

## **TECHNOLOGIES AND MECHANISMS OF PUBLIC ADMINISTRATION**

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### **DIGITAL INFORMATION AND INFORMATION TECHNOLOGIES AS FACTORS IN THE DEVELOPMENT OF PUBLIC ADMINISTRATION IN UKRAINE**

*In the presented study, the author examines managerial activity as the object of research in the context of the development of the information society in Ukraine. Among the main factors influencing the transformation of public administration, particular emphasis is placed on the use of digital information and the application of information technologies by public authorities and local self-government bodies. The subject of the research is the legal regulation of relations arising in connection with the use of digitally formatted information for governance purposes and the technologies associated with its processing.*

*The research objective defined by the author is determined by the identification of trends in the development of information activities of public authorities. It is noted that under current conditions, communication between citizens and the state is undergoing change due to the emergence of new mechanisms of managerial activity. The main research hypothesis is that a process is underway whereby electronic forms of phenomena and categories are being replaced by their more modern counterparts in the perception of governance actors, characterized by a digital embodiment. Digitalization did not emerge as an unexpected*

*phenomenon; rather, it was preceded by processes of automation and informatization in public administration.*

*The novelty of the research lies in the theoretical substantiation of the need to establish continuous information exchange between the state and citizens by providing the population with permanent access to information and opportunities for its independent use, including automated processing. The study concludes that the existing regulatory framework is sufficiently stable to support the development of public administration under conditions of digital transformation of society, while also emphasizing the need for timely and targeted regulation of public-law information relations.*

**Key words:** *digitalization; digital transformation; public administration; factors; directions of further development of digitalization of public administration.*

Problem setting. For Ukraine, the digitalization of public administration is an important factor in European integration, the enhancement of the state's institutional capacity, and the strengthening of the resilience of the governance system in the face of contemporary challenges, in particular under conditions of martial law. The implementation of the state policy of digital development contributes to the formation of an effective, open, and citizen-oriented system of public administration.

Information technologies, including e-governance, electronic document management, digital registers, and online services, significantly transform the mechanisms of public administration. They optimize administrative procedures, reduce time and financial costs, minimize corruption risks, and ensure the accessibility of public services for the population.

Recent research and publication analysis. An analysis of academic research indicates the existence of a significant number of studies by domestic and foreign scholars addressing issues of digitalization and the impact of digital transformations on public administration. Among them are the works of N. Atamanova, O. Bernaziuk, T. Byrkovych, V. Dreshpak, S. Kvitka, V. Kuibida, I. Lopushynskyi, V. Namestnik, I. Nikolina, N. Novichenko, Yu. Pihariiev, H. Pocheptsov, V. Saprykin, O. Semiletov, N. Sydorenko, I. Surai, and others.

Purpose of the article. The purpose of the article is to substantiate the procedural specifics of the digital transformation of public administration in the direction of servitization.

Article main body. In the current conditions of the development of the information society, digital information and information technologies play a key role in the transformation of Ukraine's public administration system. Their implementation contributes to increasing the efficiency of public authorities and local self-government bodies, ensuring the transparency of administrative processes, improving the quality of public services, and expanding opportunities for civic participation.

Digital information serves as the basis for managerial decision-making, strategic planning, and monitoring the performance of public authorities. It provides prompt access to data, as well as their processing, storage, and analytical use. In the context of digitalization, the importance of open data is increasing, as it promotes government accountability and strengthens public trust.

The strategy for the digital transformation of public administration in Ukraine represents a set of state priorities, goals, and measures aimed at the systematic implementation of digital information and information technologies in the activities of public authorities and local self-government bodies. The main goal of this strategy is to create an efficient, transparent, open, and citizen-oriented system of public administration through the digitalization of administrative processes and public services. The normative foundations of digital transformation in public administration were laid with the adoption of the Concept for the Development of E-Governance in Ukraine on September 20, 2017 (Cabinet of Ministers of Ukraine Resolution No. 649-r) [3, c.235].

