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THE NEED TO DEVELOP ETHICAL ASPECTS OF THE USE OF ARTIFICIAL INTELLIGENCE IN MODERN CONDITIONS

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ABSTRACT:
This article analyzes the need to develop ethical considerations for the use of artificial intelligence (AI) by modern human civilization in an era of rapid development and application of digital solutions in many spheres of human life. New AI technologies are being developed that are becoming a powerful force and could pose a threat to both individuals and all of humanity. This factor necessitates examining AI within the framework of ethics and morality, its basic principles and norms, and the development of a special Code of Ethics in the field of AI. This Code could establish general ethical standards and principles of behavior that should guide the activities of participants in AI-related relationships.

Keywords: Artificial Intelligence, ethics of Artificial Intelligence, digitalization, Code of Ethics, ethical standards.

Introduction

Today we are witnessing the emergence and rapid spread of artificial intelligence across all spheres of human life. Experts in the field believe that «as the global AI software market expected to grow 154% every year, the industry is projected to be valued at US$22.6 billion by 2025». [12]

But what exactly is artificial intelligence? The concept itself is broad and can have different meanings depending on the context. Specialists in the field often prefer to use terms like "artificial intelligence methods" or "intelligent systems."

AI can be understood as a form of modern technology that empowers machines to tackle problems typically solved through logical reasoning. Artificial Intelligence is capable of imitating human behavior, and its main feature is the ability to learn independently from available information and «experience».

Other definitions of artificial intelligence have been proposed, such as:

1. «A scientific field that provides the framework for posing and solving problems related to the hardware or software modeling of human activities traditionally considered intellectual.». [3]

2. «A field of computer science and information technology that aims to recreate intelligent reasoning and actions using computer systems and other artificial devices.». [9]
3. «The ability of a system to correctly interpret external data, learn from it, and use the acquired knowledge to achieve specific goals and objectives through flexible adaptation». [13]
Today it has become clear that modern science and scientific and technological progress are constantly facing various new problems, including those of an ethical nature. The activities of scientists are constantly acquiring new aspects that are associated with their moral and ethical assessment, based on human reason and public consensus. The entire history of civilization has repeatedly shown that any scientific discovery has its positive and negative sides and can be directed either for good or evil for humanity.
In modern reality, humans are increasingly becoming dependent on machine systems, which necessitates the development of new ethical and legal positions on the use of data and intellectual property. Artificial intelligence technologies have great potential for scientific and technological progress on the one hand, and for abuse or misuse on the other. Various contradictions arise in the application of artificial intelligence. The cause of these contradictions is not the scientific and technological process itself, but the ignorance and moral immaturity of consumers of the results of knowledge.. [5]

LITERATURE REVIEW

The author of the term «artificial intelligence» is an American computer scientist John McCarthy, who won the Turing Award for his enormous contribution to the field of artificial intelligence research. In 1956, he organized the first conference on artificial intelligence at Dartmouth, where he coined the term. In one of his articles, «What Is Artificial Intelligence?», he defined the concept of artificial intelligence as «...the science and technology of creating intelligent machines, especially intelligent computer programs. Artificial intelligence is concerned with the task of using computers to understand the workings of human intelligence, but is not limited to the use of techniques observed in biology.» [14]
Ethical issues regarding the use of artificial intelligence are of great importance. A number of scientists have conducted research on this issue. For example, Kholodnaya E.V. believes that for now, to a greater extent, «numerous ethical initiatives are aimed primarily at developing a reflection on the professional behavior of developers, manufacturers, users and other subjects in the field of AI technologies.» [11]
Fedorov M. (Director of the Center for Scientific and Engineering Computing Technologies for Problems with Large Data Arrays of the Skolkovo Institute of Science and Technology (Skoltech) AC) notes that «... the basis for creating an ethical environment for the development of artificial intelligence technologies should be «human-centrism», which would strictly prohibit the creation of certain types of artificial or symbiotic intelligence, similarly to the prohibition of human cloning...». [6]
Afanasyeva Zh.S., Afanasyev A.D. express the opinion that «The ethical issues associated with AI research and the application of AI technologies can be divided into two parts. The

first part is defined by the use of weak AI technologies, which changes the way people communicate with each other; by the use of these technologies for the benefit or harm of humans. The second problem is result of the interacting with fundamentally new subjects - self-learning machines, which are based on strong AI.» [4]

A brief review of research on the ethical implications of AI in modern life demonstrates that this issue remains unresolved and under-researched. Consequently, it is essential to devote even greater attention to its development, with a focus on depth and comprehensiveness.

RESEARCH METHODS

To explore this topic in detail, a multi-method approach was employed. This included the method of primary research, complemented by a comparative and systematic analysis of relevant scientific literature. Additionally, both inductive and deductive reasoning were utilized to synthesize the gathered materials.

