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FEATURES OF DIGITALIZATION AND ARTIFICIAL INTELLIGENCE OF PUBLIC ADMINISTRATION

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ABSTRACT

The article substantiates that modern development of digital technologies dramatically transforms approaches to the organization and functioning of public administration. The vision is given that digitalization is not just a technological innovation, but a prerequisite for effective public administration in the 21st century.

The authors argue that we do not present life without domestic digitalization. The digital technologies we use do not list daily. Most often these are computers, laptops, tablets, smartphones, servers, mobile banking, profiles on social networks, digital fluency, electron mail, cloud digital technologies, work, mobile applications, BlaBlaCar, alarm, household technicians with Wi-Fi, and more. Currently, all humanity has become a luminaire. It is concluded that today as a result of the formation and development of a digital state, a number of "digital terms" is formed in Ukraine, which have been used since the beginning of the XXI century in the Laws "On Electronic Identification and Electronic Trust Services", "On Electronic Documents and Electronic Document Management, and others [1]; It is established that, depending on the expected effects of the digital world, individual groups of stakeholders, the term "digitalization" is used arbitrarily, differently. Digitalization is often confused with the terms of digitalization and digital transformation (digital transformation). The authors offer an understanding of the features of the concept of digitization about the information recording system, while digitalization is about the interconnection systems and the use of digitized data. Digitalization (digitalization) - two conceptual terms in digital state, which are closely related but inaccessible, are not replaced by each other.

KEYWORDS

Digitalization, Digitization, Artificial Intelligence

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Introduction.

It should be noted that digitization does not lead to any changes in the digital processes of public administration bodies, but according to the introduction of the latest digital technologies that create a virtual sphere for relations between public administration and citizens. Dumping creates a digital foundation, and digitalization uses this foundation to further transform digital processes in all spheres of public administration bodies, forming their transition to the global process of digital transformation both their internal organizational activity and external activities. However, despite the full -scale war of Russia, Ukraine shows one of the fastest digital vectors on the planet according to the UN indicators. Digitalization required during the war will remain relevant in the recovery process [9].

Digitalization (digitalization) indicator of changes in interaction, feedback between entities (for example, citizens use electron mail instead of paper sheets instead

Living communication social networks, smartphones). Nuba is not common. The following digital technologies are actively used for digitalization, which are provided by the concepts of digital competences, the development of artificial intelligence, the index of digital transformation and additive technologies (3D printers), Big dat and others [10; 11; 12].

In itself, digitalization is the only action, is not a digital transformation. The concept of digital transformation and innovation should also be distinguished. Digital transformation is focused on citizens, while innovations are focused on changes in consumer behavior. Thus, the term of digitization refers to the encoding of information in digital form. The term digitalization includes the use of digitized information and digital technologies to make changes to the digital processes and models of the subject. Digital transformation (digital transformation) is used in global restructuring of the medium, which is guided by digital technologies.

In the modern world, digitalization is one of the most important areas of transformation of all spheres of public society, including public administration [13]. With the development of digital technologies, artificial intelligence, it was possible to effectively use digital resources to improve the quality of public administration and ensure public access to public services. The essence of modern technologies depends on the adoption, transmission, storage of information. Therefore, there are analog, digital, quantum technologies. Digital technologies are operated in the form of zeros and units that are measured in bats. This method, if described briefly, constructed by a spannut logical and technical principles: "1" can mean action, "true statement" (the supply of current to the transistor is a key element of the processor), and "0" - the absence of action (does not go supply of current). Analog technologies, in turn, work with information in a continuous form, that is, in the form of electrical voltage.

Finally, quantum computers are used to cake, which, unlike ordinary bits that can take "1" or "0", operate values both "0" and "1", which allows to process all possible states at the same time, simplifying the solution of complex calculations.

Methods.

In the process of writing the article, the following methods were used: the method of comparative sociological analysis, the method of structured interviews, the simulation method, system analysis.

Discussion.

In the first stages of computer technology development, both analog and digital computers were developed. However, in the future, the proportion of the latter has increased significantly, which is explained by the benefits of digital technologies over analog. Information in the case of their use is transmitted faster and is not distorted, users can make changes to the program without replacing the equipment, etc. , starting from the new century, and computer quantum. The emergence of the concept of digitalization is explained by the prevalence of digital technologies on alternative methods of working with information, work with digitized information. Public administration digitalization is the process of transition from traditional analog, electronic technologies and shapes, methods, tools, principles of administration to the use of digital technologies and digital solutions, the latest digital principles, resources.

