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THE ESSENCE AND FEATURES OF THE FUNCTIONING OF DIGITAL TRANSFORMATION IN STATE AND LOCAL ORGANIZATIONS

The paper examines the essence and features of digital transformation in state and local governance. The challenges of digitalization are analyzed, including outdated regulatory frameworks, fragmented information systems, low digital literacy among civil servants, and weak interagency integration. Key aspects of digitalization are identified, including process automation, the development of e-governance, and cybersecurity.

Relevance of the study. Digitalization of public administration is a crucial area of reform; however, its implementation is complicated by the absence of a unified digital policy, gaps between information systems, and weak regulatory support. The study defines key directions for improving digital governance.

Methods. A systematic analysis was applied to examine the interconnections between technological, organizational, and regulatory factors of digitalization. The structural-functional method was used to identify key components of digital transformation, content analysis to assess the regulatory framework, and the expert method to identify risks and limitations.

Main results. It has been established that digital transformation encompasses legal, organizational, and technological changes. The lack of a unified information ecosystem complicates the integration of digital services. The directions of digitalization are characterized, including process automation, interagency interaction, and the unification of electronic document management. Regulatory acts have been analyzed, revealing shortcomings such as weak coordination among government agencies and a low level of digital strategy implementation. Optimization of digital transformation is proposed through improving the regulatory framework, enhancing the digital competencies of civil servants, and adopting a comprehensive approach to digital governance.

Keywords: digital transformation; public administration; digitalization; e-governance; process automation; regulatory framework; information systems.

Introduction

Problem Statement. The digital transformation of public administration is one of the most significant challenges of our time, as it ensures efficiency, transparency, and accessibility of public services. However, the implementation of such initiatives faces several problems, including the presence of an outdated regulatory framework that does not account for the rapid development of technologies; low digital literacy among public officials; institutional fragmentation and the lack of a unified digital architecture across agencies; and low flexibility of management processes, which complicates adaptation to technological changes.

Relevance of the Study. The modern world is undergoing large-scale digitalization, and public administration cannot remain on the sidelines. In Ukraine, initiatives such as «Diiia» are actively being implemented, demonstrating the potential of digital solutions in public governance. At the same time, there is a critical need for a strategic approach to digital transformation, which includes optimizing public services through digital platforms; establishing interoperability between government information systems; developing digital competencies among officials and citizens; and forming a legislative and regulatory framework that considers the dynamics of technological changes. *Research Subject.*

The study focuses on examining the specifics of digital transformation in public and local administration, analyzing its challenges, advantages, opportunities, and strategic directions for implementing digital initiatives in the field of public administration. *Research Objective and main tasks for its achievement.* The objective is to define the essence, characteristics, and key factors of successful digital transformation in public administration and to develop recommendations for the effective implementation of digital technologies in the public sector. The main tasks include analyzing scientific approaches to the concept of «digital transformation»; assessing key trends and challenges of digitalization in public administration; studying the regulatory framework for digital initiatives in Ukraine; identifying key elements of effective digital transformation; and developing recommendations for the implementation of digital solutions in the public sector.

Analysis of recent research and publications. Issues related to the essence and specifics of digitalizing public processes have been explored by the following domestic experts: Bernaziuk O. O. [1], Karpliuk S. O. [4], Kuibida V. S., Karpenko O. V., Namestnik V. V. [6], Namestnik V. V., Pavlov M. M. [7], Savchenko O. S. [8], Zasukha M. V. [9], Semchuk Z. V. [10], Simakov K. I., Valina V. H., Launiko-

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nis V. P., Budovyi M. Yu. [11], Khomyshyn I. [12], Skoryk O. O., Riabokon N. P. [13], Ukrainka L. O., Shyfrina N. I. [14], Saprykin V. [15]. However, the key factors of successful digital transformation in public administration and recommendations for the effective implementation of digital technologies in the public sector have not been fully explored.

