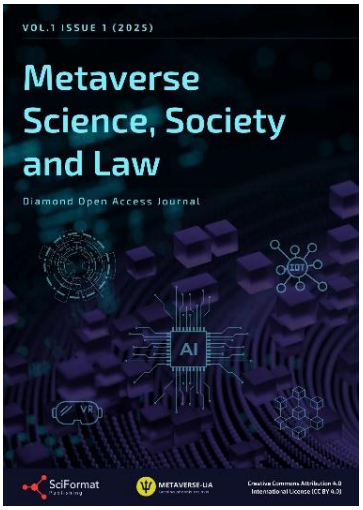

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DEVELOPMENT OF THE DOCTRINE OF IMPLEMENTING ARTIFICIAL INTELLIGENCE IN PUBLIC ADMINISTRATION

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ABSTRACT

The historical and legal stages of the formation and development of the doctrine of the introduction of artificial intelligence into public administration are studied. The concept of artificial intelligence in public administration is given. The essence of artificial intelligence in public administration is revealed, its types and principles are substantiated. The regulatory and legal regulation of artificial intelligence in Ukraine is analyzed. The advantages of introducing artificial intelligence into the public administration system and the prospects for the formation and development of artificial intelligence in public administration of Ukraine are substantiated.
Attention is drawn to the predicted challenges and risks of using artificial intelligence. The author proposes to make changes and additions to the current information legislation of Ukraine.

KEYWORDS

Artificial Intelligence, Digitalization, Public Administration, Doctrine

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Introduction.

The modern world is experiencing a rapid development of digital technologies, among which artificial intelligence (AI) occupies a leading place as one of the most revolutionary innovations of the 21st century. The introduction of artificial intelligence technologies into the public administration system is becoming not only a matter of modernization of public administration, but also a strategic necessity for ensuring the efficiency, transparency and quality of public service provision.

In the context of globalization and digital transformation of society, traditional approaches to public administration require a radical rethinking. Artificial intelligence as a general-purpose technology carries both challenges and new approaches to public policy, which makes the study of this topic particularly relevant.

The relevance of the topic is enhanced by the fact that Ukraine has adopted the National Strategy for the Development of Artificial Intelligence for 2021-2030, which aims to position the country as a leader in the development and implementation of AI technologies. This indicates a strategic understanding of the importance of integrating AI into all spheres of public life, including public administration.

The purpose of the study is to comprehensively analyze the formation and development of the doctrine of introducing artificial intelligence into public administration, the features, advantages and challenges of using artificial intelligence in the public administration system, as well as to determine the prospects for its development in Ukraine.

Artificial intelligence in the context of public administration can be defined as a set of technologies and algorithms capable of imitating human cognitive functions to solve public administration tasks [3, p. 15]. These technologies include machine learning, natural language processing, computer vision, expert systems and other tools that allow automating decision-making processes and improving the quality of public services.

The conceptual basis for the introduction of AI into public administration is the principle of "smart governance", which involves the use of advanced technologies to create a more efficient, transparent and citizen-oriented management system. This approach is based on three main components: automation of routine processes, support for data-based decision-making and improved interaction with citizens.

In management, artificial intelligence can bring many benefits, including automation of routine tasks, improved interaction with citizens and analysis of large volumes of data [4, p. 28]. This allows government agencies to focus on strategic tasks and more complex issues that require human intervention.

The theoretical basis for the application of AI in the public sector is the concept of digital governance, which considers information and communication technologies as a key tool for the transformation of public administration. Within this concept, AI acts as a means of achieving the main goals of public administration: efficiency, accountability, transparency and orientation towards the needs of citizens.

Legal regulation of the use of artificial intelligence in public administration in Ukraine is at the stage of active formation. The main strategic document in this area is the Concept of the Development of Artificial Intelligence in Ukraine, approved by the government in 2020 [5, p. 2].

The Cabinet of Ministers of Ukraine approved an action plan for the implementation of the Concept of the Development of Artificial Intelligence in Ukraine for 2021-2024 [2, p. 1], which indicates a systematic approach to the implementation of AI technologies in various areas, including public administration.

In addition, in 2024, a new concept of state policy in the field of artificial intelligence was approved, which demonstrates the evolution of approaches to regulation this area. This document takes into account international experience and current trends in the development of AI technologies.

An important aspect of legal regulation is ensuring ethical principles for the use of AI in the public sector. This includes issues of transparency of algorithms, non-discrimination, protection of personal data and accountability of automated decisions. Ukrainian legislation is gradually adapting to these requirements, taking into account European standards and recommendations.

The issue of creating an institutional framework for managing the development of AI deserves special attention. In Ukraine, there is an Expert Committee on the Development of Artificial Intelligence under the Ministry of Digital Transformation, which coordinates the efforts of various departments in this area.

The introduction of artificial intelligence technologies into public administration carries numerous advantages, which can be grouped into several key areas.

