smorodinova A.G. Access to justice as a legal phenomenon // Russian judge. 2009. N 2. pp. 3-6.
[33] Afanasyev S.F. On the problem of the material and procedural legal personality of artificial intelligence // Bulletin of the Civil Procedure. 2022. N 3. pp. 12-31.

an appropriate standard that will outline clear boundaries for the use of this technology, so as to take into account compliance with the principles of justice, as well as the constitutional rights and freedoms of citizens.

ACKNOWLEDGEMENT

This publication has been supported by RUDN University.

LIST OF LITERATURE

[1] Frolova E.E., Ermakova E.P. (2022) Utilizing Artificial Intelligence in Legal Practice. In: Inshakova A.O., Frolova E.E. (eds) Smart Technologies for the Digitisation of Industry: Entrepreneurial Environment. Smart Innovation, Systems and Technologies, vol 254. Pages 17-27. Springer, Singapore. https://doi.org/10.1007/978-981-16-4621-8_2.

[2] Osipov G. S. Artificial intelligence: state ofresearch and outlookfor the future//Artificial intelligence news. 2001. N 1. pp. 3-13.

[3] Morkhat P. M. Artificial intelligence: a legal view. Moscow: Buki Vedi, 2017, 257 p.

[4] Ermakova, E.P., Erbutaeva, Z.K. (2023). New Forms of Dispute Resolution in the Russian Federation as a Reflection of Innovation in Law Enforcement: Platform Justice. In: Popkova, E.G. (eds) Sustainable Development Risks and Risk Management. Advances in Science, Technology & Innovation. Springer, Cham. https://doi.org/10.1007/978-3-031-34256-1_28

[5] Spitsin I. N., Tarasov I. N. Use of artificial intelligence in the administration of justice: theoretical aspects of legal regulation (problem statement) / / Actual problems of Russian law. 2020. N 8. pp. 96-107.

[6] Gorodnova N. V. Modeling the development and implementation of systems of "weak" and "strong" artificial intelligence: socio-economic aspects. - 2022. - Volume 12. - No. 1. - pp. 123-140. doi: 10.18334/vinec. 12.1.113717

[7] Vindzh V. Singularity. - Moscow: AST. - 2022. - 224 p..

[8] Poskryakov R. S. Ispol'zovanie iskusstvennogo intellekta v sudebnoy deyatelOrpapeв'nosti [The use of artificial intelligence in judicial activity]. 2019. N 16(137). URL: https://cyberleninka.ru/article/n/ispolzovanie-iskusstvennogo-intellekta-v-sudebnoy-deyatelnosti (дата обращения: 20.08.2023).

[9] Momotov V. V. Artificial intelligence in legal proceedings: state and prospects of its use // Bulletin of O. E. Kutafin University. 2021. N 5(81). P. 189; Andreev V. K., Laptev V. A., Chucha S. Yu. Artificial intelligence in the system of electronic justice in the consideration of corporate disputes. Right. 2020. Vol. 11. N 1. P. 22.

[10] Kabatskaya E. A. Using artificial intelligence as a means of optimizing judicial activity // Russian judge. 2023. N 10. pp. 51-55. DOI: 10.18572 / 1812-3791-2023-10-51-55 (www.doi.org).

[11] Kleandrov M. I. Reflections on the topic: can a robot be a judge? // Russian justice. 2018. N 6. P. 25

[12] Laptev V. Artificial intelligence in court: how it will work / / Official website of the journal "Pravo" - Text: electronic URL: https://pravo.ru/opinion/232129/. (Accessed: 22.12.2024)

[13] Speech of the Chairman of the Council of Judges of the Russian Federation V. V. Momotov on March 11, 2023 at the XVIII Meeting of the Chairmen of the Supreme Courts of the SCO member States in Delhi, Republic of India on the topic "Smart courts" and the future of the judiciary". http://www.ssrf.ru/news/vystuplieniia-intierviu-publikatsii/50081.

[14] Stanovkina M. V. [Transparency of judicial activity: a meaningful characteristic]. Novy universitet. Series "Economics and Law". 2013. N 11 (33). P. 40.

[15] Afanasyev S. F. On the problem of material and procedural legal personality of artificial intelligence // Bulletin of Civil Procedure. 2022. N 3. p. 12-31.

[16] Donald D. O. The immediacy of judicial proceedings when using artificial intelligence // Russian Law Journal, 2022, No. 4, pp. 87-98.

[17] Mirza L., Smorodinova A. G. [Access to justice as a legal phenomenon]. 2009. N 2. pp. 3