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THE LIMITATIONS OF ARTIFICIAL INTELLIGENCE (LEGAL PROBLEMS)**

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The subject. Possible problems that may lead to further use of artificial intelligence, as well as ways to overcome them are studied.
The purpose of the article is to identify the principles of the legal status of artificial intelligence.
The methodology includes formal-logical method, systematic approach, formal-legal method, comparative method, analysis, synthesis.
The main results of the research. The basic approaches to the definition of the concept of artificial intelligence are examined, specific examples are given, the problems that can cause the further use of artificial intelligence are analyzed. Artificial intelligence as a complex computing system is characterized by: variability in decision-making, a certain degree of autonomy when working, as well as the ability to take into account the experience gained from previously made decisions and use it to correct them. The challenges that are facing both the legislators and scientists are identified, such as: determining the status of artificial intelligence, responsibility for its actions and, accordingly, finding the most acceptable way to transform legislation governing the use of artificial intelligence.
Conclusions. Artificial intelligence, due to both its novelty and certain functioning features, causes disagreement in the scientific community regarding the permissible limits of its application, its legal status, responsibility for the results of its activities, as well as on many other related issues. Today there is no unity of opinion even in relation to the definition of the term "artificial intelligence", which is largely due to the previously mentioned features.
Therefore, in a world of continuous scientific and technological progress, where artificial intelligence plays an increasing role, we should continue to study these technologies in order to: firstly, determine their role and place in the future of humanity; secondly, to define the permissible limits of the use of artificial intelligence in order not to harm individual people or groups of people; thirdly, based on an understanding of the nature and principles of artificial intelligence, transform legislation in such a way that it best meets the challenges, which legal scholars will have to face in the future.

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1. Introduction.

The world is moving forward with technological progress, qualitative changes in which became clearly visible in the middle of the XX century. Since that time, following the path of intensifying production and improving the quality of work performed, people have constantly created and improved robotic mechanisms, which later became an integral part of their lives, going beyond just the production sphere.

In view of this, modern researchers are faced with the question of the status of robotic mechanisms. Of course, it is inextricably linked with artificial intelligence as the most promising technology that can replace people in performing a certain number of functions, which in the future can raise people's lives to a qualitatively different level than that available at this stage of technology development.

The question of the status and role of artificial intelligence is directly related to some of the problems caused by insufficient legal regulation of the ways and areas of application of artificial intelligence, and sometimes its complete absence, which makes it necessary to identify challenges that, in our opinion, will become more and more relevant for both legislators and legal scientists in the future. In this regard, we cannot disagree with the opinion of O.A. Yastrebov, who identified the need to improve the legal regulation of artificial intelligence as one of the "most important areas of development of Russian law" [1, p. 315].

2. The concept of artificial intelligence.

Scientific and technological progress, as mentioned above, is developing continuously, thus causing the need for an equally continuous study of emerging technologies. For example, at the early stages of the development of robotics, it was assumed that the robot is no more than a machine that can act exclusively according to the algorithms specified by the program developer. However, the further development of robotics and programming, which resulted in the emergence of artificial intelligence, has caused the need to rethink our understanding of robots and their potential. The fact is that artificial intelligence, unlike a "normal" robot, has the ability to make independent decisions based on the data obtained, which is certainly superior to programs that are unable to go beyond the prescribed algorithms. This circumstance allows us to talk about artificial intelligence as the "next stage of development of robotics" [2, p. 83]. In addition, artificial intelligence is also able to analyze its own previously made decisions and change them, that is, to act alternatively. This distinctive feature is often called the ability to self-learn, which makes artificial intelligence technology similar to the capabilities of the human mind (for example, in GOST R ISO 8373-2014 "Robots and robotic devices. Terms and definitions", the terms "intelligent robot" and "robot with elements of artificial intelligence" are given as synonyms).

This raises a legitimate question about the definition of artificial intelligence. There is no consensus in the scientific community on this issue, which is due to both the novelty of artificial intelligence and the fact that its capabilities still remain unexplored due to the previously described ability to make alternative decisions, but since our work is devoted to the problematic aspects of the application of this technology, we cannot do without its definition. To do this, we should cite the characteristics of artificial intelligence that are traditionally highlighted by researchers.

Let's turn to the work Of I.V. Ponkin and

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A.I. Redkina on artificial intelligence, highlighting some of the features inherent in it, according to the authors: "a high degree of substantiality and overall autonomy, the ability to self-referentially adapt their own behavior and self-study, independently model algorithms for solving problems" [3, p. 95]. In addition, similar characteristics of artificial intelligence are highlighted in the work on robotics, edited by A.V. Neznamova: the ability to analyze the environment, a certain autonomy in the implementation of the algorithm and the ability to self-study [4, p. 23]. P. M. Morkhat in his monograph, as well as the above-mentioned researchers, among other characteristics also leads to: the ability to self-organization and self-adaptation, learning and self-learning and anthropomorphic-reasonable independent decision-making [5, p.69].