The legal definition of the information society formulated in the Strategy does not entirely reflect the existing regulatory framework in precise terminological terms. When referring to information as a resource, it generally implies the possibilities of working with it, including automated processing, for purposes necessary to achieve an expected positive outcome. The term "application" is more appropriately associated with another concept — "information technologies." Such technologies are applied across various areas of human activity. The current stage of societal development is characterized by their pervasive penetration not only into new spheres of everyday and professional life but also by their direct influence on the dynamics of social relations and their qualitative transformation. A prerequisite for these circumstances has been the formation of an extensive network of

digital communication channels, i.e., the improvement of the information infrastructure. These processes can be described as digital transformation or digitalization, which affect society and the relationships within it, including those of a legal nature.

Although the definition fixed by the Strategy raises a number of discussion points, it accurately characterizes the most fundamental element of the information society — information. In the current context, information is a key resource that can be used for the development of society and the state. Among Ukraine's national interests identified in the Strategy is the need to improve the efficiency of public administration. Managerial activity is mentioned in a separate section alongside the economy and the social sphere. Such mention is not accidental and, in our view, is linked to the need to address pressing problems in these areas, which have accumulated over a long period and remain relevant today. This raises a natural question: is a conceptual transformation of public administration occurring in the information society in connection with digitalization?

Decision-making today can be directly associated with the capacity of public authorities to utilize information and information technologies. Proper handling of relevant digital information enables authorities to make decisions that consider multiple factors, many of which cannot be established by human analysis and forecasting alone. The use of information technologies, offering computational potential far exceeding human capabilities, allows the acquisition of the data needed for decision-making. However, the process of obtaining qualitatively new information through specific algorithmic operations is not always transparent, obvious, or fully explainable, and therefore cannot and should not be considered the sole or exclusively correct basis for managerial decision-making [5, c.73].

Research indicates that information is the central element of public administration. Analyzing the historical stages of information activities within public authorities and local self-government bodies, it can be observed that effective handling of information is a key factor determining the quality of decisions. Information used in public administration has undergone a long evolutionary process in terms of organizational form: from the first written records documenting facts, events, or circumstances, authorities moved to formalized documents and document flow, inter-agency interactions, and the provision of services in their conventional understanding as actions taken at the request of interested parties.

Considering documents as information recorded on a physical medium with corresponding attributes, one can note a change in their organizational form — from physical embodiment to electronic representation. Gradual accumulation of documents (information on physical media) required systematization. Working with electronic versions enabled a fundamentally different format: automated processing of digital information.

The application of information technologies allowed public administration to undergo processes of automation and informatization, gradually entering a new stage of digitalization. Accordingly, the accumulation of digital information predetermined the next stage in the information activities of modern public authorities — the use of information systems containing arrays of digitized data. Today, information activities in public administration can be understood more broadly than merely using processed data from state, municipal, or other information systems for decision-making purposes.

Digitalization expands forms of citizen engagement in governance through various mechanisms and initiatives. Citizens, in communicating with the state, use services, websites, petitions, and electronic (remote) voting. Information technologies, which have become significantly more accessible in recent years to both authorities and the public, are employed in this interaction. Widely disseminated information technologies are primarily associated with Internet usage. Their application facilitates both targeted and broad engagement, even of politically inactive citizens, in the indirect process of policy preparation and decision-making. For example, initial experiences with remote electronic voting in domestic electoral practice demonstrate a positive effect on voter activity [4].

Citizen participation via information technologies enhances government legitimacy and ensures additional conditions for free access to information. To describe citizen involvement in various managerial activities, scientific concepts such as electronic parliament, e-government, e-justice, and e-voting have been developed. In public law studies, these concepts are often treated as institutions of electronic democracy, which have only recently become the subject of research by domestic legal scholars. International interest in “e-government” emerged toward the end of the last century. It is important to note that these categories are often not legally codified. Only specific mechanisms used in management (e.g., electronic signature, electronic message, electronic document, electronic document flow) receive normative

recognition. This practice differs significantly across countries. For example, in the United Kingdom, specialized projects were developed to ensure electronic democracy, facilitating both citizen communication with public institutions via digital channels and the organization of new forms of decision-making within party structures.