Identification of previously unresolved parts of the general problem. Despite a significant number of studies, several unresolved aspects remain in the issue of digital transformation in public administration, including the absence of a unified strategy for digitalizing public processes; a low level of adaptation of regulatory policies to rapid technological changes; insufficient understanding of the socio-economic effects of digital transformation in the public sector; unresolved issues of institutional interaction between government bodies within the digital ecosystem; and the lack of transparent mechanisms for digital regulation and personal data management.

Research methods and information base. The research methods are based on systems analysis, which allows digital transformation to be considered as a complex process involving technological, organizational, and regulatory factors. The structural-functional method is used to identify key elements and principles of digitalization in public administration, while comparative analysis helps assess different approaches to digital transformation. Content analysis of Ukraine's regulatory acts, government strategies, and academic publications helps identify gaps in regulation and areas for improvement. The expert method is applied to assess the main risks and challenges of digitalization, while the analysis of specific initiatives, such as e-government and automation of public services, enables the evaluation of the practical effectiveness of digital solutions. The information base includes legislative acts, government strategic documents, academic research, and analytical materials on digital transformation. The study's information base includes Ukraine's legislative and regulatory acts governing the digital transformation of public administration, such as the Law of Ukraine «On Administrative Services», resolutions and orders of the Cabinet of Ministers, as well as strategic documents, including the «Concept for the Development of E-Government in Ukraine». Scientific publications that reveal the essence and specifics of digital transformation, particularly works by domestic researchers summarizing approaches to digitalizing public administration, have been used. Additionally, the results of digital initiatives such as the «Diia» state portal and regulatory acts governing the development of e-government, digital infrastructure, cybersecurity, and the use of cloud technologies in the public sector have been analyzed.

Presentation of the main material of the study with justification of the obtained results

In the era of rapid technological development, digital transformation is not just a necessity but a strategic priority for government and public organizations. Digital innovations enhance management processes, create new opportunities to improve efficiency, facilitate service delivery to citizens and businesses, and increase trust in government institutions. Digital transformation in public administration faces a wide range of challenges that hinder its successful implementation, including technological barriers, infrastructure deficiencies, cybersecurity threats, data pri-

vacy concerns, low digital literacy among staff and leadership, bureaucratic obstacles, and instability in management processes. Given these factors, it is essential to study not only the current state of digital initiatives but also to identify priorities, directions, and recommendations for the further development and implementation of digital transformation technologies and tools in government and local organizations.

We will outline the scientific approaches to defining «digital transformation» in government and local organizations by domestic experts (see Table 1).

As shown in Table 1, Bernaziuk O. O. [1] defines digital transformation as a system of interconnected tools for collecting, processing, and disseminating information, focusing on the technical aspect of process automation. In contrast, the «Encyclopedia of Information Science and Technology» [2] takes a broader approach, describing digital transformation as the global computerization of society and the digitization of all possible processes, emphasizing the accessibility of technology for users. However, the «Concepts for the Development of the Digital Economy and Society of Ukraine» [3] shift the focus from technical automation to economic impact, considering digital transformation as a powerful mechanism for increasing efficiency. At the same time, Karpluk S. O. [4] offers an even deeper level of analysis, interpreting digital transformation not just as the implementation of technologies but as a paradigm shift in thinking, actions, and communication, where digital tools serve as a means rather than an end. A broader context is covered by the «Digital Agenda of Ukraine – 2020» [5], which views digital transformation not only within business but also in social interaction, highlighting its continuity and integration into all areas of life. Expanding on this idea, Kuibida V. S., Karpenko O. V., and Namestnik V. V. [6] emphasize the transformation of public administration, defining it as a leap from traditional governance to digital governance. Namestnik V. V. and Pavlov M. M. [7] develop a similar perspective but with a focus on creating interoperable, digital-by-default systems that not only automate processes but also enable informed decision-making based on critical point analysis. An equally important aspect is proposed by Savchenko O. S. [8], who highlights mechanisms for implementing public policies, where digital technologies become a key tool in decision-making and administrative service provision. Zasukha M. V. [9] takes a more comprehensive approach, considering digital transformation in public administration as an overall strategy for increasing efficiency. Simultaneously, Semchuk Z. V. [10] emphasizes the innovative nature of the process, underlining its connection to informatization. However, digital transformation is not limited to the public sector. Simakov K. I., Valina V. H., Launikonis V. P., and Budovyi M. Yu. [11] go beyond governance processes, stressing those digital technologies also reshape social, cultural, and administrative structures, facilitating the transition to a digital society. Their view is complemented by Khomyshyn I. [12], who clarifies that digital transformation is not merely the modernization of public administration but a shift from «e-government» to «digital government», where technologies not only support processes but determine their outcomes. Meanwhile, Skoryk O. O. and Riabokon N. P. [13] consider digital transformation as a process requiring a comprehensive assessment, including regulatory, organizational, and financial aspects of digital governance. Ukrainka L. O. and Shyfrina N. I. [14] elaborate on this