Public administration digitalization includes the introduction of digital platforms, services, digital data processing for convenient interaction of the state and citizens [14; 15; 16; 17; 18; 19].

Digitalization of public administration is aimed at: 1) creation of a single digital space throughout the country; 2) providing public services to the population in a digital environment on the basis of digital technologies; 3) development of digital doubles in the activity and exercise of the powers of public administration entities; 4) the ability to connect to the digital space of the country of the authorities, non -state

institutions; 5) connection of citizens of the country and their associations to digital state resources in order to solve issues and problems. In this regard, this process has some advantages and risks.

The advantages of digitalization of public administration include: 1) reducing corruption: digitalization will avoid a long and difficult time of communication process with state bodies; 2) increasing the efficiency and speed of work of state bodies; 3) improving the quality of services; 4) the possibility of improving transparency and openness of government operations.

Table 1. Stages of digitalization of public administration:

№	Stage	Characteristics
1.	Evaluation and planning	<ul style="list-style-type: none"> - analysis of the current state of digital systems. - Determination of the purpose and porretters of digitalization. - Creating a roadmap and choosing digital technologies for implementation.
2.	Digitalization of the main processes	<ul style="list-style-type: none"> - digitalization of daily administrative operations. - creation of digital infrastructure for basic public services. - introduction of a single platform for intercostal interaction and circulation by digital data.
3.	Implementation of digital services	<ul style="list-style-type: none"> - development of digital services for citizens and public administration (platforms, mobile applications). - Creation of multifunctional centers that provide access to services through the Internet, mobile devices, offline Points).
4.	Creating and analyzing data	<ul style="list-style-type: none"> - development of centralized data warehouses (public registers and databases). - introduction of analytical digital resources for real -time data collection and analysis. - Use of artificial intelligence to forecast and optimize processes
5.	Integration and interagency interaction	<ul style="list-style-type: none"> - combining data and processes of different agencies on a single digital platform. - Creating API to interact with other public and private systems. - Increasing the level of interaction and circulation of data between agencies to optimize work.
6.	Development Digital Culture	<ul style="list-style-type: none"> - raising the level of digital awareness of employees. - development of training programs and courses for the development of new technology. - formation of a new culture that supports innovations and digital initiatives.
7.	Cybersecurity and Dana protection	<ul style="list-style-type: none"> - introduction of cybersecurity systems for data protection and prevention of cyberattacks. - creation of a regulatory framework for protecting data of citizens. - ensuring the activity of infrastructure to external dangers.
8.	Digitalization monitoring	<ul style="list-style-type: none"> - constant monitoring of digital systems. - analysis of feedback from citizens. - modernization and improvement of services based on data and reviews of users.

The risks of digitalization of public administration include: 1) inequality of access to digital technologies (some due to their age or low income, they cannot use them effectively); 2) possible errors in digital systems; 3) the vulnerability of the digitalization process is characterized by the possibility of cyberattacks; 4) possible loss of jobs [20].

Conclusions

The legal aspects of public administration digitalization include, in particular, issues related to the implementation of the state public interest in the field of transparency and accessibility of information, protection of citizens' rights, ensuring data security and effective implementation of legislation. Provision of transparency provides open access to official documents and procedures. Digital platforms should be accessible and convenient for use by citizens. With transparency, the digitalization of public administration

should take into account the issues of privacy and protection of personal data. Another important aspect of public administration digitalization is the effective implementation of the legislation. Digital services must be developed and implemented in the light of all legislative requirements and norms related to the work of public administration bodies. In a large number of countries of the world, the digital state is already actively being developed with active implementation of digital technologies in the activities of public administration bodies and digitalization of public services is being carried out. For Ukraine, this issue is relevant, priority and is a component of building modern public administration. Public administration digitalization is a legal regime in the virtual sphere of public administration entities, using digital information, digital technology to improve the efficiency of public administration bodies, improve the quality of life of citizens, ensure economic, social and political development of the state.

