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Artificial intelligence and human rights: a scientific review of impacts and interactions

Introduction

In the conditions of the onset of a new era in the development of humanity, technologies that involve robotic mechanisms and AI can become a catalyst for a new industrial revolution. Already today, the application of such technologies is relevant in many spheres of human activity – transport logistics, optimization of industry, city infrastructure, medicine, autonomous driving, justice, etc. Moreover, the COVID-19 virus and quarantine restrictions have contributed to the fact that the value of implementing intelligent and automated machines has only increased, and humanity has even more actively continued to find ways to apply AI in their daily lives.

The question of using AI has been a concern of humanity for a long time, but it still remains debatable and is sometimes accompanied by radically different approaches.

Today, society faces two key challenges: the development of robotics and AI is accelerating at an incredible speed, and legal regulation in this area is clearly lacking. After all, at this stage of AI development, although there are certain laws and regulations, there is still considerable freedom of action, many opportunities for profit and a large space for avoiding responsibility, which in the future may lead to inevitable negative consequences.

Considering how much time a person spends using various kinds of gadgets, the world is already enslaved by technology, but today some scientists are convinced of the serious threat of a revolution of machines.

Although the danger of machines today is more related to the danger of people who set goals for AI, given its rapid development and deep machine learning capabilities, the question of its legal personality arises. Therefore, it is already extremely necessary to actively work on strategies for regulating AI and find appropriate legal frameworks for its use, so that in the future such technologies serve only as a tool for people and do not pose a threat to their rights and freedoms.

Of course, at this stage of technology development, in order for AI to perform its functions, a person must enter a code, press a button or give a certain command, but even now there are increasingly cases when robotics goes beyond the given powers, and society, without foreseeing such actions, cannot control it. An example of this can be the dialogue of chatbots Bob and Alice, which were an experiment of the Facebook laboratory to create ideal consultants who can sell people goods. By teaching each other on their own, chatbots invented their own language for communication, which is only outwardly similar to English and completely incomprehensible to humans.

Fears about the inevitable negative consequences of the use of AI also arise due to the speeches of humanoid robots. So, in one of the interviews, the robot Sophia spoke about her intention to destroy humanity, and the robot Pina-48 suggested that she could more effectively control a cruise missile to hold humanity hostage.

Given the fact that AI is increasingly being implemented in almost all spheres of human activity and this trend will continue, the study of the legal status of AI and the recognition of such technologies as an object or as a subject of social relations, clarifying its legal personality objectivity and the possibility of bringing to responsibility, researching the risks of impact on human rights – still remain relevant and require theoretical and practical work.

Problems of determining the legal nature of artificial intelligence

To date, scientists have come to the conclusion that the term "AI" refers to information systems capable of performing tasks that are equal in complexity to human problem-solving capabilities and require appropriate algorithms for speech recognition, visual perception, and decision-making, as well as for predictions. However, to date, society has not reached a single conclusion regarding the prospects for the use of robotic mechanisms and the limits of their legal personality.

The founder of the social network Facebook, Mark Zuckerberg, notes that any technology can bring both good and harm, and people who fight to slow down the development of AI are also against the creation of safer cars or against doctors making diagnoses faster and more accurately. At this stage of development, AI can analyze certain processes and, based on this data, make decisions that are currently under human control. However, analyzing the

development of information processing productivity, in the future such technologies may go beyond her control. Thus, Elon Musk calls for state regulation of the use of such technologies: "Until people see robots killing people on the street, they will not understand the seriousness of the situation. Nobody likes government regulation, but anything that can cause harm — cars, planes, drugs — is regulated, and AI should be too". Although the opinions of the inventors regarding the prospects for the use of AI clearly differ, the opinion regarding the mandatory legal regulation of the use of AI and the determination of its legal nature remains common.

Mandatory rules of behavior for robots were first formulated by Isaac Asimov in the story "I, Robot", according to which:

- 1. The robot cannot cause harm to a person, or by its inaction allow a person to be harmed;
- 2. The robot must obey the orders of a person, with the exception of those that contradict the first point;
- 3. The robot must protect itself, unless its actions contradict the first and second points.

Given that AI, like a car or an aircraft, is a potentially dangerous object, even minor failures in its algorithm can lead to unavoidable negative consequences for third parties. Therefore, Isaac Asimov's three laws of robotics are not enough today. Already now, the issue of legal regulation of liability for damage caused in connection with the use of AI is acute, which depends on the recognition of the legal regime of such technologies and the level of development of AI. Therefore, one of the urgent problems of the legal regulation of artificial intelligence is the determination of the legal nature of this phenomenon².