approach by emphasizing the integration of digital technologies into political governance, which minimizes decision-making time and enhances administrative efficiency. Finally, Saprykin V. [15] approaches digital transformation

from an evolutionary perspective, arguing that digitalization is not a leap but a gradual process that reshapes public administration by implementing digital tools to increase transparency and accessibility.

Table 1. Scientific approaches to defining «digital transformation» in government and local organizations by domestic experts

№	Researchers	Description
1	Bernaziuk O. O.	Digital transformation is a system of interconnected tools that collect, process, record, store input, and form and distribute output information using a special digital method.
2	Encyclopedia of Information Science and Technology	Digital transformation is the process of integrating digital technologies into the daily lives of society by digitizing everything that can be digitized. Digitalization means computerizing systems and workplaces for greater ease and accessibility
3	Concept of Development of the Digital Economy and Society of Ukraine for 2018–2020	Digital transformation is a mechanism for economic growth through the ability of technology to positively impact the efficiency, effectiveness, cost, and quality of economic, social, and personal activities.
4	Karpluk S. O.	Digital transformation is a kind of paradigm shift in how we think, how we act, how we communicate with the external environment and with each other, and technology here is more of a tool than a goal.
5	Digital Agenda of Ukraine – 2020	Digital transformation is a tool for ensuring, improving and transforming business processes through the use of digital technologies and digitized data, goes beyond business and refers to the continuous implementation of digital technologies in all aspects of social life. Or the use of online opportunities and innovative digital technologies by all participants in the economic system – from individuals to large companies and states
6	Kuibida V. S. Karpenko O. V., Namestnik V. V.	Digital transformation is the process of implementing digital technologies to improve the lives of people, society and the state, and digitalization of public governance is a leap-forward process of digital transformation of public governance into digital governance (digital governance).
7	Namestnik V. V., Pavlov M. M.	Digital transformation is the process of creating and using new, digital-by-default, interoperable, standardized information systems in public administration, which allow not only to digitize and automate existing management processes using electronic tools, but also to identify certain "critical points" of the management process, the relationship between them and make decisions taking them into account.
8	Savchenko O. S.	Digital transformation is a set of digital technologies for using online communication tools in the system of making and implementing state management decisions, providing administrative services, and forming effective state mechanisms for implementing state policy in all spheres of society.
9	Zasukha M. V.	Digital transformation is a comprehensive approach based on new information technologies that creates new opportunities to improve management efficiency.
10	Semchuk Z. V.	Digital transformation is an innovative management process that ensures efficiency, informatization, and innovative development of society.
11	Simakov K. I., Valina V. H., Launikonis V. P., Budovyi M. Yu.	Digital transformation is the process of changing social, cultural, commercial and administrative structures that ensure the efficiency of the public sector and the transition to a digital society.
12	Khomyshyn I.	Digital transformation is the transition from «e-government» to «digital government», where technology not only supports processes but also shapes the outcomes of public administration.
13	Skoryk O. O., Riabokon N. P.	Digital transformation is a comprehensive approach to assessing the digitalization of society, including regulation, organization, financing, and methodology of digital governance.
14	Ukrainska L. O., Shyfrina N. I.	Digital transformation is the transition to digital governance, in which technology is integrated into the policymaking process, minimizing the time to implement decisions, and improving public administration.
15	Saprykin V.	Digital transformation is an evolutionary process that changes public administration through the implementation of information technology and digital tools to increase efficiency, transparency, and accessibility.