Basic elements of digitalization of public administration: digital public services, they should be available online, for citizens and other persons, improving the efficiency of public administration bodies, optimization of internal processes, reducing the timing Creation and modernization of network digital infrastructure, cloud platforms, digital data processing centers, digital security, development and implementation of uniform standards for digital data exchange, digital security, digital education, digital rights, digital identification.

Stages of digitalization of public administration:

The purpose of digitalization of public administration is to improve the quality of life of citizens through convenient access to public services, to improve the confidence in public administration by reducing administrative barriers and increasing transparency, improving the country's competitiveness through the development of digital economy, reducing budget expenditures by improving the efficiency of public administration.

Types of modern digitalization of public administration of Ukraine are considered: action, "trembita", CDTO (Chief Digital Transformation Officer), blockchain technology, digital money (cryptocurrency), VR (virtual reality), ARG (complementary reality) technology, wide-reality. declarations, receipt of certificates, registration of documents online; transition to digital document management between government bodies, which reduces the time and resources required to process documents; creation of uniform digital platforms for public services, which allows to simplify and speed up the process of receiving services; analysis of large amounts of data making more effective digital solutions; Use of artificial intelligence for digitalization of routine processes and improving the efficiency of public administration and other types of digitalization. The introduction of digitalization helps to improve the transparency of public administration bodies, the competitiveness of a digital state, to create a favorable business environment and to ensure the realization of constitutional rights of citizens, to transform traditional bureaucratic procedures into digital decisions, to improve the quality of public services, to ensure public services.

Signs, principles, types of digitalization of public administration

Public administration digitalization is a complex process of transformation of traditional forms and methods of public administration through the widespread use of digital technologies. It is a transformation of living (biological) into antibiological technologies. This process implies not only technological (digital) renewal, but also a fundamental change in the ideology of relations of the state-citizen, the principles of administration.

Digital technologies can be divided into several categories according to different criteria. In the broad sense, these are devices (smartphones, computers, 3D printers), data (texts, videos, audio, tables), data transmission (network, Internet), data storage (cloud repositories), data processing (software, machine training) and data protection (cryptography). Internet things (IOT), large data (big data), machine learning, virtual and supplemented reality, blockchain, cybersecurity, robotics.

More detailed classification may include:

By the method of interaction:

Interactive equipment, software, projection systems, VR/AR equipment, robotics. By levels of penetration:

Devices (infrastructure), network, filling/maintenance.

By the ability to integrate physical and software products:

Programs, solutions for the introduction of digital equipment, cyberphysical systems.

Digital technologies develop very quickly, and new digital directions and technologies are constantly emerging (large data, neurotechnologies, distributed systems of registers, quantum technologies, new production technologies, industrial Internet, sensory, wireless technologies).

The main features of public administration digitalization:

- A holistic approach:

Digitalization affects all aspects of public society, including organizational structure, culture, processes and technologies.

- The steady process:

This is not one event, but a constant process of adaptation and development in response to changes in the digital environment.

- Orientation to a citizen:

Digitalization is aimed at improving the relationship between administration and citizens, meeting their needs and enhancing loyalty.

- Data use:

The data becomes a key property, and digital technologies allow you to collect, analyze and use them to make digital decisions and create new values.

- Automation and optimization:

Digital technologies allow you to automate conventional processes, increase efficiency and reduce costs.

- Innovation and flexibility:

Digitalization contributes to the introduction of new technologies, such as artificial intelligence, cloud calculations and digital solutions, which increases the flexibility and adaptability of administration.

- Change in culture:

Successful digitalization requires changes in thinking and culture in the company, encouraging innovation and preparing for changes and others.

Digitalization of public administration is characterized by a number of features. First, the technological aspect involves the introduction of modern information systems, databases, electronic platforms and digital tools to optimize administrative processes. This includes the automation of workflow, the creation of electronic registers, the development of mobile applications for the provision of services.

Secondly, the organizational aspect concerns the restructuring of the internal processes of public authorities, optimization of bureaucratic procedures and the creation of new forms of interaction with citizens and business. Electronic governance requires a dramatic change in organizational culture and management approaches. Third, the social aspect covers overcoming the digital gap and the formation of digital literacy of citizens.

