ppi 201502ZU4645

Esta publicación científica en formato digital es continuidad de la revista impresa ISSN-Versión Impresa 0798-1406 / ISSN-Versión on line 2542-3185Depósito legal pp 197402ZU34

# CUESTIONES POLÍTICAS

Instituto de Estudios Políticos y Derecho Público "Dr. Humberto J. La Roche" de la Facultad de Ciencias Jurídicas y Políticas de la Universidad del Zulia Maracaibo, Venezuela



## Achievements and prospects of digitization of public administration spheres in Ukraine

DOI: https://doi.org/10.46398/cuestpol.4179.44

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#### Abstract

The article analyzes the legal documents of conceptual and strategic nature, as well as the existing state mechanisms aimed at digitization of the sphere of public management and administration in Ukraine. In this context, conceptual tasks aimed at the implementation and further development of

digitization tools for the activities of state administration bodies, in general, and in certain spheres of public activity have been defined. The prospects for the development of digital potential, which should be implemented by key government institutions in such areas of digital transformation as: telecommunication services and digital infrastructure; e-commerce and virtual assets; innovations, information and communication technologies and startups; the field of health care; development of digital potential, acquisition of skills and competencies of citizens, digitization of education and e-learning, have been identified. The results obtained allow us to conclude that, for an effective public administration, digital technologies are an effective tool that requires thorough study and practical testing.



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# **Keywords:** public administration; public management; executive branch bodies; digital transformations; information space.

### Logros y perspectivas de la digitalización de las esferas de la administración pública en Ucrania

#### Abstract

El artículo analiza los documentos legales de naturaleza conceptual y estratégica, así como los mecanismos estatales existentes destinados a la digitalización de la esfera de la gestión y administración pública en Ucrania. En este contexto, se han definido tareas conceptuales encaminadas a la implantación y posterior desarrollo de herramientas de digitalización para las actividades de los órganos de la administración estatal, en general, y en determinados ámbitos de la actividad pública. Se han identificado las perspectivas de desarrollo del potencial digital, que deben ser implementadas por instituciones gubernamentales clave en áreas de transformación digital como: servicios de telecomunicaciones e infraestructura digital; comercio electrónico y activos virtuales; innovaciones, tecnologías de la información v la comunicación v startups; el campo de la atención de la salud; desarrollo del potencial digital, adquisición de habilidades y competencias de los ciudadanos, digitalización de la educación y aprendizaje en línea. Los resultados obtenidos permiten concluir que, para una administración pública eficaz, las tecnologías digitales son una herramienta efectiva que requiere un estudio exhaustivo y pruebas prácticas.

**Palabras clave:** administración pública; gestión pública; órganos del poder ejecutivo; transformaciones digitales; espacio de información.

#### Introduction

The functioning of the modern world is impossible without the processes of active digitalization of all spheres of life in society, which is accompanied by the widespread penetration of digital technologies into the processes regulated by the state. «Digital» society is a step towards the formation of a new type of relationship between the government and society, which introduces new conceptual and value platforms for providing services to citizens, reducing bureaucratic obstacles, forming various information databases, which enables public administration bodies to timely and promptly receive any what information and how to use it. Expanding the capabilities of digital technologies is one of the dominant factors in the growth of the world economy in the next 5-10 years, which is a key driver of achieving the Sustainable Development Goals of the country and its regions in conditions of decentralization (Muraev, 2021, p. 2). At the same time, the spread of technological innovations carries certain threats and disadvantages, which primarily relate to the release of personnel, cybercrime and privacy violations. Under such conditions, as rightly emphasized in the doctrine, the theory of modernization, which implies a more intensive use of technologies by democratic states, should be revised with a shift in focus to the specifics of the use of certain digital tools, their adaptation by digital political subjects, ways of construction and mobilization by them networks (Steblyna, 2021, p. 12).

The development of democracy in Ukraine, integration into the Single Digital Market of the European Union, introduction of e-government and e-democracy tools into the public administration system, further development of the information society, decentralization and creation of united territorial communities became the driving force of the modernization of public administration in the country. The key task of such modernization should be the transition to a service-oriented state, one of whose priorities is the provision of high-quality public services using modern digital and information and communication technologies.