These characteristics are largely correlated with what was previously said. Therefore, we can conclude that artificial intelligence as a complex computing system is characterized by: variability in decision-making, a certain degree of autonomy when working, as well as the ability to take into account the experience gained from previously made decisions and use it to correct them.

3. Limits of application of artificial intelligence.

Nowadays, artificial intelligence technologies are already actively used in various spheres of human life: from medicine and heavy industry to the development of computer games and movies. Even now, we can confidently say that after some time, artificial intelligence will be used in almost any activity, perhaps in all without exception, thus becoming a reliable assistant to a person in performing a number of tasks - from the simplest to the most complex.

For example, we can give an example of using artificial intelligence in law. Recently, the question of the possibility and necessity of using artificial intelligence in court cases has been raised more often. As arguments in support of this innovation can be given: the impartiality of artificial intelligence, its integrity and strict adherence to legal requirements (especially when making court decisions, since the issue of reducing the permissible limits of judicial discretion remains relevant to this day [6, p. 49]). On the one hand, these proposals are quite appropriate in the current realities of the Russian judicial system, taking into account the excessive workload of judges and, in our opinion, excessive bureaucracy, which, undoubtedly, cannot but have a negative impact on the process of judicial proceedings and on the quality of decisions rendered.

On the other hand, it remains unclear exactly how artificial intelligence should be used in legal proceedings, and what the limits of its application will be, since, in particular, judge of the Constitutional Court of the Russian Federation G.A. Gadzhiev believes that robots "are not capable of making decisions that are made by the court". Such an opinion is quite reasonable because judges, in addition to the legal norms themselves, must be guided in the decision-making process by morality and ethical standards, and take into account a number of other indicators that, at least at this stage of technology development, it is not yet possible to upload to the database of artificial intelligence, the algorithms on which it builds its decisions. In addition, it should be noted that the answer to the question of integrity and impartiality of artificial intelligence is not as unambiguous as it may seem at first glance. For example, T. S. Platina justifiably points out that artificial intelligence, even if there is a certain degree of autonomy, cannot be completely independent, since "AI programs may include the bias of their programmers and other people

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with whom they interact" [7, p.165].

However, it should be recognized that artificial intelligence technologies can have a positive impact on the implementation of their activities by lawyers, acting as an assistant. For example, V. A. Zhilkin, in an article describing the use of artificial intelligence and digital technologies in law on the example of Finland, notes that in our time artificial intelligence is able to analyze legal documents and cope with routine legal functions. In addition, he also points out that due to the transition to electronic media in the preparation of court cases, the volume of paper documentation is significantly reduced [8, p.18]. However, even here there are difficulties, since these innovations can be evaluated in different ways. So, on the one hand, such changes have a beneficial effect on the timing and process of consideration of court cases, since, first, the time for their preparation and consideration is reduced, and secondly, the probability of making mistakes due to the human factor is reduced. On the other hand, this inevitably leads to the loss of jobs for graduates, who are likely to be massively reduced with the widespread introduction of the described technologies. This problem is most likely to affect the category of lawyers who do not yet have sufficient experience or qualifications to perform more complex legal functions that are still inaccessible to artificial intelligence; of course, we are talking about those who have recently graduated from educational institutions or are still continuing their studies, since they usually perform such tasks.

Therefore, by the example of the introduction of artificial intelligence technologies in the legal sphere, we can see that this process, along with the advantages, carries a lot of controversies and questions about the negative consequences of such innovations, as well as their feasibility in General.

However, we should add that as scientific and technological progress develops continuously, artificial intelligence will play an increasingly important role in our lives in General and in law in particular, and therefore it is necessary to pay due attention to the study of possible problems that will inevitably arise in the process of its further use.

4. Problematic aspects related to the use of artificial intelligence.

First of all, despite the fairly common opinion that the development of scientific and technological progress with the widespread introduction of computing technologies reduces the number of errors that occur due to the "human factor", we note that it is not yet possible to talk about the perfect work of artificial intelligence. For example, there is always a risk of making serious errors in the operation due to an incorrectly spelled symbol in the algorithm, or simply a system failure due to overloaded mechanisms. And since artificial intelligence technologies are entrusted with more and more important work, the consequences of such errors can cause unexpected and extremely undesirable consequences, which is especially clearly shown in such areas of artificial intelligence applications, such as medicine, where people's lives and health may be at risk, or in the banking system, where errors can lead to significant economic losses.