RESULTS AND DISCUSSIONS

Today, two concepts have been defined: strong and weak artificial intelligence. Weak artificial intelligence is already widely used in various areas of people's everyday lives, such as «smart homes», image and face recognition, online translators and conversational assistants, self-driving vehicles and much more. Thus, weak artificial intelligence mainly solves the tasks for which it was created.

Strong artificial intelligence does not yet exist, and scientists are divided on whether it can ever be created. Strong AI would be characterized by consciousness, the ability to autonomously learn and perform fundamentally new tasks, and goal-setting capabilities that are not present in weak AI. Although there is no strong artificial intelligence yet, it is still extremely important to consider whether machines can think and act as moral agents. These urgent questions raise ethical concerns about the boundaries of what is permissible and what is morally right.

Building ethics into machines is a challenging task. Machines do not have inherent morality, and it is difficult to design and implement ethical principles in artificial intelligence systems using even the most advanced technologies; they are not capable of following ethical values in the same way that humans do. Therefore, it is crucial for humans to carefully consider the ethical implications of AI and develop clear moral principles for its use.

Today, the process of a gradual qualitative transition from conceptualizing and understanding the principles of using artificial intelligence to the first practical steps in the field of ethics has begun. The developers of artificial intelligence themselves are primarily interested in a balanced approach that prioritizes human-centricity without imposing strict restrictions on AI development.

Many well-known IT companies in the world, and a number of some countries, have already understood the need to develop ethical aspects of artificial intelligence. They began to create ethical codes in the field of artificial intelligence. For example, Microsoft was one of the first companies, already in 2016, to develop and begin to apply the document «10 Laws of

Artificial Intelligence» which sets out the key requirements for the development of artificial intelligence ethics. This corporation proposed six ethical principles for the development of artificial intelligence, published in the pages of the book «The Future Computed» - fairness, reliability, privacy and security, inclusivity, transparency, accountability and responsibility. [8]

IBM took the same approach. Today, there are about fifty large IT companies around the world that have developed and applied their own codes and rules based on ethical principles related to the use and development of artificial intelligence. Among such companies are Russian ABBYY, Sber and Yandex.

It is already clear and evident that humanity has entered an era of widespread use of artificial intelligence in many spheres of life. However, attitudes towards AI vary widely, from the cautious stance of business giants such as Elon Musk, Bill Gates, and Stephen Hawking, to the actively creative approach of Raymond Kurzweil, Larry Page, Jaan Tallinn, Mark Zuckerberg, and many other equally authoritative scientists and entrepreneurs.

In 2017, the Asilomar Conference on the Safety of Working with Artificial Intelligence was organized and held in the USA (California), organized by the Future of Life Institute (FLI). The result of this conference was the document «23 principles of artificial intelligence», of which 13 relate specifically to the ethical standards and values of working with artificial intelligence. Subsequently, these principles were reflected in the corporate standards of a number of companies whose activities are related to the development of artificial intelligence.

Ethics in the field of artificial intelligence is becoming one of the main elements of soft law in the regulation of national and international markets. In December 2021, UNESCO adopted the Recommendation on the Ethical Considerations of Artificial Intelligence, which outlines approaches to international soft regulation that pay particular attention to the ethical dimension. A framework has also been proposed for a possible global ethical assessment of AI using an index centered on stakeholders such as government, business, civil society, and research centers. These recommendations on the ethical aspects of AI provide a model for global consensus on various aspects of the ethical regulation of this modern technology.

Many countries, realizing the importance and danger of artificial intelligence, have begun to develop and implement their own AI Ethics Codes. For example, in 2021, Russia adopted the “Russian Code of Ethics in the Field of Artificial Intelligence” at the 1st International Forum “Ethics of Artificial Intelligence: The Beginning of Trust.” By 2023, more than 150 Russian organizations had signed this document. The need for ethical standards and regulations for AI is spelled out in the “Russian National Strategy for the Development of Artificial Intelligence for the Period until 2030”.

«Russia is one of the first countries in the world to formulate five main risks and threats that accompany the introduction of artificial intelligence into life: discrimination, loss of privacy, loss of control over artificial intelligence, harm to humans due to algorithm errors, and use for unacceptable purposes. All of them are included in the adopted «Code of Ethics of

Artificial Intelligence» as threats to human rights and freedoms. In response to risks, the code approves the basic principles for the implementation of artificial intelligence - transparency, truthfulness, responsibility, reliability, inclusiveness, impartiality, security and confidentiality. The main priority of this Code for the Development of Artificial Intelligence Technologies is to protect the interests and rights of people». [4]

China has also released a code of ethical principles for artificial intelligence, where the issue of control over it is central. Those, in this country there is a peculiar limitation of the influence of high technologies on people. But at the same time, China's task is to acquire the status of a world leader in developments in the field of artificial intelligence by 2030. The Ministry of Science and Technology of the People's Republic of China published the code «Specifications of the Ethics of New Generation Artificial Intelligence», which notes that people should have the full right to decide whether or not to accept artificial intelligence services, withdraw from interaction with an artificial intelligence system, or stop the operation of such a system at any time.