#### 1. Methodology of the study

To achieve the goal and set tasks of the scientific article, a complex of general scientific research methods was used, and the systematic approach is its methodological basis and is used to solve most of the research tasks. System-analytical and content analysis methods were used in the study of regulatory and legal documents. The use of methods of analysis and synthesis made it possible to identify problems and determine the subject of research, to improve the conceptual and categorical apparatus of the subject area of research. The work also applies: the method of comparison and the systematic approach – for the study of foreign experience of digital transformation in the field of public management and administration; statistical methods - to clarify the dynamics of digitalization of the sphere of public administration at the national level; factor analysis - to justify the system of influencing factors on the process of digital transformation of management; subject-object approach and abstract-logical, systemstructural methods - to develop the concept of digital transformation of public management and administration. The method of generalization was used when formulating research conclusions based on the results of processing a set of materials on a relevant topic.

#### 2. Analysis of recent research

Many foreign and domestic scientists are working on the problem of ensuring digital transformations of society by legal means and increasing their effectiveness, which is explained, we emphasize again, by the globality of the phenomenon, which is the information space, and the scale of the risks and threats that accompany this process. In the focus of scientists and practitioners are the issues of introduction of modern digital information and communication technologies in the field of public management and administration, provision of high-quality public services in Ukraine, informatization and digitization of state authorities, etc.

At the same time, despite the wide range of scientific developments on this issue, there is a significant range of problems of a normative, legal and practical nature that require further development. After all, in connection with the significant pace of transformation of the information space, new and urgent tasks constantly arise in this area, the successful solution of which also depends on the success of the transformation of the «normal» pre-digital format of this space into a new model – a digital one, which is currently «burdened» also military actions on the territory of Ukraine.

For the sake of fairness, we should point out Ukraine's significant successes in the direction of digitalization of certain spheres of life. The system of providing public e-services and electronic identification is developing at a rapid pace (in particular, the public services portal «Action» has been created under the auspices of the relevant ministry, the Integrated Electronic Identification System has been launched, SmartID technology is being systematically implemented, and the process of optimizing electronic data registers has begun).

At the same time, in continuation of active administrative reforms, the functioning of public authorities and the services they provide require further optimization of state tools for digitalization of the sphere of public management and administration in Ukraine in such areas as electronic commerce and virtual assets; innovations, information and communication technologies and startups; health care, telecommunications services and digital infrastructure and others.

Therefore, the relevance of the research is determined by the presence of a problem, the essence of which boils down to the existing contradictions between the need to improve the quality of public services in the conditions of the formation of the information society, which is possible on the basis of the digitalization of the specified services, and the insufficient scientific and applied and methodological and technological support of the specified activity.

#### 3. Results and discussion

Management of society in conditions of permanent turbulence actualized the task of comprehensive study of extremely complex and multi-level interdependencies of processes of globalization and public administration. Understanding the dynamics of their relationship and interaction is of particular importance for deepening the understanding of modern trends in the development of state-management mechanisms in Ukraine (Aleynikova, 2021, p. 249). A strong and effective state policy can stop the spread of crisis trends, the characteristic feature of which today is a people-centered approach based on the introduction of the latest digital technologies in the relationship between the state and civil society.

Digitization of the sphere of public administration involves the application of strategic technologies of public administration, such as: the use of social networks and communications for active involvement of the public in administrative and political processes; provision of alternatives in the opportunity to engage in communication with public administration bodies; application of new methods of finding out and understanding the needs of citizens; support for personalization, etc.; introduction of a «digital» workplace; access to information bases as a tool for evaluating and controlling the work of the authorities and the state; the orientation and interest of state institutions in improving the quality of services, optimizing the number of employees and reducing costs; use of «Big data» data and others.

Some scientists highlight the characteristic signs of digitalization: all types of content go from analog, physical and static to digital, at the same time they become mobile and personal, and the individual gets the opportunity to control his personal content, direct information requests, form an individual trajectory of information activity; there is a transition to simple communication technologies (technology becomes only a means, a tool of communication), the main characteristic of the means and technology is manageability; communications become heterogeneous: vertical, hierarchical communication loses its relevance, there is a transition to a network structure of communication (Cherednichenko, 2021). Digitization leads to: increased availability, quality and ease of obtaining goods and services; increase in the consumption capacity of the population; the growth of intra-industry competition; increasing the competitiveness of the state's economy on world markets; emergence of new professions.

Digitization is inextricably linked with digital transformation, that is, the complex transformation of public authorities, private enterprises, etc., is associated with a successful transition to new models, channels of communication with society and consumers of products and services, which are based on new approaches to data administration using digital technologies, with the aim of its effectiveness. Currently, public management bodies are actively searching for new forms of life and ensuring the continuity of functioning, which requires the active introduction of all forms of digitalization for high-quality and effective public administration in order to optimize management costs, the quality of mutual exchange and the provision of services to the population (Chorny, 2021, p. 226).