In direct connection with the existing possibility of artificial intelligence making mistakes in its work and, as a result, a negative result, there is a problem of qualification of responsibility for the previously mentioned mistakes made by artificial intelligence, which seems to us to be one of the key and most relevant at the moment. So, among modern researchers, there is no consensus on how to qualify the results of actions of artificial

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intelligence, if they caused damage. There are three main concepts: first, the recognition of the responsible person who used artificial intelligence (for example, an employee of an organization authorized to perform certain tasks using artificial intelligence), second, the programmer (software developer), if the error occurred due to an error or failure, and third, the person who owns the rights to artificial intelligence [9, p.24].

There is also another point of view, which is largely correlated with the question of the possibility of recognizing artificial intelligence as a subject of law. P. M. Morkhat, analyzing this concept, notes the following: despite the fact that most often the developers of this technology are responsible for the errors of artificial intelligence, there are cases when the behavior of robots will not be consistent with the originally set algorithms. Such a situation is possible because, as it was said earlier, the distinctive feature of artificial intelligence is its ability to self-learn [10, p. 72]. So the question arises, who will be responsible in this case? To date, there is no answer to this question, which is largely due to the complexity and novelty of the technology itself, as well as debatable questions about the recognition or non-recognition of the legal personality of artificial intelligence. Moreover, if we turn to modern legislation, we will also not find an answer to this question. At least, we can state with confidence that today the legislator does not recognize the legal personality of artificial intelligence, and therefore, its delictworthiness [11, p.45].

5. Approaches to understanding artificial intelligence: trend and modernity.

As mentioned earlier, modern Russian legislation does not recognize artificial intelligence as a legal entity, but it should be noted that this circumstance does not mean that artificial intelligence will not change its legal status later. So, speaking about the prospects for the development of legislation on artificial intelligence, we can cite some of the most common approaches that offer options for improving legislation in this area. The first approach is based, as we mentioned earlier, on the idea of recognizing artificial intelligence as an independent participant in legal relations, an "electronic person". For example, O. A. Yastrebov considers the possibility of giving artificial intelligence legal personality in the context of understanding the legal personality of G. Kelsen as a set of rights and obligations, the content of which is a certain behavior [12, p. 48-49]. However, this approach leaves open the previously mentioned question of responsibility for errors in artificial intelligence. So, it remains unclear who and how will be responsible for the failure of artificial intelligence to fulfill its obligations? In addition, we can assume that the implementation of this model in practice will cause the need for a fundamentally different qualitative transformation of legislation, not limited to changes in any particular industry or several industries. Morkhat writes about the possibility of recognizing an "electronic person" - a legal fiction, since the recognition of its legal personality, similar to a person, in the future may entail difficulties associated with the fact that the rights of robots at a certain stage will come into conflict with the rights of people [13, p.76]. Consequently, the implementation of the described approach in the future will still require "significant theoretical and practical development of legislation" [14, p. 372]. But it is quite possible that in the long term, this approach will be the basis for future legislative changes.

The second approach is to recognize artificial intelligence as an object of law. To date, this option remains the most acceptable,

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since on the one hand, it does not cause such controversial issues, and on the other – it corresponds to the current level of development of technologies in the field of artificial intelligence. In addition, the issue of responsibility for the actions of artificial intelligence when recognizing it as an object of law will not be so problematic, because if it commits, for example, an error that has negative consequences, the responsibility will lie with the owner of the rights to artificial intelligence (the owner or owner), the software developer, if the error was the result of problems with algorithms, or the manufacturer. Interested in the opinion of S. A. Somenkov, who reasonably noted that companies producing artificial intelligence systems may be interested in losing their development status as an object, since this will avoid liability for low-quality products [15, p.84]. Thus, we can assume that despite the fact that today the recognition of artificial intelligence as an object of law is still the most acceptable way to regulate this area, but in the future, it is most likely that artificial intelligence will become a participant in legal relations by acquiring the Statute of the subject of law.

6. Conclusions.

Summing up all the above, we should summarize that today artificial intelligence technologies are still not fully understood due to the complexity of their systems, their ability to learn themselves and change behavior. Thus, it is particularly worth noting that when considering the issue of further changing the status of artificial intelligence, the legislator should take a comprehensive approach to studying the advantages and disadvantages of artificial intelligence technologies, the possibility of their negative impact on certain areas of their application, such as the possible negative impact on the availability of jobs for certain categories of employees whose functions can be performed by artificial intelligence. Questions remain open about the responsibility for artificial intelligence errors and their consequences, as well as about the possibility of committing them by artificial intelligence in General. However, it must be recognized that in a world of continuous scientific and technological progress, where artificial intelligence plays an increasing role, it is necessary to continue studying these technologies in order to: first, determine their role and place in the future of humanity, and secondly, define the permissible limits of the use of artificial intelligence in order not to harm individual people or groups of people, and third, based on an understanding of the nature and principles of artificial intelligence, transform legislation in this way, so that it can best meet the challenges that legal scholars will face in the future.

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