Increasing the efficiency of administrative processes is one of the main advantages of AI. Automation of routine tasks, such as document processing, checking the compliance of applications with established criteria, and distributing citizens' appeals to the relevant departments, allows to significantly reduce the time for performing these operations and reduce the likelihood of errors.

Improving the quality of decision-making is achieved due to the ability of AI to analyze large volumes of data and identify patterns that may not be obvious to a person. This is especially important in the context of strategic planning, forecasting socio-economic processes, and assessing the effectiveness of government programs.

Personalization of public services becomes possible through the use of machine learning algorithms that can adapt interfaces and procedures to the individual needs of citizens. This includes providing relevant information, optimization of service routes and proactive information about available opportunities.

Increased transparency and accountability is achieved through the ability to document all stages of decision-making by AI algorithms. This creates the prerequisites for better control over the activities of public administration and increasing citizens' trust in state institutions.

Saving resources is an important advantage, since automation of processes allows reducing the need for human resources to perform standardized tasks and redistributing them to more complex and creative functions.

Despite numerous advantages, the introduction of artificial intelligence into public administration is accompanied by significant challenges and risks that require careful consideration and systematic resolution.

An analysis of the current use of artificial intelligence technologies in public administration reveals both the advantages of digital technologies and threats to the sovereign information space [6, p. 45]. This emphasizes the importance of balancing innovation and national security.

Ethical challenges include issues of fairness, non-discrimination and transparency of algorithms [1, p. 22]. There is a risk that AI algorithms may reproduce or reinforce existing biases, leading to discrimination

against certain groups of citizens. Technological risks are related to the reliability and security of AI systems. Errors in algorithms or cyberattacks can lead to serious consequences for citizens and the state. In addition, dependence on technological solutions creates risks in the event of their failure or malfunction.

Social consequences include the potential reduction of jobs in the public sector due to automation. This requires the development of strategies for retraining and adapting workers to new conditions.

Legal and regulatory challenges relate to the need to adapt existing legislation to new technological realities. Issues of liability for decisions made by algorithms, protection of personal data and ensuring the right to appeal automated decisions require clear legal regulation.

Organizational challenges include the need to change corporate culture, train personnel and restructure the work processes of state bodies.

The integration of artificial intelligence technologies into public administration at the local level opens up new horizons and creates challenges for the Ukrainian public administration system. The prospects for the development of AI in this area can be considered in several key areas.

Short-term prospects (1-3 years) include the implementation of basic AI technologies to automate the most standardized processes. This may include the development of chatbots for informing citizens, automatic classification systems for appeals and basic analytical tools for processing open data.

Medium-term prospects (3-7 years) involve the creation of more complex systems capable of supporting management decision-making. This includes the development of predictive models for budget planning, early warning systems for social problems, and intelligent platforms for coordination between different levels of government.

Long-term prospects (7-15 years) may include the creation of complex "smart governance" systems that are capable of autonomously performing a significant part of administrative functions with minimal human intervention.

An important factor in development is Ukraine's participation in international initiatives. In May 2025, a scientific and practical conference "Artificial Intelligence in Public Administration: Challenges, Opportunities, Prospects", which indicates an active scientific discourse in this area.

The key factors for the successful development of AI in the public sector of Ukraine are: the development of appropriate educational infrastructure, the creation of partnerships between the public and private sectors, ensuring investment in research and development, and the formation of citizens' trust in new technologies.

The study of the issues of applying artificial intelligence in public administration allows us to draw several important conclusions regarding the current state and prospects for the development of this area in Ukraine.

First, artificial intelligence represents significant potential for the transformation of the public administration system, offering tools to increase the efficiency, transparency, and quality of public service provision. Automation of routine processes, improved analytical capabilities, and personalization of interaction with citizens are key advantages of implementing AI technologies.

Second, the successful implementation of AI in public administration requires a comprehensive approach that includes the development of an appropriate regulatory framework, investments in technological infrastructure and human capital, as well as ensuring ethical standards for the use of technologies.

Third, the challenges and risks associated with the use of AI are significant and require serious attention. Ethical dilemmas, technological risks, social consequences and legal issues require a systematic solution to ensure the responsible and effective use of technologies.

Fourth, international experience demonstrates various models of AI implementation in the public sector, which can serve as guidelines for Ukraine. At the same time, it is important to adapt these approaches to the specific conditions and needs of the Ukrainian public administration system.

Fifth, the prospects for the development of AI in public administration in Ukraine are encouraging, especially given the strategic documents and initiatives aimed at the digital transformation of the state. However, the realization of this potential requires coordinated efforts of all stakeholders.

Conclusions.

In summary, it can be argued that artificial intelligence is not a panacea for all problems of public administration, but when used correctly, it can become a powerful tool for modernizing public administration and improving the quality of life of citizens. The key to success is a balanced approach that combines technological innovations with ethical principles and an orientation to the needs of society.

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