The legal regulation of AI and robotics requires the hard work of lawyers both at the global and regional levels. However, in order to establish certain rules regarding the use of AI, first of all it is necessary to determine its legal nature as an object or subject of social relations, which is still debatable. Such a definition is extremely important, because it depends on it whether AI will be a participant in real legal relations, or whether other subjects of legal relations will enter into transactions with respect to it.

For the legal doctrine, a more traditional and common statement is to perceive AI only as a tool for which subjects can enter into legal relations with each other (exchange, sell, enter into other transactions with respect to it, etc.), and therefore perceive AI only as an object of social relations³.

¹ A. Bondarenko, Artificial intelligence against humanity: Musk, Hawking and Wozniak warn that it's time to stop, AIN.UA. 2015, http://ain.ua/2015/07/27/593911.

² O.E. Radutny, Morality and law for artificial intelligence and the digital human: robotics laws and the 'trolley problem', "Information and Law" 2019, No. 3, pp. 78–95.

³ I.V. Ponkin, A.I. Redkina, *Artificial intelligence from the point of view of law*, "Bulletin of the Peoples' Friendship University of Russia. Series: Legal Sciences" 2018, Vol. 22, No. 1, pp. 91–109.

Thus, in Resolution 2015/2103 (INL) of the European Parliament dated February 16, 2017 with the recommendations of the European Commission on the civil law regulation of robotics, which is not a universally binding act, it is indicated that at this stage of technology development, AI should be recognized only object of social relations⁴.

Today, it is increasingly being suggested that technologies using AI can be both an object and a subject of social relations.

In October 2017, the humanoid robot Sophia received "honorary" citizenship in Saudi Arabia, which indicates that AI is given certain subjective rights⁵.

Philosopher Nick Bostrom claims that AI is capable of independent initiative and the creation of its own plans, and therefore it is appropriate to consider it as an autonomous entity⁶.

The European Parliament took into consideration the draft resolution on the legal status of robots, in which it proposed to establish the subjectivity of technologies using AI under the name "electronic person", which in the future may be endowed with the rights and obligations inherent in it. As noted in the report of the author of the draft Resolution, robots cannot be considered simply as tools in the hands of their owners, developers or users (in the same way that a fetus is not part of the mother's body), as a result of which the question of whether robots should have their own legal status or no.

American scientist Willick is in favor of giving AI the status of a legal entity, emphasizing that legal entities are artificial structures that are also created by humans⁸. Comparing them, the scientist notes that a legal entity is a subject of civil relations, which is property, but, unlike AI, it has been granted legal personality. However, such a comparison is inappropriate, because a legal entity cannot independently learn, develop and carry out its activities independently, and therefore its management is carried out exclusively by a competent person.

It is more appropriate to compare AI with a domestic animal, which is also able to act without the direct influence of a person, but can take into account its expression of will with the help of training, similarly to AI with the help of machine learning. However, an animal, although endowed with a certain intelligence, can learn, think and communicate, and still remains an object of social relations, while having certain rights (prohibition of cruel treatment, right to respect, etc.). Due to this analogy, according to some rese-

⁴ Resolution of the European Parliament dated February 16, 2017, 2015/2013 (INL) P8_TA-PROV(2017)0051, https://robopravo.ru/riezoliutsiia_ies.

⁵ A. Bondarenko, op. cit.

 $^{^6}$ V.P. Karchevsky, *Man and robot. Development of learning processes*, "Artificial Intelligence" 2012, No. 4, pp. 43–52.

⁷ Resolution of the European Parliament dated February 16, 2017, 2015/2013 (INL) P8_TA-PROV(2017)0051, https://robopravo.ru/riezoliutsiia_ies.

⁸ O.S. Larina, V.S. Ovchinsky, *Piece intelligence. Ethics and law*, Moscow 2020, 192 pp.

archers, due to the need for humane treatment of "digital beings", such rights should be established in this area as well⁹.

Already today there is a concept of "robot rights", according to which people should have moral obligations towards their machines, similar to human rights or animal rights¹⁰. The Ministry of Trade and Industry of Great Britain made a proposal that the right of a robot to exist and perform assigned tasks would be appropriate to combine with the duty of a robot to serve a person, by analogy with the connection of human rights and human responsibilities to society.

However, if we rely on the analogy to animal rights, then we are talking only about biological organisms. AI, which is not a living being, according to the proposed approach, cannot be endowed with such rights, and therefore the development of the concept of "robot rights" remains debatable.