* formed by the author based on sources [1-15]

Thus, domestic experts analyze digital transformation from various perspectives. Bernaziuk O. O. focuses on technical aspects, the «Encyclopedia of Information Science and Technology» on computerization, the "Concepts for the Development of the Digital Economy" on economic impact, and Karpluk S. O. on paradigm shifts in thinking. The «Digital Agenda» and researchers of public administration, such as Kuibida V. S. and co-authors, examine transformation through the lens of digital governance, while Namestnik V. V. and Pavlov M. M. detail managerial interoperability. Savchenko O. S., Zasukha M. V., and Semchuk

Z. V. analyze digitalization from a public administration perspective, whereas Simakov K. I. and others consider its socio-cultural impact. Khomyshyn I. highlights the evolution of governmental processes, Skoryk O. O. and Riabokon N. P. emphasize a comprehensive approach to digital governance, Ukrainska L. O. and Shyfrina N. I. focus on the integration of technology into politics, and Saprykin V. sees digitalization as a gradual development process.

The next step is to outline the key legislative and regulatory acts governing the digital transformation of public administration processes in Ukraine (see Table 2).

Table 2. Legislative and regulatory acts governing the digital transformation of public administration processes in Ukraine

№	Name of the document	Document detailing	Disadvantages
1	Law of Ukraine «On Administrative Services»	Defines the legal framework for the provision of administrative services in Ukraine, aimed at ensuring the transparency and accessibility of these services for citizens.	Does not fully take into account modern digital technologies and needs to be updated to meet modern digitalization requirements.
2	Resolution of the Cabinet of Ministers of Ukraine No. 856 «Issues of the Ministry of Digital Transformation»	Defines the functions and powers of the Ministry of Digital Transformation, responsible for implementing state policy in the field of digitalization.	May require clarification on specific mechanisms for interaction with other government agencies and updating in line with rapid technological changes.
3	Resolution of the Cabinet of Ministers of Ukraine No. 1467-r «On approval of the Strategy for the implementation of digital development, digital transformations and digitalization of the public finance management system for the period until 2025»	Aimed at introducing digital technologies into the public finance management system to increase its efficiency and transparency.	Requires a clear implementation plan and mechanisms for monitoring performance, as well as adaptation to new challenges and technologies.
4	Order of the Ministry of Digital Transformation of Ukraine No. 145 «On ensuring monitoring of the quality of administrative services»	Establishes a procedure for monitoring and assessing the quality of administrative services with the aim of improving and digitizing them.	May require additional resources and tools to effectively monitor and implement evaluation results.
5	Draft Law No. 10273 «On Amendments to Certain Laws of Ukraine Regarding the Functioning of the National System of Confidential Communications and the National Electronic Communications Network»	Aimed at creating a legal framework for the functioning of secure communication systems in Ukraine.	As of the date of the request, the bill may not yet have been adopted or may require revision to fully comply with modern security requirements.
6	Order of the Cabinet of Ministers of Ukraine No. 649-r «On Approval of the Concept for the Development of Electronic Governance in Ukraine»	Determines the directions of e-government development to increase the efficiency of public administration through digital technologies.	Insufficient funding for full-scale implementation of the concept.
7	Law of Ukraine «On Amendments to Certain Laws of Ukraine on Improving Public Administration and Regulation in the Provision of Cloud Services» No. 3343-IX	Aimed at improving the legal regulation of the provision of cloud services, which contributes to the digital transformation of government agencies.	The need for additional clarifications regarding the practical application of the new norms.