The legal aspect of digitalization concerns the creation of an appropriate regulatory framework governing the functioning of electronic services, protection of personal data, cybersecurity and electronic document circulation, client orientation, which involves the provision of services in a convenient way for citizens, interoperability of various information systems, transparency of processes.

Effective functioning of the digitalization of public administration is based on a set of principles that determine the conceptual foundations and strategic orientations of e-government development.

Public administration digitalization principles include providing access to digital technologies and services, flexibility, digital culture, creating a favorable environment for digital innovations, as well as efficient use of a potential economy for economic growth and public good, as well as constant optimization and adaptation to changes.

For example, the essence of principles:

- Orientation to comfortable relations between the citizen and the state is the focus of digitalization on man. Understanding people's needs, improving public administration interaction, providing fast, transparent, quality personalized services.

- Flexibility:

The digital activity of public administration should be flexible and adaptive to respond quickly to changes in the digital sphere and the needs of citizens.- Innovations:

Digitalization is impossible without the introduction of innovative technologies and approaches that allow you to optimize processes, create new values and increase competitiveness.

- Enders:

Successful digitalization requires active participation and support from the management of public administration to establish a vector of development and inspire employees.

- digital culture:

It is necessary to create a digital culture in the nation that supports innovation, cooperation and adaptation to changes.

-The constant learning and development:

Digitalization is a constant process that requires constant training of employees with new digital technologies and skills.

-Analysis and optimization:

It is important to monitor digitalization results, analyze data and adjust strategy and processes to achieve goals.

-internment and cooperation:

Effective digitalization requires interaction at the horizontal and vertical levels of interaction.

- Digital Safety:

Data and infrastructure safety is a critical aspect of digitalization.

- scalability:

Digital solutions must be scaled to meet the needs of administration and adapt to changing technology conditions.

- digital infrastructure:

Construction of reliable and stable digitalization, including high -speed networks and data processing centers.

- Public sector digging:

Providing public services in digital form and ensuring access to all citizens.

- Regulation:

Providing a safe and reliable digital environment, including regulation of new technologies, such as artificial intelligence and personal data protection.

The principle of free access to digital technologies regulates that digital services should be free of charge for all categories of citizens. The principle of transparency means the openness of the activities of public authorities, the possibility of obtaining information on the procedures for providing services by citizens, the status of consideration of their appeals and the criteria for decision -making.

The principle of efficiency is aimed at optimizing physical costs. This is achieved through the automation of routine operations, minimizing the number of stages of service provision and using the "single window" principle.

The principle of safety covers information protection, cybersecurity and privacy of personal data.

The principle of interoperability ensures the compatibility of various information systems and the possibility of their effective interaction. This avoids the creation of "information islands" and to provide a comprehensive approach to the service of citizens.

The principle of user orientation involves the design of electronic services based on the needs and expectations of citizens and business, not the internal logic of the work of the authorities.

The principle of technological neutrality means that legal regulation should not give preference to specific technological solutions, but should ensure the ability to use different technologies to achieve the goals.

The main types of public administration digitalization are: electronic services, electronic document circulation and digital signature, digital platforms and public service portals.

Electronic services form the basis of the modern digitalization system of public administration [21].

The classification of electronic services is carried out according to different criteria. There are four main categories in terms of comple

Digital services (Level 1) provide unilateral information through websites, portals and mobile applications. This includes the placement of regulations, information on procedures, contact data, etc.;

Digital interactive services (Level 2) allow bilateral interaction between citizens and authorities. Citizens can download and fill in electronic forms, send requests, receive consultations online;

Transactional services (level 3) provide a full cycle of administrative service in electronic form, including the submission of documents, their processing and obtaining results. It is this level that is the most popular citizens.

Transformation services (level 4) are characterized by personalization and proactiveness. The system automatically identifies the needs of the user and offers appropriate services without the need to submit the application.

Digital services can be classified into:

- state (provided by central executive bodies);
- regional (provided by local self-government bodies);
- mixed (require the interaction of several levels of government).

There is an "action" in Ukraine, which brings together more than 100 most popular electronic services. This includes passport registration, registration of residence, receipt of certificates, social payments, etc. [22].

The peculiarity of the current stage of development is the introduction of the principle of "state in a smartphone", which provides for the availability of basic services through mobile applications. Electronic Document Management and Digital Signature

Electronic document flow is the basis of the modern system of digitalization of public administration, ensuring effective interaction between public authorities and optimization of internal administrative processes.