The concept of the development of the digital economy and society of Ukraine for 2018-2020 established the provision that «with a systemic state approach, «digital» technologies will significantly stimulate the development of an open information society as one of the essential factors in the development of democracy in the country, increasing productivity, economic growth, as well as improving the quality of life of Ukrainian citizens» (DECREE OF THE CABINET OF MINISTERS OF UKRAINE Nº 2250-P, 2010).

According to the Concept of the development of e-government in Ukraine, approved by the resolution of the Cabinet of Ministers of Ukraine, it is established that the development of e-government will contribute to: increasing the efficiency of public administration as a result of simplifying administrative procedures, reducing administrative costs, applying modern methods of public administration; improving the quality of administrative services and their availability; ensuring the implementation of control over the effectiveness of the activities of state authorities and local selfgovernment bodies; ensuring a high degree of availability of information about the activities of state authorities and local self-government bodies, providing opportunities for citizens and public organizations to directly participate in the processes of preparation of draft decisions adopted at all levels of state administration; reducing the level of corruption and «shading» of the economy; achieving a qualitatively new level of state and society management in general, as well as strengthen trust in state institutions (DECREE OF THE CABINET OF MINISTERS OF UKRAINE № 67-r, 2018).

On the basis of these trends, in 2019, the Committee on Digital Transformation was established, whose areas of responsibility include the formation of the legislative foundations of «digitalization» and the digital society of Ukraine, the administration, functioning and use of the Internet in Ukraine, work on national and state informatization programs, and as well as programs of the European Union «Single Digital Market», other programs of digital cooperation, issues of e-government and public electronic services, smart infrastructure (cities, communities), cyber security and cyber protection, etc.

Also, in order to optimize the system of central executive bodies, the Ministry of Digital Transformation of Ukraine was created (RESOLUTION OF THE CABINET OF MINISTERS OF UKRAINE № 829, 2019),

which became the central main body in the system of central executive bodies, which ensures the formation and implementation of state policy: in the areas of digitalization, digital development, digital economy, digital innovations and technologies, e-government and e-democracy, development of information society, informatization; in the field of implementation of electronic document management; in the field of development of digital skills and digital rights of citizens; in the areas of open data, development of infrastructure of broadband access to the Internet and telecommunications, e-commerce and business; in the field of providing electronic identification; in the field of ITindustry development (DECREE OF THE CABINET OF MINISTERS OF UKRAINE Nº 856, 2019).

The fact that Ukraine intends to carry out a digital transformation, ensuring the provision of administrative services through a secure «single window» using modern information technologies, and spreading digital literacy was first stated in the 2020 Strategy (DECREE OF THE PRESIDENT OF UKRAINE № 392/2020), and at the end In 2021, Ukraine adopted a new Strategy for the implementation of digital development, digital transformations and digitalization of the state finance management system for the period until 2025 and the Action Plan for its implementation (DECREE OF THE CABINET OF MINISTERS OF UKRAINE № 1467-r).

The specified regulatory legal documents were adopted to ensure highquality digital transformation in certain areas of business related to the circulation of material values: such as state finance management, state internal financial control activities, monitoring and assessment of fiscal risks, maximum automation of business processes, etc. In particular, the 2021 Strategy specifies information security in the Unified Information and Telecommunications System of the State Finance Management System against modern cyber threats in the conditions of digitization of management processes and the need for data exchange (ORDER OF THE CABINET OF MINISTERS OF UKRAINE № 1467-p, 2021) as a separate goal.

The main approach defined by this Strategy is the centralization of ITresources and ITfunctions of the Ministry of Finance and central executive authorities, with the priority use of cloud technologies, the creation of a single data repository, the gradual transition to a new level of service-oriented systems by ensuring the availability of public services in the mode online As part of the implementation of this Strategy, it is planned to create a cloud infrastructure of the state finance management system, create an interdepartmental data repository, and implement tools for analytical processing of the information accumulated in it (DECREE OF THE CABINET OF MINISTERS OF UKRAINE Nº 1467-r, 2021).