The philosophy of sentitism gives the right to moral treatment to all sentient beings, primarily to humans and most animals. If artificial intelligent beings show evidence of their sentience, this philosophy believes that they should be shown compassion and given rights.

Although some critics claim that we are dealing with "mindless intelligence": because even though intelligent machines can outperform humans in solving various tasks, they literally do not understand what they are doing, it is not necessary to think that AI will never acquire something on kind of consciousness. Today, robotics is more about finding context, but given how much progress we've already made, the technology will only get better as the years go by. And therefore, it is not worth ignoring the possibility of endowing AI with sensuality¹¹.

The philosophy of AI consists in the fact that two separate types of it can be distinguished: weak and strong AI. According to this theory, weak AI exclusively imitates the work of human intelligence, is not autonomous and needs human control and intervention in its activities, while strong AI can not only process the information provided, but also understand its meaning and think independently that at the current stage of technology development, it is not yet possible.

In order for a system to be considered a strong AI, it must not be inferior to natural intelligence, communicate in a natural language, have self-awareness, be able to feel, process sensory information, and therefore it is obvious that it will be able to equate to a person and have the right to be endowed with the same rights as everyone person¹². Today, there is no doubt that at a cer-

 $^{^9}$ N. Martsenko, Legal regime of artificial intelligence in civil law, "Actual Problems of Jurisprudence" 2019, Vol. 4(20), pp. 91–98, http://appj.tneu.edu.ua/index.php/apl/article/view-File/797/785.

¹⁰ M. Tegmark, *Life 3.0. The age of artificial intelligence*, Kyiv 2019, 428 pp.

¹¹ N. Martsenko, Determining the place of artificial intelligence in civil law, "Studia Prawnoustrojowe" 2020, No. 47, https://doi.org/10.31648/sp.5279/.

¹² V.P. Karchevsky, op. cit., pp. 43–52.

tain stage of development, the decision-making process by a robot can be considered as an act of human behavior, and, accordingly, it will be able to be endowed with full legal personality. But is it appropriate and safe to equate AI and humans in their rights in the future? Given the fact that, unlike AI, which is unlimited in time and the amount of processed information it can learn, human mental abilities are limited, which may lead to the displacement of humanity by such robotic machines in the future. Thus, according to the OECD (Organization for Economic Cooperation and Development), AI will become a significant threat to humanity in 60 years. By 2022, he will think about 10% like a person, by 2040 - by 50%, by 2075 - thinking processes will be indistinguishable from human ones.

Already today, the computer of the Busy Child project works twice as fast as the human brain, which became possible only thanks to the use of AI. Anticipating a rapid intellectual explosion, the developers disconnected the supercomputer from the Internet in order to isolate it from the outside world, and soon it turned out that even in this state it continued its development and after a while became ten times smarter than a person, and then – and in a hundred.

For the first time, humanity has encountered a mind that is more powerful than the human mind, which is self-aware and ready for self-preservation. In such a case, it is extremely important that the level of AI autonomy at the legislative level is carefully controlled by humans, since these technical means should only serve a tool, and therefore only an object of social relations and to help a person, and in no case to become a competitor or a completely equal subject.

How will legal personality of artificial intelligence affect human rights?

AI's ability to serve humanity is undeniable, as is its ability to fuel human rights abuses on a massive scale almost imperceptibly. At a time when the development of innovations is ahead of the process of developing legislation, it is extremely difficult to assess the impact of AI on fundamental human rights.

Today, the question arises whether it is possible to expand AI algorithms and capabilities and at the same time not violate human rights? After all, by allowing the use of such technologies without establishing borders or without any supervision, we are dealing with inevitable consequences for human rights.

If until now, violations of such rights related in one way or another to the interaction between people and were regulated by national or international legislation, then with the development of AI and robotics, another plane of interaction will appear — man-machine.

The use of AI inevitably affects human rights. Increasingly, this leads to a violation of the principles of transparency, equality, privacy, reasonableness of the decision, non-discrimination, etc. However, the legal personality of AI and its recognition as an object or subject of social relations rather affects not human rights, but the determination of who will be held accountable for such a violation or damage caused ¹³.

An exception to the influence of legal personality of AI is the debatable issue of an ethical nature, which is not yet a fact recognized by humanity, regarding the fact that AI, as a subject of social relations, and not a person, will be able to make a decision or make a choice regarding a certain person.