The electronic document management system in public administration bodies is characterized by specific features that distinguish it from the commercial sector. First of all, these are increased requirements for information protection and the legal significance of electronic documents.

The key technology for ensuring authenticity and integrity of electronic documents is electronic digital signature. The legislative regulation of the digital signature is carried out in accordance with the legislation on electronic trust services, which is harmonized with the European Eidas regulation. This normative act establishes three levels of electronic signature: simple, improved and improved with a qualified certificate.

The practical implementation of the electronic document management system in public administration bodies is accompanied by a number of technical and organizational challenges. Studies show that the main problems are insufficient integration of various information systems, limited functionality of existing platforms and insufficient level of digital literacy of civil servants.

Digital signature as a tool for ensuring the accuracy of electronic documents is of particular importance for public administration. The use of a qualified electronic signature allows you to completely replace the person's own signature, which greatly simplifies and accelerates administrative procedures. At the same time, the introduction of a digital signature requires the creation of reliable open key infrastructure and high-level cybersecurity.

The analysis of international experience shows that the effectiveness of the electronic document management system depends largely on the level of standardization of documents and processing procedures. European countries are actively using international standards such as ISO 14641 for long-term storage of electronic documents and ISO 32000 for PDF/a format.

A special area of application of electronic document circulation is interaction with citizens and legal entities. Creating a single electronic interaction system can significantly improve the availability and quality of administrative services. The introduction of the "Single Window" principle through electronic portals makes it possible to submit documents in electronic form without the need for personal visits to the authorities.

The legal support of electronic document flow also includes the issues of archival storage of electronic documents. According to the legislation on the National Archival Fund and archival institutions, electronic documents are subject to long-term storage in compliance with the requirements for their readability and accessibility within the established storage periods.

Digital Platforms and Public Services Portals

Digital public services platforms are complex technological solutions that provide centralized access to citizens and businesses to a wide range of administrative services in electronic format.

The conceptual basis for the creation of digital platforms in public services is the principle of "state as a service", which provides an orientation to the needs of users and to ensure convenient, fast and quality provision of services. This approach dramatically changes the traditional paradigm of interaction between the state and citizens, transferring the focus on administrative procedures to the end result for the consumer of services.

The leading digital platform in Ukraine is the action portal, which integrates more than 100 most popular public services in a single digital space. The analysis of the functionality of this platform shows its high efficiency: more than 100 million services are currently provided through the portal, which indicates the success of the chosen digitalization strategy.

Architecturally digital platforms of public services are based on the principles of service-oriented architecture (SOA) and a micro-service approach. This provides the modularity of the system, the ability to

scales and integrate new services without violating the functioning of existing components. The use of API interfaces allows you to interact with different state registers and information systems.

A key feature of modern public services platforms is the implementation of the principle of "proactiveness" when the system automatically initiates the provision of services based on life events of citizens. For example, when registering a baby, the system automatically offers children's aid and other related services.

Legal regulation of digital platforms is carried out within the framework of the legislation on administrative services, which establishes requirements for electronic provision of services. The legislation provides for the obligation to provide an electronic form of service for all administrative services that can be provided in this way.

The technological basis of digital platforms is cloud calculations that provide high reliability, scalability and economic efficiency of decisions. The use of cloud infrastructure allows public administration bodies to focus on providing services, not on maintenance of IT systems.

Integration of digital platforms with electronic identification systems BankID, MobileID and other electronic identification methods ensures a high level of safety and ease of use.

The analysis of custom experience shows that the effectiveness of digital platforms depends largely on the quality of the user interface and the availability of services for different categories of the population. An important aspect is to ensure accessibility for people with disabilities in accordance with international WCAG standards.

The prospects for the development of digital platforms are related to the introduction of personalized services based on the analysis of large data, the use of chatbots and voice helpers to improve user experience, as well as integration with European digital platforms under the Digital Single Market.

The prospects for the development of digitalization of public administration in Ukraine are related to the implementation of a digital transformation strategy, which provides for a high level of digitalization by 2030. The key priorities are the creation of a digital state, the development of digital skills and cybersecurity.