* formed by the author independently

As seen from the data in Table 2, the digital transformation of public administration in Ukraine is a complex, multifactorial process based on the gradual modernization of the legislative framework and its adaptation to rapid technological changes. The analysis of regulatory acts governing the digitalization of administrative services, e-government, public finance management, and cloud service operations indicates a clear strategic direction but also reveals significant implementation challenges. At the legislative level, key digitalization principles have been established, particularly within the Law of Ukraine «On Administrative Services», which defines the legal framework for their provision. However, this regulatory act does not fully address the modern challenges of the digital age, as it lacks integration with advanced technologies such as artificial intelligence, blockchain, and big data. A similar situation is observed in the Cabinet of Ministers of Ukraine Resolution No. 1467-r, «On Approval of the Strategy for Digital Development, Digital Transformations, and Digitalization of the Public Finance Management System until 2025». While this strategy includes progressive provisions, it requires a more detailed implementation plan and control mechanisms. An important step was the establishment of the Ministry of Digital Transformation of Ukraine, formalized by Cabinet of Ministers Resolution No. 856, «On the Ministry of Digital Transformation». This decision enabled the creation of a specialized body responsible for implementing state policy in digitalization. However, clarifying its interaction mechanisms with other government agencies is necessary to avoid functional duplication and ensure the coordi-

ination of digital initiatives. Similar challenges arise in the implementation of the e-government development concept in Ukraine, approved by Cabinet of Ministers Resolution No. 649-r, «On Approval of the Concept for the Development of E-Government in Ukraine». Although this concept clearly defines development directions, it faces insufficient funding, significantly hindering its full implementation. A separate aspect of digital transformation is related to the security of communication networks, which is critically important given modern cybersecurity threats. The draft law of Ukraine No. 10273, «On Amendments to Certain Laws of Ukraine Regarding the Functioning of the National Secure Communication System and the National Electronic Communication Network», aims to establish a legal framework for these systems. However, further refinement is needed to address all cybersecurity and state data protection challenges. A similar issue is evident in the Law of Ukraine No. 3343-IX, «On Amendments to Certain Laws of Ukraine Regarding the Improvement of Public Administration and Regulation in the Provision of Cloud Services». While it has significant potential to enhance digital infrastructure, it requires clear regulatory mechanisms and methodological guidance for government agencies. Thus, the analysis of legislative regulation of digital transformation in Ukraine demonstrates a comprehensive approach to digitalizing various public administration sectors. However, it also highlights implementation issues related to regulatory uncertainty, the absence of detailed execution mechanisms, limited resource allocation, and the need for rapid adaptation to technological changes. Compared to European practices,

Ukraine's regulatory framework has not yet achieved the necessary level of coherence and completeness, necessitating further harmonization and the development of a comprehensive legal strategy for digital transformation. This strategy should consider not only technical aspects but

also the socio-economic challenges associated with digital reforms.

Next, we will define the key elements and principles of the digital transformation of public administration processes in Ukraine (see Table 3).

Table 3. Key elements and principles of the digital transformation of public administration processes in Ukraine

№	Element / Principles	Characteristic
1	Transition from paper-based processes to digital ones	Abandonment of physical documents, automation of administrative procedures, introduction of electronic document management.
2	Unification of disparate information systems	Integration of databases, simplification of information exchange between state bodies, creation of unified platforms for citizens and businesses.
3	Automation of decision-making	Use of algorithms and artificial intelligence for analytics, risk forecasting, resource allocation and control over the implementation of decisions.
4	Reducing the role of officials in routine processes	Minimization of the human factor in the interaction of citizens with state institutions through chatbots, electronic services and automated services.
5	Open data and transparent management	Accessibility of state registers, publicity of information on budget expenditures, automated mechanisms of civil society control.
6	Security of digital processes	Cybersecurity of state systems, protection of personal data, prevention of interference in the work of digital infrastructure.
7	Changing the culture of management	Abandonment of bureaucratic habits, flexibility of processes, transition to data-based management and rapid iterations.
8	Flexibility in the implementation of technologies	Openness to the use of new technologies (artificial intelligence, blockchain, IoT), experimentation with new approaches to public administration.
9	Focusing on the needs of citizens	Focus on user experience, proactive services without the need for contact, personalization of government services.
10	Rethinking the regulatory role of the state	Using digital technologies not only to optimize processes, but also to change the very logic of government regulation.

