UDC 334.025+339.98

ARTIFICIAL INTELLIGENCE IN MODERN SOCIETY: ETHICAL AND SOCIAL ISSUES

ИСКУССТВЕННЫЙ ИНТЕЛЛЕКТ В СОВРЕМЕННОМ ОБЩЕСТВЕ: ЭТИЧЕСКИЕ И СОЦИАЛЬНЫЕ ПРОБЛЕМЫ

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Keywords: artificial intelligence, ethical problems of artificial intelligence, social problems, risks of artificial intelligence, digital technologies.

Ключевые слова: искусственный интеллект, этические проблемы искусственного интеллекта, социальные проблемы, риски искусственного интеллекта, цифровые технологии.

Abstract. The paper examines ethical and social issues of the use of artificial intelligence in modern society, identifies problematic areas of implementation of this technology in the field of labor market, social and economic inequality, data privacy, social isolation, legal regulation of artificial intelligence and opacity of algorithms. The article examines potential solutions and approaches to ensuring the ethical use of artificial intelligence.

Аннотация. В работе рассмотрены этические и социальные вопросы применения искусственного интеллекта в современном обществе, выявлены проблемные области внедрения данной технологии в области рынка труда, социального и экономического неравенства, конфиденциальности данных, социальной изоляции, правового регулирования искусственного интеллекта и непрозрачности алгоритмов. В статье исследованы потенциальные решения и подходы к обеспечению этического использования искусственного интеллекта.

Until recently, artificial intelligence (AI) has been a source of inspiration for science fiction authors and artists. Nowadays, futuristic ideas are giving way to real scientific research and practical results in the application of artificial intelligence in various fields. Advanced technologies are actively permeating all sectors, including manufacturing, services, education, science, and management, forming the foundation for intellectual automation, robotics, logistics, and communications [12]. The development and integration of AI into various aspects of life bring not only potential benefits but also generate certain apprehensions and negative consequences. The unprecedented advancement of AI is sparking concerns about its impact on the workforce, resulting in job loss

and increased inequality among different population groups. Questions also arise about data confidentiality and security, particularly in the context of the widespread use of machine learning algorithms that underpin AI. Thus, ethical issues related to AI deployment become a pressing matter.

Artificial intelligence, with its unique capabilities for learning and data analysis, penetrates all spheres of modern life. It has become an integral part of our everyday experience, from recommendation systems in social networks to autonomous vehicles and advisory robots. Nonetheless, as the influence of this technology continues to grow, questions arise about how AI is transforming the structure of society. According to research conducted by the World Economic Forum, nearly 75 % of surveyed companies acknowledge AI as a key driver of changes in the business and employment landscape. Contemporary technology has a dual impact on the labor market: on the one hand, artificial intelligence contributes to the creation of new jobs in the technology sector, but at the same time, it leads to workforce reduction due to automation and the integration of neural networks into production processes [13]. Based on projections by the U.S. Bureau of Labor Statistics, it is anticipated that by 2030, automation will significantly contribute to job reductions in 19 out of 30 professions, which could potentially result in higher unemployment rates and, as a result, an increase in poverty. Individuals who experience job loss because of automation will face financial difficulties resulting from decreasing wages. Additionally, there will be an increased demand for retraining to acquire new skills that align with the changing job market requirements [14]. Considering these developments, the progress and application of artificial intelligence raise important ethical and social questions in society, particularly concerning the prospects for future employment and the work environment.

In the modern world, which is becoming increasingly global and technologically advanced, interpersonal connections are diminishing, leading to an increase in loneliness. Based on a report by the European Commission, approximately 13 % of respondents have reported feeling lonely most of the time or on a constant basis [7]. In the conditions of social isolation and a lack of resources to meet the needs of vulnerable populations, artificial companion robots have been developed to provide companionship and support for people, particularly the elderly. Despite the positive aspects of this development, there are several drawbacks: the loss of human connections and depersonalization of relationships with machines can increase the sense of isolation and worsen users' psychological well-being [6]. In light of the above-mentioned dimensions, it is important to strike a balance between the benefits and risks of using companion robots to ensure their effective integration into everyday life.

Another significant aspect is related to data privacy. According to a report from the InfoWatch expert-analytical center in 2022, 667.6 million records of personal user data were lost [4]. This fact indicates insufficient protection of personal information in the online environment, thereby raising questions about

how effective the use of AI is. A growth in cases of data leaks can undermine public confidence in technology companies and AI systems. If users cannot be confident that their personal data is secure, a conscious decision to limit the use of AI in everyday life becomes inevitable. In this regard, the responsibility of companies, as well as regulatory authorities in ensuring the control and safety of information increases.

Experts note that artificial intelligent systems, originally conceived as neutral and impartial, can effectively exhibit discrimination, reproducing or even reinforcing social inequality among individuals based on factors such as race, ethnicity, age, gender, etc. [15]. For instance, due to gender-based discrimination observed in the decisions made by the Apple Card credit algorithm, male applicants were granted significantly higher credit limits than their spouses, even in cases where some women had higher credit scores [8]. In another scenario, in algorithms predicting the required volume of medical care, black patients received less treatment than white patients, even with identical diagnoses [9]. Despite the absence of explicit racial bias in the source code, the algorithm produced erroneous outcomes due to internal biases of data and learning processes. All these instances point to "algorithmic bias", a phenomenon that leads to unequal outcomes and decisions, distorting reality and potentially harming specific social groups. Algorithmic bias can arise from the lack of transparency in the algorithms' data and processes, highlighting the pressing issue of algorithm development transparency. A number of scientists believe that the nature of algorithms remains nontransparent due to the "black box" principle, the lack of clear definitions of the concept of "fairness", as well as AI training on large amounts of data without taking into account the context of the subject area [5; 11]. Such opacity can cause discontent and distrust among users and society as a whole. Customers may face an unexpected refusal of credit, and owners of autonomous cars may face unpredictable behavior of their vehicles.

In this regard, the laws and principles regulating information technology are actively being developed in various countries around the world. The European Union has developed a number of legislative acts regulating the development of digital technologies [3]. In China, a data protection law came into effect [10], and Russia has adopted Federal Law "On conducting an experiment to establish special regulation in order to create the necessary conditions for the development and implementation of artificial intelligence technologies...", aimed at creating and developing AI technologies [1]. These steps demonstrate the growing importance of regulating ethical issues in the digital sphere, as well as the commitment of various nations to safeguard the rights and interests of their citizens in the rapidly evolving technological landscape. However, many experts believe that there still exists a lack of a clear methodological foundation for legal regulation of artificial intelligence in Russia. This includes the need for the

development of comprehensive legislation and framework legal documents aimed at standardization and control in this field [2].

Thus, the development and implementation of AI technologies are important and promising achievements, but they are accompanied by certain ethical and social problems. It is important to achieve a balance between the benefits that AI can bring to our society and the negative consequences. It is critical to develop ethical standards governing the use of AI, including issues of equality, transparency, security, and confidentiality of data. Furthermore, it is important to foster public discourse and engage experts in this field to ensure that society is prepared to address the challenges posed by the advancement of AI. Equally important is the consideration of potential risks associated with the autonomy and self-learning of artificial intelligence. The ability of AI to make decisions without human involvement or control can lead to unpredictable consequences, so the implementation of AI should be accompanied by stringent security checks and responsible usage. It is necessary to be aware of the consequences related to economic and social inequality that may arise as a result of automation and the replacement of humans with AI-based robots and programs.

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