At the same time, fundamental documents, which are fully devoted to information security issues, have been adopted in Ukraine. So, in 2021, two strategies appeared in this area at once. One of them is the Information Security Strategy, which emphasizes that the digital transformation of society affects the state of protection of the individual's right to privacy due to the increase in the number of social networks, their integration with other social services of everyday use, as well as due to the specifics of the organization of the worldwide Internet (DECREE OF THE PRESIDENT OF UKRAINE Nº 685/2021). Another document of a strategic nature is the Cybersecurity Strategy of Ukraine «Safe cyberspace is the key to the country's successful development» (DECREE OF THE PRESIDENT OF UKRAINE Nº 447/2021). Given the numerous threats and challenges that cyberspace is full of for Ukraine, in the era of digital transformations in the country, the risk of misuse of the latest technologies for criminal purposes increases, and therefore the role of cyber security increases.

Today, digital innovations are being introduced in Ukraine in the following areas: automated collection, storage and processing of information; creation of digital goods and services; development of a new digital model for the use of digital design; performance of administrative functions; automation of manual work using robots and electronic document management; management of production processes and supply networks, etc.

The problems of modern public administration reform in Ukraine, in particular in the direction of digitalization, require the development of new approaches, which are often based on foreign experience, the skillful use of which can undoubtedly accelerate the process of reforming the functioning public administration system. However, it is important not only to borrow established management models, but also to correctly build a reform algorithm based on advanced foreign practices. In fact, in the situation of adapting the foreign experience of reforming management, we are talking about management innovations that require regulatory and legal support at the level of a special regime, as both the management system and those social relations that form the basis of public management require changes.

As noted by S. Seryogin and V. Bashtannyk, the process of adapting foreign management experience should be carried out through the study of: both predicted and spontaneous regulators of internal and external influence on social relations, which stabilize the country's political system; organizational means of improving the management system at the level of the national state, if the individual criteria of social reforms are not known in advance, are formed under the influence of a change in the political course (Seryogin, 2007, p. 7). Thus, the issue of adaptation to the national conditions of state development of world experience accumulated by the theory of public administration still remains the main scientific problem (Meltyukhova & Korzhenko, 2010, p. 14). In Ukraine, the use of digital technology tools for the financial support of the social sphere is not active enough, as in China, the USA, India, and Great Britain. However, the importance of this is evidenced by the decision in 2020 by the government to approve the Strategy of Digital Transformation of the Social Sphere (DECREE OF THE CABINET OF MINISTERS OF UKRAINE № 1353-p, 2020), which defines the directions and main tasks of the comprehensive digital transformation of all components of the social protection system of the population until 2023. In addition, the Concept of the development of electronic health care (e-health) was developed and approved, which defines the political, organizational-legal, technological and ideological conditions and principles of the development of e-health (DECREE OF THE CABINET OF MINISTERS OF UKRAINE Nº 1671-r, 2020). The implementation of this Concept is foreseen until 2025.

Each process or technology has both its advantages and disadvantages. If we talk about the use of the blockchain system, its advantages include durability, fast transactions, data transparency, exchange transactions without intermediaries, and a reduction in the level of corruption. The most significant are the internal advantages of the application, which are primarily related to transparency, interactivity, safety and technological improvement of the state management and control system.

As for the shortcomings of the blockchain, it should be noted that technical problems tend to stand in the way, and it also remains unknown who will collect transactions into blocks and chains, that is, there is still a risk of data compromise; large volume of data memory; impossibility to delete or change data after it has entered the database. External threats are caused, first of all, by the lack of a legal basis for the use of decentralized register technology (Shyshkova, 2018, p. 384). In general, it is undeniable that effective modern technologies should be used to improve and modernize public administration and control (Hrushko & Koretska, 2021, p. 34).

In the countries of the European Union, an evaluation indicator of the level of technological development and the degree of introduction of innovative technologies in the digital society is used – the DESI Index (International Digital Economy and Society Index, 2022). The index covers five main subindices: connectivity, human capital, internet use, digital integration and digital public services. In particular, for determining the DESI index, an important component is the presence of digital skills in the population and among graduates of educational institutions. According to the value of the index, in 2022, Belgium, the Netherlands, Luxembourg, Denmark, Finland, Sweden, Great Britain, Ireland, Estonia, and Austria became leaders in the development of digital technologies among the countries of the European Union (International Digital Economy and Society Index, 2022). Also, compared to previous years, the number of people who used e-government services increased from 58 % to 72 % (International Digital Economy and Society Index, 2022). Such countries as Denmark, Spain and Estonia have the lead in this indicator.

The field of e-government in France is aimed at ensuring interaction between management services, accessibility of management sites, expanding access to electronic payment systems and to justice via the Internet. Taking into account the experience of France, it is expedient for Ukraine to implement measures to train officials in the field of digital technologies, take into account awareness in the digital field when entering the civil service, appropriate modernization of publicly available computer systems, and rationalization of state funding in the information society.

