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## **BENEFITS AND RISKS OF AI USAGE IN PUBLIC ADMINISTRATION OF UKRAINE**

### **ПЕРЕВАГИ ТА РИЗИКИ ВИКОРИСТАННЯ ШІ В ПУБЛІЧНОМУ АДМІНІСТРУВАННІ УКРАЇНИ**

*Розглянуто напрями впровадження технологій штучного інтелекту в сфері публічного адміністрування України. Сформульовано переваги, які можна досягти завдяки впровадженню технологій штучного інтелекту в сфері публічного управління, а також потенційні ризики, на які необхідно зважати. Запропоновано рекомендації, щодо здійснення кроків у створенні сприятливої правової середовища, необхідної для впровадження технологій штучного інтелекту в сфері публічного адміністрування України.*

**Ключові слова:** *штучний інтелект, публічне адміністрування, застосунок, переваги, ризики.*

In today's world, artificial intelligence feels more tangible and impactful than ever before. AI is commonly defined as the intelligence exhibited by machines, particularly computer systems. It is also a field of research in computer science that focuses on developing and studying methods and software that enable machines to perceive their environment, learn from it, and make decisions to maximize their chances of achieving predefined goals. But what type of AI has begun to significantly influence our daily lives? Generative artificial intelligence refers to AI systems that can match or even surpass human cognitive abilities across a broad range of tasks [1].

Generative AI applications have already become a part of our everyday life, having its influence in different fields of our activities, but how can we use these capabilities of AI technologies in public administration? Obviously in a similar way to how private companies have already started using AI technologies in their own processes. AI technologies can be used in several areas of public administration. Firstly it's supporting public employees in their daily tasks, optimizing workload. AI-assistants can significantly help in routine processes, freeing up working time of employees for more important and complex tasks. Secondly, it's analyzing data, building theories and checking hypotheses, which can be massively helpful in public administration. Generative AI can be helpful within the framework of data analysis and decision-making, it can build potential theories that can be used by public managers in practice. Thirdly, AI technologies can support advanced trainings of public employees. It can help to improve the skills and professional knowledge base of public employees by quickly providing the valuable pivoted information [2].

Except formulated benefits, AI-based technologies usage can have plenty of possible risks, as any new technology appearing in a public field. It's important to keep in mind that public administrations usually manage extremely sensitive private data. So before implementing any new AI-based application, it's important to be focused on the next points. Firstly, cybersecurity should be the number one priority. Within the framework of implementing AI-based solutions in a public organization, cybersecurity specialists should be involved to take all necessary measures to ensure the safety of confidential data and overall reliability of systems. Secondly, it is important to treat sensitive information carefully. In 2024, most of the

world's leading companies developed and implemented policies for using AI applications. An important part is being careful with the formulation of a prompt to AI-application, because it should not contain any confidential and sensitive information. Also the quality of prompt results provided by the AI should be always properly checked. AI technologies should constantly process large amounts of data in order to learn, adapt and self-develop. The usage of AI actually helps similar technologies to develop, because the more we use them, the faster these technologies become better and more efficient. Thirdly, understanding of the principles of AI-applications functions. Obviously, we should not require public employees to have a deep understanding of the technology of AI, but everyone should understand the general principles. Most likely any results generated by AI-applications should be an intermediate result of the employee's work. In addition to checking, these results must also undergo additional processing by the employee before they are considered as relevant and high-quality. In addition, it's necessary to inform not only public employees, but also public customers about the benefits and responsibility of AI-technologies usage [3][4].

A fundamental basis of implementation of AI-based applications in public administration systems of Ukraine, should be creation of an acceptable legislative ecosystem. This is a key step, which should be done on the government level, and which includes several points. Firstly, the legislative branch should develop and implement a clear and effective legislative base for the usage of AI in the public sector. Secondly, is a budget planning for AI implementation. The executive branch must plan a certain amount of budget resources for the needs of the implementation and usage of AI technologies in the public sector. An analysis and planning measures must be carried out to assess the necessary resources at the state and local budget levels as necessary for the implementation of such projects. Thirdly, cybersecurity must remain the number one priority. Otherwise, the implementation of insufficiently protected systems will not only be considered as a waste of budget resources, but will also maximize the risk of loss of confidential data, and undermine public trust in public administration systems [5].

Possibilities of AI-based technologies seem to be practically unlimited nowadays. Implementation of these technologies in public administration systems of Ukraine can bring it valuable benefits, if the proper risk management and legislative base will be applied as well.

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