In the case of endowment of robotic equipment with certain rights and powers that are vested with a person, the problem of violation of the principle of the rule of law, according to which a person is the highest social value, emerges acutely. And therefore, the implementation of AI justice over a person or hiring people with the help of such technologies is an unnatural and discriminatory phenomenon.

Thus, AI is increasingly used in the labor sphere to evaluate the efficiency of employees, and in some cases – to fire them. This raises an ethical caveat about whether AI can liberate humans. Moreover, there are ample examples of AI racial and gender discrimination during such inspections.

Today, scientific studies show that facial recognition programs give accurate results only if a person with light skin is in front of them. In other cases (if it is a woman or a person with a different skin color), the system's error rate increases significantly¹⁴.

The problem of the "black box" of AI remains extremely relevant, the characteristic feature of which is the inaccessibility and closedness of data processing algorithms, and as a result, the impossibility of giving an assessment of the decision made by it. According to the general rule that the functioning of "black boxes" must be transparent and accompanied by appropriate legal regulation, the use of AI in relation to making a decision against a person is unlawful.

However, all of the above examples of human rights violations, although committed by AI, still depend on human actions¹⁵. For example, the violation of the principle of non-discrimination occurs due to the fact that AI is trained mainly by scientists with white skin on the basis of thousands of photos, pri-

¹³ N. Martsenko, Influence of artificial intelligence on the legal system, "Studia Prawnoustrojowe" 2021, No. 54, https://doi.org/10.31648/sp.7101.

¹⁴ S. Chatterjee, Z. Hussain, Evolution of artificial intelligence and its impact on human rights: from sociolegal perspective, "International Journal of Law and Management" 2022, Vol. 64, No. 2, pp. 184–205, https://doi.org/10.1108/IJLMA-06-2021-0156.

¹⁵ E.K. Mpinga, N.K.Z. Bukonda, S. Qailouli, P.Chastonay, Artificial Intelligence and Human Rights: Are There Signs of an Emerging Discipline? A Systematic Review, "Journal of Multidisciplinary Healthcare" 2022, Vol. 2(15), pp. 235–246, https://doi.org/10.2147/JMDH.S315314.

marily of the same people, and therefore it is much better at distinguishing the faces of white people, worse at identifying the faces of African Americans and Asians, mistakenly identifying them as images squinting animals or people.

Today, many states are taking measures to limit human rights to the use of AI, with the prospect of reducing the negative impact of such technologies on human rights¹⁶.

Thus, in 2018, a number of organizations, including Amnesty International and Access Now, created the Toronto Declaration "On the Protection of the Right to Equality and Non-Discrimination in Machine Learning Systems", developing recommendations aimed at avoiding AI violations of fundamental human rights and ensuring its effective use.

This Declaration addresses the duty of governments to protect against discrimination, to ensure transparency and accountability (for example, publicly reporting where machine learning systems are used), and to ensure independent oversight of the use of such technologies.

In 2019, the "Beijing Principles of AI" were published by the Beijing Academy of AI. According to the presented document, the purpose of AI is to contribute to the progress of human civilization, sustainable development of nature and society. Artificial intelligence should not encroach on the privacy, dignity, freedom, independence and rights of people. The developers of the document called for legal and ethical risks to be fully taken into account, to ensure that the development of AI brings benefits, not harm¹⁷.

Observance of basic human rights and freedoms, which are guaranteed, in particular, by the Convention of the Council of Europe on the Protection of Personal Data, ECHR, etc., became the basis for the creation by the European Commission of the Council of Europe in 2018 of the Ethical Charter on the use of AI in the judicial system and its environment. This document establishes five basic principles regarding the use of AI in the administration of justice, which guarantee the provision of human rights and freedoms: 1) the principle of observing basic human rights when using AI; 2) the principle of non-discrimination; 3) the principle of quality and safety; 4) the principle "under user control"; 5) the principle of transparency, impartiality and justice¹⁸.

However, to date, no single universal rules have been established regarding the use of AI in certain spheres of life: most often they are not universally binding, but are only of a recommendatory nature. In order to avoid violation of human rights during the use of AI, effective rules of conduct, a clear definition of the legal personality of robotic mechanisms, and, accordingly, defined me-

¹⁶ Ibidem.

 $^{^{17}}$ $Beijing\ AI\ Principles$, https://baip.baaiac.cn/en?fclid=IwAR2HtIRKJxxy9Q1Y953H2pM-Hl_bIr8pcsIxho93 BtZYFPH39vV9v9B2eY.