It should be noted that the use of information and information technologies in public authorities is not always aimed at improving administrative efficiency. In Japan, e-government mechanisms focus on achieving macro-level results, including the socialization of specific citizen groups. The People's Republic of China develops regulation to ensure national security, including information security, through special monitoring systems with intelligent functions analyzing data from user devices and infrastructure sensors across urban areas [1, c.87].

Trends in domestic lawmaking indicate that these “electronic” concepts are gradually being replaced by “digital” categories of similar meaning but different nature. Terms such as digital economy, digital rights, digital certificate, digital financial asset, and digital currency have been introduced. The foundation for both electronic and digital legal categories is formed by regulatory objects from sectoral legislation: information, information technologies, information systems, etc. While distinguishing between “electronic” and “digital” is not the focus of this study, their conceptual differences in public administration are based on real mechanisms connecting citizens and the state [7, c.110].

Digital transformation allows a modern approach to public administration, where traditional communication between citizens and authorities requires not only feedback and information processing (electronic period) but also continuous information exchange, enabling citizens constant access and self-processing (digital period). Today, it is appropriate to consider digital information and information technologies as mutually interdependent, forming the foundation of a digital state. The digital state as a legal phenomenon is actively studied, and international researchers identified prerequisites for its emergence a decade ago.

Administrative activity is closely linked with the development of the digital economy. Scholars note that in the context of international cooperation, the digital economy involves technology adoption across various sectors, including public administration, changing

management mechanisms alongside transformations of goods, services, capital, labor markets, infrastructure, and security. Not only has the informational activity of authorities expanded, but new directions for information-based economic management in specific sectors are emerging in international legal practice.

Ukraine provides unique national examples of transforming governance tools in the information society. One innovation ensuring citizen-state connection is the provision of state and municipal services electronically through dedicated information systems. The quality of public administration and service delivery is directly tied to the e-government concept, providing substantive content. New digital services are often tested with the business community before being made available to citizens, reflecting a global management trend. Public administration also increasingly adopts new terminology, such as client-centricity, which is uncommon in traditional public law. Integration of businesses into the provision of socially significant public services remains limited. Public authorities generally avoid intermediaries in electronic service provision, except trusted organizations supporting IT infrastructure (e.g., electronic signature issuance, digital certificate verification) [2, c.108].

The modern information society stage has a service-oriented nature. Even electronic public services are conceptually reinterpreted in state function implementation, allowing representation as super-services and mono-services. Although “super-service” is absent from legislation, it appears in subordinate regulations and acts of state and regional executive bodies. Super-services enable previously unavailable modes of citizen-state interaction, based on:

- minimizing or eliminating the need for physical documents to confirm identity, events, or facts;
- modern identification and authentication mechanisms removing the need for physical visits;
- comprehensive processing of requests with inter-agency interaction;
- provision of state and municipal services, including constitutional rights and social guarantees, without in-person requests;
- expanded information access via cross-platform systems and new legislative safeguards;

- reduced corruption and abuse risks.

Mono-services represent specific state or municipal services within super-services or independently, prioritizing digital transformation of procedural delivery due to high citizen demand. Key aspects include:

- using state service portals;
- electronic service provision regardless of citizen location;
- automatic electronic document generation without human decision-making;
- notifying citizens of service availability;
- recording service provision in information systems;
- inter-agency coordination without citizen involvement.

Super-services and mono-services are professional management terminology arising from digital public administration; citizens continue to access specific services as before. Their legal recognition does not require major restructuring of information and sectoral regulation, as they are information systems with complex organization and multiple information actors.

Thus, the development of a service-oriented state model is a promising direction for improving public authority function quality. Citizen-state communication is substantively transformed through new digital information use and information technology application. Authorities employ tools emerging from digital public administration, while governance continues alongside other sectors within the digital economy. The current high-dynamic stage of the information society demands continuous improvement of management mechanisms.

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