* formed by the author independently

According to the data in Table 3, the key element of digital transformation in public administration in Ukraine is the transition from paper-based processes to digital ones, which serves as the foundation for further automation. However, its effectiveness largely depends on the integration of information systems, which remains a weak point in Ukraine's digital policy. The fragmentation of databases and the absence of unified standards for information exchange between government agencies complicate the implementation of digital solutions, reducing the speed and convenience of public service delivery. The automation of decision-making through algorithmic mechanisms and artificial intelligence is a crucial factor in improving public administration efficiency. However, its implementation requires the development of clear ethical standards and mechanisms to control potential biases in algorithms. At the same time, minimizing human involvement in citizen-state interactions through automated services and chatbots significantly reduces service delivery time but introduces the risk of decreased flexibility in administrative decisions in non-standard situations. The principle of open data and transparent governance is one of the strongest mechanisms for reducing corruption and increasing public trust in the state. However, its effective implementation is only possible with adequate digital literacy among the population and access to analytical tools that enable public participation in monitoring government expenditures and policy decisions. Meanwhile, increasing government transparency requires unprecedented cybersecurity measures, as the expansion of digital registries and automated platforms significantly raises the vulnerability of state systems to attacks and data breaches. Digitalization in public administration requires not only technical changes but also a transformation of management culture. Overcoming bureaucratic habits, shifting to rapid iterations, and adopting data-driven governance pose significant challenges, as government institutions often exhibit high levels of inertia and resistance to change. A similar challenge

exists in the flexibility of technology adoption—despite the rapid development of digital governance tools such as artificial intelligence, blockchain, and the Internet of Things, their adaptation to real public administration needs requires thorough testing and efficiency assessments. A fundamental feature of digital transformation is its citizen-centric approach, where digitalization should not be an end in itself but should evolve into a proactive government service model. This implies personalized citizen-state interaction without the need for individuals to initiate bureaucratic procedures. Achieving this requires a fundamental rethinking of the state's role—not just as a regulator that establishes rules but as an enabler ensuring adaptability, transparency, and user-friendliness through digital mechanisms.

The specifics of public sector digital transformation before and after implementation are examined in Table 4.

As seen from the data in Table 4, one of the most significant transformations occurs in the planning function. Instead of paper documents and bureaucratic approvals, it now relies on data analytics tools, artificial intelligence, and dynamic algorithms, which reduce overall time costs and enhance efficiency. This improvement is also evident in interagency coordination, where digital platforms integrate into management processes, simplifying interactions. Decision-making becomes more substantiated through Big Data tools and scenario modeling, replacing subjective assessments and reducing the likelihood of errors. At the same time, automated data exchange accelerates decision-making and eliminates function duplication, while control and monitoring processes become more transparent through digital auditing, which minimizes corruption risks and optimizes resource utilization. The changes are also noticeable for citizens: online services simplify access to public services, reducing administrative burdens. The automation of HR processes enhances the efficiency of civil servants, and digital financial control helps optimize budgeting. Additionally, crisis management technologies, which operate in

real-time in conjunction with scenario forecasting, significantly improve response speed to emerging risks. Dynamic changes are also taking place in the regulatory sphere, where automated systems enable the rapid updating of regulations and ensure compliance control. Thus, digital transformation is not merely a technological upgrade but a compre-

hensive change in management processes that minimizes excessive bureaucracy, reduces corruption risks, and increases the efficiency of public administration. Based on the above information, it is advisable to formulate recommendations for further directions in the digital transformation of public administration processes in Ukraine (see Table 5).