The European Union has created the Artificial Intelligence Leading Expert Group (AI HLEG) to develop ethics guidelines. In particular, they warn the world's major technology companies that algorithms should not discriminate against users based on their age, race or gender. The document states that artificial intelligence must comply with the requirements of established norms and laws, ethical principles and values, and be reliable from a technical and social point of view.

Recommendations include the need to take into account ethical issues at every stage of the development and implementation of artificial intelligence, transparency of processes, as well as guarantees to protect the confidentiality of user personal data and other measures.

Considerable attention is also paid to the ethics of using artificial intelligence in strategic areas such as medicine and biotechnology. In its paper, AI HLEG proposes that experiments and research on animals and humans using artificial intelligence must be ethically justified and approved by relevant regulators.

Uzbekistan, as one of the developing countries in the world, does not stand aside in the use of artificial intelligence. The country pays considerable attention to this issue from the government and the state. Thus, in 2021, Resolution of the President of the Republic of Uzbekistan N PP-4996 «On measures to create conditions for the accelerated implementation of artificial intelligence technologies» was adopted. [1] This Resolution was adopted in accordance with the Strategy «Digital Uzbekistan - 2030» and in order to create favorable conditions for the accelerated implementation of artificial intelligence technologies and their widespread use in the country, ensuring the availability and high quality of digital data, and training qualified personnel in this area.

The country also adopted Resolution of the Cabinet of Ministers of the Republic of Uzbekistan N 475 dated July 31, 2021 «On organizing the activities of the Research Institute for the Development of Digital Technologies and Artificial Intelligence». [2] Its main tasks are:

«Organization of scientific research aimed at the full implementation of the Digital Uzbekistan Strategy - 2030 and the introduction of artificial intelligence technologies into the economy, social sphere and public administration.

Development of innovative products for control and automation of production processes based on artificial intelligence technologies, as well as their models, algorithms and software.

Conducting fundamental and applied scientific research in the field of artificial intelligence, forming a scientific ecosystem for the development of digital technologies.

Establishing cooperation and implementing joint projects with leading foreign innovation and scientific institutions for the development of artificial intelligence technologies.» [10]

In Uzbekistan today, various communities operate, educational courses are organized and launched, and conferences on artificial intelligence are held. Those. In recent years, the digital technology industry in the country has grown significantly, and its place in various international rankings is changing for the better from year to year. For example, «according to the statistics indicated in the Government Artificial Intelligence Rea Dines Index, developed by the British organization Oxford Insights, Uzbekistan ranked 158th place among 160 states in 2019, 95th place in 2020, 93rd place in 2021 and 79th place in 2022 (growth +14).» [7]

Those, in Uzbekistan, the first steps are being taken to apply artificial intelligence technologies. However, the situation regarding the ethical side of the use of artificial intelligence is not yet at the proper level. And, working in this direction, the country needs to pay attention to developing its own code of regulatory and ethical principles and norms for the development and application of artificial intelligence.

CONCLUSION

Thus, it can be noted that today, although the main concerns may be related to the «superiority» of artificial intelligence over humans, more pressing concerns relate to the social and ethical implications of its use, such as, for example, the misuse of personal data and the possibility that it may actually exacerbate rather than reduce existing inequalities.

The interaction between man and artificial intelligence at the present stage of its development involves a wide variety of scenarios, which gives rise to different categories of ethical problems that depend on the very purpose of using artificial intelligence, on the one hand, and independent decision-making by self-learning programs based on artificial intelligence, on the other hand. Much attention also needs to be focused on artificial intelligence research itself, which also needs to define its ethical framework.

The prospects for the use of artificial intelligence technologies are enormous and require special attention. And humanity needs to decide at the global level on the principles that will be laid down in this area of technology, both for companies developing solutions based on artificial intelligence, and for consumers of these solutions. The more complex high-tech devices developed using artificial intelligence technologies, including robots, become, the

more urgent it becomes to develop guiding ethical principles on the basis of which they will operate.

Emerging ethical issues regarding the use of artificial intelligence also require countries to thoroughly study their legislation, which will be able to ensure a responsible approach to the long-term development of artificial intelligence technologies.

The ethical aspect of the development and implementation of artificial intelligence technologies is extremely important for understanding the further development of modern civilization and the place of man in it. The philosophical questions that arise in this regard are relevant to artificial intelligence as a research space.

Uzbekistan needs to develop its precise and clear position on the issue of the ethical side of the use of artificial intelligence, relying on already adopted international legal documents on this issue. This is also necessary in order to be able to defend their national and state interests in the field of application of artificial intelligence in interstate communication and participation in international organizations.

It is clear that artificial intelligence today is one of the most promising technologies that can increase human capabilities and simplify our lives. But the main fact remains that artificial intelligence is only a tool that humanity can and should use with the utmost care and ethics. Today, the world's efforts must be focused on developing a legislative and ethical framework aimed at ensuring responsible development of artificial intelligence technologies.

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