Integration with European digital initiatives, including Digital Europe, opens up new opportunities to exchange experience and attract funding. Participation in European projects will accelerate digital transformation and achieve compatibility with European standards.

Artificial intelligence in public administration

The modern world is experiencing the rapid development of digital technologies, among which artificial intelligence (AI) occupies a leading place as one of the most revolutionary innovations of the XXI century. The introduction of artificial intelligence technologies into the public administration system is a matter of ensuring the efficiency, transparency and quality of public services.

In the context of globalization and digital transformation of society, traditional approaches to public administration require a radical rethinking. Artificial intelligence, both general technology, carries both challenges and new approaches to public policy [23].

Ukraine has adopted a number of acts that aim to position the country as a leader in the development and implementation of AI technologies. This testifies to the strategic understanding of the importance of AI integration into all spheres of public life, including public administration [24; 25; 26; 26; 27].

Artificial intelligence (AI) - involvement of digital computers that perform repeated tasks of a person concerning the solution (choice) of decisions, templates, algorithms using data, statistics and other information without the need to have constant human management.

It includes areas such as machine learning, natural language processing, computer vision and others.

The principles of use of AI (digital principles) are also called the principles of digital rights, the collection and processing of data, the definition of appropriate models, system training, testing and practical application. AI is based on machine training, neural networks and automation. Basic Principles of AI use in public administration:

- Machine training:

AI research on the basis of data, determination of patterns and adaptation of its work.

- neural networks:

AI mimics the structure and functions of the human brain, which allows AI to analyze complex data and make decisions.

- Automation:

AI can automate ordinary tasks by increasing efficiency and reducing mistakes.

- Treatment of large data:

AI is capable of processing a huge amount of data to identify patterns and decision making.

- Prognostic analytics:

AI can predict future events based on the analysis of historical data.

- Working:

AI can manage work and automated systems to perform different tasks.

Ethical Principles of Using AI:

- Justice:

AI should be fair and impartial, prevent discrimination.

- Safety:

AI systems must be safe and reliable to minimize risks.

- Privacy:

Personal data protection and confidentiality of information must be protected. - Transparency and understandability:

It is important that AI systems are transparent and understandable so that users can understand how decisions are made.

- Responsibility:

It is necessary to clearly determine the responsibility for the actions of AI systems.

- Transparency (transparency):

Refers to one of the basic principles of development and use of artificial intelligence technologies. The openness of information

Definition:

AI describes the ability of machines to imitate human intelligence, including training, recognition of images, solving problems and decision making.

- TRAINING MACHINES:

Algorithms that allow systems to study data and improve their results over time.

- Natural language processing:

Allows computers to understand, interpret and generate human language.

- Computer vision:

Allows you to "view" computers and interpret images.

- Application:

AI is used in a wide range of spheres, including medicine, finance, transport, education and more.

AI development raises questions related to consciousness, ethics and future humanity.

- AI generation:

Type AI that can generate new content, such as text, image or music.

- strong and weak AI:

The weak AI is designed to solve specific algorithms, while a strong AI, which does not exist yet, would have a common intelligence like a person. But a person has emotions, spirituality, can love, make friends, sympathize. Any digital technology can only simulate emotional feelings and other human qualities.

Artificial intelligence in public administration can be defined as a set of digital technologies and algorithms that can simulate cognitive functions of citizens. These technologies include machine learning, natural language processing, computer vision, expert systems and other tools that allow you to automate digital decision-making processes and improve the quality of public services [28].

The conceptual basis for the introduction of AI in public administration is the principle of "smart government". It regulates the introduction of digital technologies. This approach is based on three main components: automation of routine processes, supporting decision-making based on data and improving interaction with citizens.

Artificial intelligence can bring many advantages, including automation of routine tasks, improving interaction with citizens and analyzing large amounts of data. This allows government bodies to focus on strategic tasks and more complex issues that require human intervention.

The theoretical basis for the use of AI in the public sector is the concept of digital government, which considers information and communication technologies as a key tool for transformation of public administration. Within this concept, the AI acts as a means of achieving the basic goals of public administration: efficiency, accountability, transparency and focus on citizens' needs.