Table 4. Specifics of public sector digital transformation before and after implementation

№	Management function	To digital transformation	After digital transformation
1	Planning	Manual strategy development, paper documents, long approval cycle.	Use of analytics and AI, digital forecasting, flexible planning.
2	Process organization	Fragmented processes, lack of a single information base.	Integrated digital platforms, centralized process management.
3	Decision-making	Subjective approach, dependence on officials, lack of data.	Use of algorithms, Big Data, scenario modeling for informed decision-making.
4	Coordination between departments	Bureaucratic delays, exchange of documents through paper or manual processes.	Automated data exchange, information systems integration.
5	Control and monitoring	Manual checks, high probability of errors and abuse.	Automated process tracking, digital audit, transparency.
6	Interaction with citizens	Physical presence in government agencies, limited access to information.	Online services, digital platforms with 24/7 access, chatbots, electronic consultations.
7	Personnel management	Complex bureaucratic procedures, paper-based personnel records.	Automation of HR processes, digital dossiers, online training.
8	Financial management	Difficult to control costs, opaque procurement, corruption risks.	Digital cost control, electronic bidding, open access to the budget.
9	Crisis response	Slow decision-making, difficulty in analyzing data in real time.	Use of analytics for rapid response, crisis dashboards, scenario planning.
10	Regulatory activities	Manual updating of regulations, ineffective compliance monitoring.	Dynamic update of regulations, automated control of compliance with norms.

* formed by the author independently

Table 5. Recommendations for further directions in the digital transformation of public administration processes in Ukraine

№	Item	Recommendations	Expected effect
1	Implementation of a single digital architecture	Create a single digital architecture of public administration with integrated information flows and platforms. Introduce interoperability between departments through unified data exchange standards.	Increasing the coherence of government processes, minimizing data duplication, reducing bureaucratic barriers.
2	Automation of management processes	Optimize management processes by automating routine tasks and introducing BPM systems. Implement Lean and Six Sigma methodologies to increase the efficiency of administrative procedures.	Reducing the time for performing administrative functions, improving the quality of government services, reducing costs.
3	Testing and implementation of innovative technologies	Actively test artificial intelligence, blockchain and IoT in the public sector. Create innovative "sandboxes" for piloting new technologies without risk to core systems.	Rapid adaptation to technological changes, reducing the costs of implementing new solutions, increasing the level of public trust in digital services.
4	Formation of an open digital ecosystem	Create an open digital platform for state, commercial and local services. Introduce API gateways to integrate business and the civil sector into the digital economy.	Improving the interaction of the state, business and society, stimulating the development of innovations, increasing the convenience of public services.
5	Implementation of a hybrid transition to digital technologies	Implement a gradual transition to digital technologies while preserving critical analog processes. Use cloud solutions in combination with local data centers.	Minimizing risks when switching to digital technologies, ensuring the stability of the work of government bodies, maintaining the trust of citizens.
6	Gradual implementation of digital solutions	Implement digital technologies gradually, with regular testing of effectiveness. Use Agile and CI/CD approaches to quickly update digital solutions.	Reducing the risks of technological failures, reducing personnel resistance to change, continuous improvement of public services.
7	Full digitalization of public services	Completely abandon paper-based document management, digitize government services. Use AI management and blockchain to automate decision-making.	Maximum efficiency, reducing the impact of the human factor, eliminating corruption risks.
8	Implementation of decentralized management	Introduce DAOs (decentralized autonomous organizations) in decision-making processes. Use blockchain to manage property registries and administrative data.	Increasing the autonomy of regions, transparency of processes, reducing corruption risks.
9	Centralization of public digital resources	Create unified state data centers for centralized information management. Implement a single national e-services platform.	High level of cybersecurity, standardization and unification of government processes, effective control over management data.