The identified potential opportunities of the digital economy in individual countries make it possible to conclude that most of them should implement an active and effective state policy to overcome the «digital divide». Digitalization of many areas of life, active introduction of the Internet in households, formation of necessary professional digital skills also play an important role. At the same time, countries that have reached the highest level of digital maturity open up many digital perspectives and opportunities for further activation of the development of digitalization in the field of public administration in general and in certain branches of public production and the state.

In general, it should be emphasized that the deployment of the broad digital capabilities of the world's leading democracies requires governments to implement a strategy for the development of the digital economy in the context of the «digitalization» of the country, the formation of the internal IT market, and the development of motivation among consumers of digital technologies. It is necessary to provide a developed digital infrastructure as a basis for the development of the digital economy, which will encompass a complex of technologies, products and processes that will be able to provide computing, telecommunication and network capabilities on a digital basis.

Over the past few years, a number of important steps have been taken in Ukraine on the way to the EU's Single Digital Market. Among the most important factors that create positive prospects for digital European integration: 1) legislative prerequisites: creation and active activity of the Digital Transformation Committee of the Verkhovna Rada of Ukraine; 2) institutional prerequisites: creation and active activity of the Ministry of Digital Transformation of Ukraine, appointment of deputy ministers for digital development in all ministries of Ukraine; 3) foreign policy prerequisites: activities of the EU support program «EU4Digital: support for the digital economy and society in the Eastern Partnership», development of the Strategy («road map») of Ukraine's integration into the Single Digital Market of the European Union in close cooperation with representatives of the relevant structural divisions of the European Commission . Thanks to the above factors, certain successes have been achieved in most areas of digital transformation, in particular, the most positively indicative are the areas of electronic governance, regulation of electronic communications, electronic trust services and electronic identification, electronic health care system. However, the improvement of policy and specific actions for the further digital development of Ukraine requires increased attention.

In particular, there is a shortage of officially approved strategic documents that would more clearly define the policy vectors and intentions of national authorities for the further perspective of the country's digital development in terms of individual sectors of the digital market. More intensive actions should be carried out in the areas of cyber security, e-commerce and development of the ITecosystem (Digital transformations in Ukraine: do domestic institutional conditions meet external challenges and the European agenda?, 2020).

The results of the analysis of the current situation in Ukraine and the trends of its development make it possible to determine the prospects for the development of digital potential, which should be implemented by key government institutions within the framework of each direction of digital transformation in the near future.

In the field of telecommunications services and digital infrastructure, it is necessary to: finalize and implement the Law of Ukraine «On Electronic Communications»; develop a clear action plan involving stakeholders to update by-laws in this area; to make changes to the Law of Ukraine «On access to construction, transport, and electric power facilities for the purpose of development of telecommunication networks»; develop national standards in the field of radio frequency resource use, harmonized with the standards of the European Institute of Telecommunication Standards ETSI; speed up the process of official approval of the draft Strategy (road map) of Ukraine's integration into the EU's Single Digital Market; each state authority to prepare its own plan for ensuring cyber security and protection of information and communication networks; to introduce a unified design and rules for providing information on official web portals and websites of state enterprises and institutions; develop a program to modernize the IT infrastructure of state authorities and ensure its financing from budgets; develop and adopt a national cyber emergency response plan; develop a step-by-step action plan for the implementation of the basic EU directive in the field of cyber security; develop a national program of financial support for cyber security in Ukraine and provide the responsible authorities with resources for its implementation.

The Cybersecurity Strategy of Ukraine, adopted in 2021, states that for the further development of the national cyber security system on the basis of deterrence, cyber resilience, and cooperation, it is necessary to: strengthen the capacity of the national cyber security system to prevent armed aggression against Ukraine in cyberspace or with its use, neutralization of intelligence subversive activities, minimization of threats of cybercrime and cyberterrorism; acquiring the ability to quickly adapt to internal and external threats in cyberspace, support and restore the sustainable functioning of the national information infrastructure; ensuring the development of communication, coordination and partnership between the subjects of cyber security at the national level, the development of strategic relations in the field of cyber security with key foreign partners. The key unifying and coordinating role in this process will be played by the National Cyber Security Coordination Center (DECREE OF THE PRESIDENT OF UKRAINE Nº 447/2021).