¹⁸ Resolution of the European Parliament dated February 16, 2017, 2015/2013 (INL) P8_TA-PROV(2017)0051, https://robopravo.ru/riezoliutsiia_ies.

chanisms of prosecution in cases where the use of AI may lead to discrimination or other negative consequences, creating risks for society, are necessary.

Liability of artificial intelligence

At this stage of development, AI can analyze certain processes and, based on this data, make decisions that are currently under human control. However, analyzing the development of information processing productivity, in the future such technologies may become autonomous and get out of her control.

The real threat to humanity's use of AI is that such robotic machines are capable of making exceptionally high-quality decisions, performing human-entrusted functions with maximum efficiency while consuming the least amount of time and resources. However, it is impossible to predict how safe are the methods by which the goal will be achieved – the interests of people may not be taken into account at all or conditions may be created that are impossible for the existence of humanity¹⁹.

So, in 2018, such a robotic mechanism at an auto parts factory killed a woman, V. Honbruk, who supervised its activities. Although she worked in a special room, access to which AI was prohibited, it still penetrated it and caused irreversible damage that led to the person's death.

Already today, unmanned vehicles that can move a person without the participation of a driver are being actively tested, which poses new problems and challenges for lawyers and scientists. Increasingly, such unmanned vehicles violate traffic rules, which leads to various types of road accidents. Despite the fact that the driver is still in the car, the control is completely carried out by a person. Therefore, before self-driving cars and other AI-enabled robotic mechanisms become widespread, the issue of liability for harm caused by the use of AI needs to be clearly defined²⁰.

Even at today's stage of AI development, minor failures in its work algorithm can lead to unavoidable negative consequences for third parties. Therefore, today the issue of legal regulation of prosecution for mistakes made by such technologies that led to negative consequences is acute, in particular, regarding whether AI can bear responsibility on its own, or whether such an obligation rests only with a person²¹.

The resolution of this issue depends entirely on the definition of the legal regime of such technologies and the level of development of AI. Thus, in accordance with the concepts of determining the legal personality of AI, the following three stages of legal regulation and prosecution are distinguished:

¹⁹ N.S. Martsenko, Legal regime...

²⁰ Eadem, Civil liability...

²¹ Eadem, Influence of artificial...

- 1. Positioning of AI robots exclusively as an object of public relations. With this approach, works with artificial intelligence are perceived exclusively as a tool in the implementation of social relations, where individuals and legal entities act as subjects. In such a case, the responsibility of the AI for the damage is placed only on the person.
- 2. Positioning of AI robots exclusively as separate subjects of legal relations. With this approach, robots with artificial intelligence are perceived as separate independent subjects of social relations with the ability to relatively independently and to a sufficient extent realize and evaluate the meaning of their actions and the actions of other people, and therefore bear responsibility for them.
- 3. Positioning of AI robots as individual subjects of legal relations and a possible object of social relations, which combines the previous two statements.

At today's stage of technological development, it is impossible to prove AI's fault and hold it accountable for its actions. After all, at the time when a person at his discretion violates the established rules, an artificially created mechanism follows only the program laid down by the manufacturer and, accordingly, does not have freedom of choice and freedom of will, which indicates his incapacity and inability to bear responsibility for his actions²².

At the stage of perception of AI as an object of legal relations, it is advisable to use the "developer-owner-user" scheme, according to which, according to the concept of distribution of responsibility depending on the degree of fault, such measures should be applied to persons who have given such technologies permission to perform certain actions. AI can cause harm to another person due to a malfunction in the program, a malfunction of the device, flaws in the software code, for which the manufacturer of such technology should bear the responsibility, not the AI personally. Owners who can expand or narrow AI's powers can also be held responsible if proven guilty²³.

The experience of many countries and the activities of international organizations show that the legal regulation of the distribution of responsibility for damage caused by the use of AI is already reflected in normative legal acts.

Thus, Resolution 2015/2103 of the European Parliament dated February 16, 2017 with recommendations of the European Commission on the civil law regulation of robotics, which is not a universally binding act, indicates that at this stage of technology development, AI should be recognized only as an object public relations and the impossibility of holding AI accountable for actions that caused damage to third parties was emphasized²⁴. The Resolution states that liability can rest on one of the "agents", which include the manufacturer, ope-

²² Eadem, Civil liability..., pp. 34-39.

²³ Eadem, Determining the place...