The regulation of AI in public administration in Ukraine is at the stage of active formation, which indicates a systematic approach to the introduction of AI technologies in various fields, including public administration. It demonstrates the evolution of approaches to regulating this area. This document takes into account the international experience and current trends in the development of AI technologies [29; 30].

An important aspect of legal regulation is to ensure the ethical principles of using AI in the public sector. This includes the transparency of algorithms, non-discrimination, personal data protection and accountability of automated solutions. Ukrainian legislation is gradually adapting to these requirements, taking into account European standards and recommendations. Particularly noteworthy is the question of creating an institutional basis for managing AI development. There are a number of public administration subjects for artificial intelligence development in Ukraine.

The introduction of artificial intelligence technologies in public administration has numerous advantages that can be grouped in several key areas.

Increasing the efficiency of administrative processes is one of the main advantages of AI. Automation of routine tasks, such as documents processing, checking the compliance of applications with the established criteria, distribution of citizens' appeals by relevant agencies, can significantly reduce the time for performing these operations and reduce the likelihood of errors.

Improving the quality of digital decision making is achieved through the ability to analyze large amounts of data and identify patterns that may not be obvious to individuals. This is an important factor in the context of strategic planning, forecasting socio-economic processes and assessing the efficiency of government programs.

Personalization of public services is made possible by using machine learning algorithms that can adapt interfaces and procedures to individuals. This includes providing relevant information, optimizing services and proactive information about available opportunities.

Increasing transparency and accountability is achieved through the possibility of documenting all stages of decision-making by AI algorithms. This creates the preconditions for better control over the activities of public administration and increasing citizens' confidence in state institutions.

Resource savings are an important advantage, since process automation allows you to reduce the need for human resources to perform standardized tasks and redistribute them to more complex and creative functions. But at the same time, any digital technology cannot be completely replaced by a person (living being): continuation of kind, upbringing of children and so on. Despite numerous advantages, the introduction of artificial intelligence in public administration is accompanied by significant challenges and risks that require care and systematic solution.

The analysis of the current use of artificial intelligence technologies in the public administration reveals both the benefits of digital technologies and the threat of sovereign digital space. This emphasizes the importance of balancing between innovation and national security.

Ethical challenges include issues of justice, non-discrimination and transparency of algorithms. There is a risk that AI algorithms can reproduce or enhance existing prejudices, which will discriminate against individual groups of citizens. Technological risks are associated with the reliability and safety of AI systems. In addition, dependence on technological solutions creates risks in the event of their failure or improper functioning.

Social consequences include potential jobs in the public sector as a result of automation. This requires the development of strategies for retraining and adaptation of employees to new conditions.

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

Organizational challenges include the need to change corporate culture, staff training and restructuring the processes of state bodies. The integration of artificial intelligence technologies into public administration at the local level opens 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 introduction of BAI basic technologies for automation of the most standardized processes. This may include the development of chatbots to inform citizens, automatic classification systems and basic analytical tools for open data processing.

Medium-term prospects (3-7 years) provide for the creation of more complex systems capable of supporting management decisions. This includes the development of forecast models for budget planning, early social problems and intellectual 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 able to autonomously perform much of administrative functions with minimal human intervention.

An important factor in development is Ukraine's participation in international initiatives. The key factors for the successful development of AI in the public sector of Ukraine are: development of appropriate educational infrastructure, creation of partnerships between public and private sectors, providing investments in research and development and development of citizens' trust in new technologies.

Results

First, artificial intelligence represents considerable potential for transformation of the public administration system, offering tools to improve the efficiency, transparency and quality of public services. Automation of routine processes, improvement of analytical opportunities and personalization of interaction with citizens are the key benefits of implementing AI technologies.

Secondly, the successful implementation of AI in public administration requires a comprehensive approach, which includes the development of the relevant legal framework, investment in technological infrastructure and human capital, as well as providing ethical standards for the use of technologies. In practice, this is expressed in counteracting illegal content, advertising, which is imposed on the will of man, doxyning, gender harassment, which users of social networks are faced.

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

Fourth, international experience demonstrates a variety of AIs in the public sector that can serve as benchmarks for Ukraine. At the same time, it is important to adapt these approaches to the specific conditions and needs of the Ukrainian government system.

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

Artificial intelligence is not a panacea for all problems of public administration, but when used properly, it can be 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 orientation to the needs of society.

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