In the field of electronic commerce and virtual assets, we see prospects for the development of digital potential in the following: define the concepts of «electronic commerce» and «virtual assets» at the legislative level; to introduce amendments to the Tax Code of Ukraine regarding the abolition of taxation of income received by non-residents in the form of payment for the production and/or distribution of advertising and improvement of the procedure for taxation of value-added tax on transactions involving the supply of electronic services to individuals by non-residents» in order to create conditions for the effective administration of procedures that related to the taxation of value added tax on electronic services provided by nonresidents in the customs territory of Ukraine; develop a clear description of the criteria for financial monitoring of virtual assets service providers with the involvement of the National Bank of Ukraine in order to avoid abuses in the virtual assets market; adapt legislation on consumer rights protection and taxation in the field of e-commerce to EU standards and practices; to normalize the responsibility of business entities in the e-commerce segment before consumers; create a single register of business entities in the specified segment and consider the possibility of creating an online dispute settlement system.

In the field of innovations, information and communication technologies and startups, we see the need for the following: making changes to the Tax Code of Ukraine and some other legislative acts of Ukraine regarding the conduct of business activities by residents in Ukraine in order to create conditions for non-residents to conduct business in Ukraine without a physical presence on its territory and their receipt of relevant electronic trust services; develop an online platform for displaying the Ukrainian IT and innovation ecosystem, which will include information about IT companies, research and educational institutes, investment funds and companies, business incubators, technology parks, etc.; to create a national network of innovative business incubators according to the standards of the European Network of Business and Innovation Centers (EBN); to develop mechanisms of interaction of the domestic ecosystem of innovations, information and communication technologies and startups with other international and European similar ecosystems of information and communication technologies innovations and networks of financial support for innovative development; to develop mechanisms of state support for the development of business angel ecosystems in Ukraine with the possibility of providing tax benefits and applying joint investment schemes; to develop a freely available online database with a list of financial sources available to various organizations to finance innovation; register domestic crowdfunding platforms on information resources for P2P market platforms in the EU and the world, etc.

It is appropriate to emphasize that some of the steps we have indicated to increase the digital potential in the field of innovations, information and communication technologies and startups are reflected in the priority directions of the implementation of the Concept of the Development of Artificial Intelligence in Ukraine, adopted in 2020, such as: creating conditions for participation in the activities of international organizations and the implementation of initiatives related to the formation of strategies for the development, regulation and standardization of artificial intelligence; introduction of artificial intelligence technologies in the field of education, economy, public administration, cyber security, defense and other areas to ensure long-term competitiveness of Ukraine on the international market: providing access to information (databases, electronic registers, etc.), its use during the development of artificial intelligence technologies for the production of goods and the provision of services; increasing the level of professional training of specialists to ensure the field of artificial intelligence technologies with qualified personnel; protection of the information space from unauthorized intervention, ensuring the safe functioning of information and telecommunication systems; increasing the level of public safety through the use of artificial intelligence technologies during the development of resocialization measures for convicted persons and the risk of reoffending: bringing legislation in the field of using artificial intelligence technologies into compliance with international legal acts (DECREE OF THE CABINET OF MINISTERS OF UKRAINE № 1556-r, 2020).

The field of health care also needs to define the prospects of digitalization. For this purpose, it is expedient to develop a strategy for the development of the electronic health care system at the state level; create prerequisites and ensure further improvement of the data space of the electronic health care system in Ukraine (primarily, regarding ensuring data protection and cyber resistance within the eHealth system, conducting its audit, introducing standards for storage and transmission of medical information), etc.; bring the legislation in the field of electronic healthcare of Ukraine to EU standards; determine the prospects for ensuring cross-border compatibility of the electronic health care system of Ukraine with EU countries; initiate the implementation of pilot projects for the provision

of cross-border electronic health care services (Digital transformations in Ukraine: do domestic institutional conditions meet external challenges and the European agenda?, 2020).

The following prospects for the development of the digital potential of digital skills and competences of citizens, digitalization of education and online learning should also be determined: develop a national strategy for the development of digital skills and competences and a corresponding action plan for the implementation of the strategy; define at the legislative level the concepts of «digital competences» and «digital skills»; support the development and implementation at the official level of the framework of digital competences for citizens and e-competencies for business; to develop a comprehensive mechanism for measuring digital skills and competencies in Ukraine.

#### Conclusions

Thus, based on the results of the analysis of the issues investigated in the scientific article, we can draw the following general conclusions.

Digitalization of the sphere of public management and administration should be understood as a process based on the integration of public management and administration functions and digital technologies, which is aimed at the transformation of socio-economic and political relations in the information society and promotes the emergence of a new digital culture of interaction between the government, business, the public and the environment.