* formed by the author independently

As seen from the data in Table 5, effective digital transformation of public administration in Ukraine requires a phased transition to a unified digital architecture. This will ensure the integration of information flows and standardized data exchange between government agencies. The implementation of BPM systems for automating administrative processes and the application of Lean and Six Sigma methodologies are critically important to reduce the execution time of government functions and decrease bureaucratic burdens. The state should establish innovation «sandboxes» for testing artificial intelligence, blockchain, and IoT technologies, enabling risk minimization and accelerating the adaptation of advanced technologies. Additionally, the introduction of an open digital platform with API gateways for business and civil sector integration will foster the development of the digital economy and enhance public trust in government services. Given current challenges, a hybrid approach should be adopted – gradually transitioning to digital technologies while maintaining critical analog processes and using a combination of cloud and on-premise solutions to minimize risks. Radical changes should be avoided without prior system and population readiness to prevent technical failures and staff resistance. The government must create unified data centers for centralized data management and enhanced cybersecurity. Furthermore, the potential use of decentralized autonomous organizations (DAO) in regional governance should be considered to improve transparency and reduce corruption risks.

Conclusions and prospects for further research

Summarizing the conducted study, it has been established that the digital transformation of public administration is not merely a technological process but a comprehensive reform of governance mechanisms. This transformation includes the automation of administrative functions, the integration of information systems, and a shift in decision-making approaches. The key challenges identified include the absence of a unified digital architecture, insufficient interaction between government agencies, and an outdated regulatory framework. Recommendations have been proposed, including the development of a unified digital architecture, the enhancement of interoperability between institutions, and a gradual transition to the full digitalization of public services. Additionally, the importance of applying a systematic approach to digital transformation has been emphasized, incorporating technological development, regulatory changes, and the improvement of digital competencies among public officials.

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СУТНІСТЬ ТА ОСОБЛИВОСТІ ПРОЦЕСІВ ЦИФРОВОЇ ТРАНСФОРМАЦІЇ В ДЕРЖАВНИХ І МІСЦЕВИХ ОРГАНІЗАЦІЯХ

У роботі було розглянуто сутність і особливості функціонування процесів цифрової трансформації в державних і місцевих організаціях. Проаналізовано основні виклики цифровізації, зокрема застарілість нормативно-правової бази, фрагментованість інформаційних систем, недостатній рівень цифрової грамотності державних службовців та обмеженість міжвідомчої інтеграції. Виявлено ключові аспекти цифрової трансформації, серед яких автоматизація адміністративних процесів, розвиток електронного урядування та забезпечення кібербезпеки.

Актуальність дослідження. Масштабна цифровізація державного управління є невід'ємною частиною сучасних реформ, однак її реалізація супроводжується значними організаційними та технічними викликами. Відсутність єдиної цифрової політики, розриви між інформаційними системами та недостатня нормативна адаптація створюють бар'єри для впровадження інноваційних технологій. Дослідження є актуальним, оскільки визначає ключові напрями удосконалення цифрового урядування та забезпечення ефективності державного управління.

Методи. У дослідженні використано системний аналіз для комплексного вивчення взаємозв'язків між технологічними, організаційними та нормативними факторами цифровізації. Застосовано структурно-функціональний метод для визначення ключових компонентів цифрової трансформації, контент-аналіз нормативно-правових актів для оцінки регуляторного забезпечення, а також експертний метод для визначення основних ризиків та обмежень цифрового розвитку.

Результати. Встановлено, що цифрова трансформація є багаторівневим процесом, який охоплює правові, організаційні та технологічні зміни. З'ясовано, що відсутність єдиної інформаційної екосистеми ускладнює інтеграцію цифрових сервісів у державному управлінні. Охарактеризовано основні напрями цифровізації, серед яких автоматизація управлінських процесів, розвиток міжвідомчої взаємодії та формування єдиних стандартів електронного документообігу. Проаналізовано нормативно-правові акти, що регулюють цифрову трансформацію в Україні, та виявлено їхні недоліки, зокрема недостатню координацію між державними органами та низький рівень імплементації цифрових стратегій. Запропоновано шляхи оптимізації цифрової трансформації шляхом удосконалення регуляторної бази, розвитку цифрових компетенцій державних службовців та впровадження комплексного підходу до цифрового урядування.

Ключові слова: цифрова трансформація; державне управління; цифровізація; електронне урядування; автоматизація процесів; нормативно-правове регулювання; інформаційні системи.