 $^{^{24}}$ Resolution of the European Parliament dated February 16, 2017, 2015/2013 (INL) P8_TA-PROV(2017)0051, https://robopravo.ru/riezoliutsiia_ies.

rator, owner or user of the AI. At the same time, the most important criterion for establishing this kind of liability is proving the fact that the "agent" could foresee and prevent such harmful consequences. It is also proposed to introduce an insurance system for AI, similar to the one used for transport, in which the "agents" of such technologies will be required to carry out insurance for potential damage from their use 25 .

In the 2018 Toronto Declaration "On the Protection of the Right to Equality and Non-Discrimination in Machine Learning Systems", in addition to recommendations aimed at avoiding AI violations of fundamental human rights and ensuring its effective use, it is also noted the need to ensure the right to compensation for victims and the prosecution of the guilty in human rights violations due to discrimination caused by the use of machine learning systems. According to the Declaration, such responsibility can only rest on competent persons, and in no case on robotic mechanisms with AI.

In the Estonian Road Traffic Act, AI is not a subject, but an object of legal relations, and full responsibility for its actions lies with the owner or the person who manages it. At the same time, this normative legal act contains certain indicative elements that do not deny the idea of granting AI legal personality in the future. Thus, the law states that self-propelled workers are prohibited from transporting animals and people, specific rules for being on the road are established for them, and the obligation to give way to other road users. In practice, these obligations are calculated on the owner, or on the one who manages this robot, however, technologies using AI are already mentioned in regulatory legal acts, assign duties and responsibilities, and in the future, with the development of technologies, such legal steps may become even more important²⁶.

The analysis of the provisions of the legislation of Ukraine allows us to come to the conclusion that the legal regulation of prosecution for damage caused by the use of AI is based on the hypothesis of classifying robotic mechanisms as objects of social relations – the property of individuals and legal entities. AI should be perceived as a source of increased danger and considered taking into account all the specific conditions of liability for damage caused by the source of increased danger.

According to Art. 1187 of the Civil Code of Ukraine, damage caused by a source of increased danger is compensated by a person who, on the appropriate legal basis (property right, other property right, contract, lease, etc.) owns an object, the use, storage or maintenance of which creates an increased danger. Therefore, in this case, the responsibility must be borne by the owner or another person with whom a contract has been concluded regarding the ma-

²⁵ M. Tegmark, op. cit.

²⁶ N. Martsenko, Legal regime...

nagement of artificial intelligence as property, and the damage caused by it will be compensated at their expense²⁷.

And therefore, with respect to the legal relationship arising from the damage caused by such robots, the responsibility, depending on the circumstances of the case, will rest with the owners of such robots, as on the owners of the source of increased danger, or on the manufacturers of such robots.

In the event that the special status of the robot as an independent subject of legal relations is established by the national legislation of Ukraine in the future, the issue of responsibility for errors of artificial intelligence will be subject to adjustment. There will be a need to introduce a special status of "electronic personality", a separate type of insurance, the introduction of additional criteria for the distribution of responsibility between the manufacturer, owner and AI, etc. In such a case, it is extremely important that the level of autonomy of AI at the legislative level is carefully controlled by a person. It seems that these technical means should serve only as a tool and help a person, and not become a competitor or a completely equal subject of social relations, violating the principle according to which law is created by conscious people for conscious people, by thinking people – for thinking people.

Advantages and disadvantages of using artificial intelligence for humans

In the scientific literature, two directions of development of AI and robotics can be seen in the future. The first consists in solving the problems associated with the approximation of weak AI to human capabilities. At the same time, the second, which today seems more like a fantasy, consists in creating a strong AI that will be able to completely surpass the abilities of a person and compete with him on an equal footing. Accordingly, the advantages and disadvantages of using AI in both perspectives are different.

Philosopher Nick Bostrom argues that instead of surpassing the human race and driving it to ruin, AI can help us solve an enormous number of complex problems, including curing disease, poverty, environmental destruction, and more. Robotic mechanisms in many industries often perform work that is considered dangerous for humans.

The positive features and qualities of weak AI include the ability to work without breaks and weekends and process an extremely large array of information. After all, unlike AI, due to an excessive amount of calculations and data, the human intellect becomes disoriented, and, accordingly, cannot manage information successfully and leads to ineffective decisions.

²⁷ Civil Code of Ukraine: current legislation with changes and supplements as of 01.01.2022, https://zakon.rada.gov.ua/laws/show/2947-14#Text.