Based on the analysis of international experience in the field of digitalization of law, we can conclude that the system of gradual improvement of relations arising from the use of digital rights of citizens (United States of America, Great Britain, France, Denmark). For effective public administration, digital technologies are an effective tool that requires comprehensive study and practical testing.

The prospects for the development of digital potential have been determined, which should be implemented by key government institutions in the following areas of digital transformation in Ukraine: telecommunications services and digital infrastructure; e-commerce and virtual assets; innovations, information and communication technologies and startups; the field of health care; development of digital potential, skills and competences of citizens, digitization of education and online learning.

Regarding further scientific research, it is essential to investigate both Ukrainian and international bills on the regulation of the digital transformation of our country and to develop proposals for the possible implementation of the positive experience of foreign countries in Ukrainian legislation.

#### **Bibliographic References**

- ALEYNIKOVA, Olena. 2021. Factors inhibiting reforms of the management system. In: Strategy and practice of innovative development of the financial sector of Ukraine: coll. materials of IV International science and practice conf. State Fiscal Service University of Ukraine. Irpin. pp. 249-251.
- CHEREDNICHENKO, Natalia. 2021. Digitization of public administration. Available online. In: https://conf.ztu.edu.ua/wp-content/ uploads/2021/01/354.pdf. Consultation date: 05/05/2023.
- CHORNY, Serhii. 2021. Concepts and prospects for the development of digitalization in the field of public administration. In: Kyiv Journal of Law. No. 4. pp. 224229.
- CYBERSECURITY STRATEGY OF UKRAINE "SAFE CYBERSPACE IS THE KEY TO SUCCESSFUL DEVELOPMENT OF THE COUNTRY": DECREE OF THE PRESIDENT OF UKRAINE. 2021. dated 08/26/21 No. 447/2021. Available online. In: //www.president. gov.ua/ documents/4472021-40013. Data of consultation: 11/12/22.
- DECREE OF THE CABINET OF MINISTERS OF UKRAINE. 2022. Strategy for implementation of digital development, digital transformations and digitalization of the state finance management system for the period until 2025 dated 11/17/21 No. 1467-r. Available online. In: https:// zakon.rada.gov.ua/laws/show/1467-2021-p#n15. Consultation of date: 05/05/2023.
- DECREE OF THE CMU OF OCTOBER 28. 2020. Strategy of digital transformation of the social sphere: 2020 No. 1353. Available online. In: https://zakon.rada.gov.ua/laws/show/1353-2020-%D1%80#n10. Consultation of date: 05/05/2023.
- DIGITAL ECONOMY AND SOCIETY INDEX (DESI) 2022. Available online. In: file:///C:/Users/zaets/Downloads/0\_DESI\_Full\_European\_ Analysis\_2022\_2\_C01JgPAatnNfoqL2LL103tHSw\_88764.pdf. Consultation of date: 05/05/2023.
- DIGITAL TRANSFORMATIONS IN UKRAINE: DO DOMESTIC INSTITUTIONAL CONDITIONS CORRESPOND TO EXTERNAL CHALLENGES AND THE EUROPEAN AGENDA? POLISH

INTERNATIONAL AND REGIONAL RESEARCH FUND, 2020. Available online. In: http://eap-csf.org.ua/wp-content/uploads/2021/04/Research\_DT\_PF\_WG2\_ua-1.pdf. Consultation of date: 05/05/2023.

- HRUSHKO, Nadia; KORETSKA, Iryna. 2021. Implementation of blockchain technologies in the sphere of public administration. In: Strategy and practice of innovative development of the financial sector of Ukraine: coll. materials of IV International science and practice conf. State Fiscal Service University of Ukraine. Irpin. pp. 3235.
- INFORMATION SECURITY STRATEGY: DECREE OF THE PRESIDENT OF UKRAINE dated 12.28.21 No. 685/2021. Available online. In: https://www.president.gov.ua/documents/6852021-41069. Consultation of date: 05/05/2023.
- ISSUES OF THE MINISTRY OF DIGITAL TRANSFORMATION: RESOLUTION OF THE CABINET OF MINISTERS OF UKRAINE dated September 18, 2019 No. 856. Available online. In: https://zakon.rada. gov.ua/laws/show/856-2019-%D0%BF#Text. Consultation of date: 05/05/2023.
- KUZMENKO, Viktor. 2020. Digitization of public services of self-organization bodies of the population in Ukraine. Dissertation for obtaining the scientific degree of Doctor of Philosophy in the field of public management and administration, specialty 281 – public management and administration. Dnipropetrovsk Regional Institute of Public Administration of the National Academy of Public Administration under the President of Ukraine. Dnipro. 218 p.
- MELTYUKHOVA, Nadia; KORZHENKO, Volodymyr. 2010. Foreign experience of public administration. Guidelines. K.: NADU. 28 p.
- MURAEV, Yevgeny. 2021. Organizational and information support for the development of the strategy of smart cities of Ukraine in the conditions of the digital economy. Dissertation abstract for obtaining the scientific degree of candidate of economic sciences, specialty 08.00.05 development of productive forces and regional economy. O.M. Beketov Kharkiv National University of Urban Economy, Kharkiv. 29 p.
- ON THE APPROVAL OF THE CONCEPT OF DEVELOPMENT OF THE DIGITAL ECONOMY AND SOCIETY OF UKRAINE FOR 2018–2020 AND THE APPROVAL OF THE PLAN OF MEASURES FOR ITS IMPLEMENTATION: ORDER OF THE CABINET OF MINISTERS OF UKRAINE dated January 17, 2018 No. 67. Available online. In: https:// www.kmu.gov.ua/ua/npas/proshvalennya-koncepciyi-rozvitku-

cifrovoyi-ekonomikita-suspilstva-ukrayini-na-20182020-rokitazatverdzhennya-planu-zahodiv-shodo-yiyi-realizaciyi. Consultation date: 05/05/2023.

- ON THE APPROVAL OF THE CONCEPT OF THE DEVELOPMENT OF ARTIFICIAL INTELLIGENCE IN UKRAINE. DECREE OF THE CABINET OF MINISTERS OF UKRAINE No. 1556-r of December 2, 2020. Available online. In: https://zakon.rada.gov.ua/laws/show/1556-2020-%D1%80#Text. Consultation date: 05/05/2023.
- ON THE APPROVAL OF THE CONCEPT OF THE DEVELOPMENT OF E-GOVERNMENT IN UKRAINE: ORDER OF THE CABINET OF MINISTERS OF UKRAINE of December 13, 2010 No. 2250-p. Available online. In: http://zakon5.rada.gov.ua/laws/show/2250-2010-%D1%80. Consultation date: 05/05/2023.
- ON THE DECISION OF THE NATIONAL SECURITY AND DEFENSE COUNCIL OF UKRAINE "ON CYBER SECURITY STRATEGY OF UKRAINE". DECREE OF THE PRESIDENT OF UKRAINE No. 447/2021 dated May 14, 2021. Available online. In: https://zakon.rada. gov.ua/laws/show/447/2021#Text. Consultation date: 05/05/2023.
- SERYOGIN, Serhiy. 2007. Consensus democracy in integrated public administration systems: European experience and Ukraine. In: Actual problems of public administration. Dnipropetrovsk: DRIDU NADU. No. 2. pp. 03–14.
- SHYSHKOVA, Natalia. 2018. The use of blockchain in the transformation of state financial control. In: Problems of the economy, No. 2 (36). pp. 382-388.
- SOME ISSUES OF OPTIMIZING THE SYSTEM OF CENTRAL EXECUTIVE BODIES: RESOLUTION OF THE CABINET OF MINISTERS OF UKRAINE dated September 2, 2019 No. 829. Available online. In: https://zakon.rada.gov.ua/laws/show/829-2019-%D0%BF#Text.
- STEBLYNA, Natalia. 2021. Digitization of state policy as a modern discourse.
  Dissertation for the degree of Doctor of Political Sciences, specialty
  23.00.02 political institutions and processes. Donetsk National University named after Vasyl Stus. Vinnitsa. 358 p.
- THE CONCEPT OF THE DEVELOPMENT OF ELECTRONIC HEALTH CARE: DECREE OF THE CMU of November 28, 2020 No. 1671. Available online. In: https://zakon.rada.gov.ua/laws/show/1671-2021-%D1%80#Text. Consultation date: 05/05/2023.

UKRAINE'S NATIONAL SECURITY STRATEGY "HUMAN SECURITY - COUNTRY'S SECURITY": DECREE OF THE PRESIDENT OF UKRAINE dated September 14, 2020 No. 392/2020. Available online. In: https://www.president.gov.ua/documents/39 22020-35037





Esta revista fue editada en formato digital y publicada en octubre de 2023, por el **Fondo Editorial Serbiluz, Universidad del Zulia. Maracaibo-Venezuela** 

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