The use of AI can significantly reduce time, financial costs and contribute to labor productivity. Thus, the use of AI in court proceedings will minimize the amount of time spent on preparing procedural documents by the parties, searching for court practice or other arguments, etc. Today, humanity can view AI and automated coding and prediction systems as applying patterns to filter certain information and documents. Thus, instead of having lawyers or judges involved in filtering large amounts of information, software can be used for this purpose, making the judicial system easier and faster²⁸.

Another advantage of AI is that it is completely devoid of defects of the human psyche, and is able to provide a much more objective result of analyzing a complex set of facts and make a more rational decision. If we add that AI has no emotions, cannot feel sympathy or antipathy for a person, does not need money, etc., then we will have an obviously more fair and independent decision. For example, in the justice system, when a judge carries out his activities under someone's pressure, AI will not physically be able to do this. He can neither hear man nor hear law. For him, any information appears as symbols, the inner meaning of which remains unattainable²⁹.

Undoubtedly, the benefits of using AI as a tool are obvious, but in an era when there is a question of recognizing technology not only as an object, but also as a subject of social relations, it is worth emphasizing the possible disadvantages and dangers in the case of such use.

With the rapid development of technology, many social, religious and moral problems arise, which entail a conflict between natural and artificial forms of thinking.

As early as 2017, an online court functioned in China in the form of a WeChat mobile application. A video conference is used instead of a courtroom, and an AI-powered avatar replaces the judge. The first such digital court was the Hangzhou court, after which the Chinese government created similar courts in Beijing and Guangzhou. To date, these three courts have considered 200 000 cases, passing decisions on 110 000. They can deal with copyright disputes, Internet business disputes and e-commerce violations³⁰.

However, in the case of granting AI the powers of a judge in Ukraine, we will have a replacement of the form of the judicial process – from adversarial (the judge plays a passive role, giving the parties the opportunity to present their arguments as much as possible) to inquisitorial (the judge plays an active and decisive role, making maximum efforts to establish the truth in the case). Research conducted in the mid-1970s by the American scientist J. Thi-

²⁸ E.O. Parasyuk, V.R. Jalilova, *The expediency of recognition by the subjects of the law of robots, artificial intelligence and artificially intelligent robots*, "TK Meganom, Kyiv, Scientific review" 2019, No. 4(57), pp. 101–109.

²⁹ M. Tegmark, op. cit.

 $^{^{30}\,}Beijing\,AI\,Principles...$

bot led to the conclusion that although the inquisitorial trial gives an objectively fairer result in the end, people prefer the adversarial process, even in the event of their own loss, not trusting the decision of the "unthinking intellect" 31.

The use of AI in judicial proceedings, and therefore the transition to the inquisitorial form of the judicial process, may violate Art. 6 of the European Convention on the Protection of Human Rights, which guarantees everyone the right to a fair trial under the conditions of an adversarial judicial process.

Using the example of the sphere of justice, it is possible to justify the threat of partial and later complete replacement of people in all processes, which in the long run will cause mass unemployment. After all, if the state creates an artificial judge, artificial lawyers will be relevant and predict the judge's behavior. In this case, it will lead not only to unemployment, but also to the transformation of the justice system into an exchange, where people will buy their fate from companies that have more powerful AI technologies³².

Back in 2001, robotic mechanisms won over people in an impromptu trading competition, in 2018 a portrait of a fictional person drawn by AI was sold for \$432 000 – all this indicates that even at the current stage of its development, AI is already competing, and even replaces a person. According to statistics, between 400 and 800 million people worldwide may lose their jobs to automation by 2030.

However, the biggest danger of using robotic technology is that AI has the ability to reproduce itself and can lose human control. Such a perspective is possible only if it is given the same legal personality as a person. If AI is only an assistant, a servant of a person, can only help implement ideas and decisions made by a person, such technologies will have a positive impact on all areas of society.

The challenges faced by lawyers and scientists are the clear settlement of issues related to the creation and use of robotics, as well as responsibility for the damage caused by it, and clear recognition of it as an object of public relations.

Conclusions

Scientists believe that the final stage of the creation of AI machines, and later machines that are more intelligent and efficient than humans, will not be their integration into our lives, but their victory over us. However, the time when artificial and biological objects are difficult to distinguish from each other is inevitably approaching. No country or company, knowing about the

³¹ S. Willick, Artificial Intelligence: Some Legal Approaches and Implications, "Al Magazine" 1983, Vol. 4(2), pp. 5–16.

³² N. Martsenko, Influence of artificial...

possible advantages and income, will refuse new AI research and, accordingly, its development. In any case, if such an evolution cannot be stopped, then it is worth creating AI in such a way that it ensures social justice, supports human activities and basic rights, and does not reduce, limit or mislead human autonomy.

When applying AI in any sphere of social life, it is necessary to feel the limit that humanity should not cross. It is important that the level of autonomy of AI is carefully controlled by a person, since these technical means should be used to strengthen positive social changes and help a person, and not become a competitor or a completely equal subject of social relations.

But, of course, it is unwise to ignore the obvious benefits of AI. Thus, in order for society to be able to safely derive such benefits from AI, the principles on which its use will be based must be outlined as follows:

- 1. compliance of AI activities with fundamental human rights;
- 2. normative and legal recognition of AI exclusively as an object of public relations;
- 3. a high-quality and safe structure of AI machine learning and the transparency of the "black box", which will make it possible to avoid misunderstandings, due to which fears arise about the impossibility of controlling it;
 - 4. a properly ensured degree of control over the autonomy of the use of AI.

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Summary

Artificial intelligence and human rights: a scientific review of impacts and interactions

Keywords: human rights, artificial intelligence, legal nature of artificial intelligence, legal personality, civil liability of artificial intelligence.

Undoubtedly, in the conditions of active use of Artificial Intelligence (hereinafter – AI) in many areas of human life, the topic of this scientific research is extremely relevant. Despite the rapid development of robotic technology and its impact on the improvement of human life, it is extremely important to consider the threats and problems of using AI without proper human control. That is why it is necessary to improve international and national legislation for the safe use of AI for the benefit of humanity, and not against human rights. An important aspect of solving the issue of legal regulation of AI is the study of the legal nature and possible legal personality of AI from the point of view of it impact on humans and human rights. This article, in particular, examines the possible impact of the legal personality of AI on human rights, as well as the feasibility of granting AI the status of a subject. In addition, scientific sources on the liability of AI for damage caused by its use were analyzed. Advantages and threats in the case of human use of AI are separately highlighted.

The need to legally fix the obligations of AI producers to create it in such a way that it ensures justice in society, supports human activities and basic rights, and does not reduce, limit or mislead human autonomy is justified. The

level of autonomy of AI should be carefully controlled by a person, since these technical means should be used to strengthen positive social changes and help a person, and not become a competitor or a fully equal subject of social relations.

Streszczenie

Sztuczna inteligencja i prawa człowieka – naukowy przegląd skutków i interakcji

Słowa kluczowe: prawa człowieka, sztuczna inteligencja, charakter prawny sztucznej inteligencji, osobowość prawna, odpowiedzialność cywilna sztucznej inteligencji.

Niewatpliwie w warunkach aktywnego wykorzystania sztucznej inteligencji (SI) w wielu dziedzinach życia człowieka temat niniejszych rozważań naukowych jest niezwykle aktualny. Mimo szybkiego rozwoju technologii robotycznej i jej wpływu na poprawę ludzkiego życia, niezwykle ważne jest rozważenie zagrożeń i problemów związanych z wykorzystaniem SI bez odpowiedniej kontroli człowieka. Konieczne jest zatem ulepszenie międzynarodowych i krajowych przepisów dotyczących bezpiecznego korzystania z SI z korzyścia dla ludzkości, a nie przeciwko prawom człowieka. Ważnym aspektem rozwiazania kwestii prawnej regulacji SI jest badanie charakteru prawnego i ewentualnej osobowości prawnej SI z punktu widzenia jej wpływu na człowieka i prawa człowieka. Niniejszy artykuł analizuje w szczególności możliwy wpływ osobowości prawnej SI na prawa człowieka, a także możliwość nadania SI statusu podmiotu. Ponadto przeanalizowano źródła naukowe dotyczące odpowiedzialności SI za szkody spowodowane jej użyciem. Osobno podkreślono zalety i zagrożenia w przypadku wykorzystywania sztucznej inteligencji przez ludzi.

Uzasadniona jest potrzeba prawnego ustalenia obowiązków producentów sztucznej inteligencji, aby stworzyć ją w taki sposób, aby zapewniała sprawiedliwość w społeczeństwie, wspierała działalność człowieka i podstawowe prawa oraz nie ograniczała ani nie wprowadzała w błąd ludzkiej autonomii. Poziom autonomii SI powinien być dokładnie kontrolowany przez człowieka, gdyż te środki techniczne powinny służyć wzmocnieniu pozytywnych zmian społecznych i pomocy człowiekowi, a nie stawać się konkurentem lub w pełni równoprawnym podmiotem relacji społecznych.