

# DIGITALISATION OF THE PUBLIC ADMINISTRATION SYSTEM IN THE CONTEXT OF ECONOMIC AND LEGAL AREAS OF EUROPEAN INTEGRATION

Victoria Savitska<sup>1</sup>

**Abstract.** The article examines the concept and essence of the aspects of digitalisation in the field of public administration in the context of economic and legal instruments of influence on the quality and speed of European integration processes. The modern doctrine identifies several main features of the digital transformation of public administration. In Ukraine, significant progress in the development of digital transformation of public administration has been observed since 2016, when the Digital Agenda of Ukraine 2020 programme was developed, which was adapted to the standards of the European Union's Digital Agenda and included plans for the transition to digital transformation of public administration and the Ukrainian economy. The areas of digital development were identified as follows: bridging the digital divide through the development of digital infrastructures; development of digital competencies; implementation of the concept of digital jobs; digitalisation of the real economy (development of Industry 4.0); implementation of digital transformation projects; public safety; education; healthcare; tourism; e-democracy; ecology and environmental protection; urban life (building a smart city); cashless payments; harmonisation with European and global scientific initiatives; and public administration. Among the main characteristics of digitalisation in public administration is the use of digital tools, such as open data, electronic platforms and analytical systems, which facilitates citizens' access to information about the activities of public authorities, thus reducing corruption risks. Digitalisation stimulates the introduction of new technologies such as artificial intelligence, blockchain and big data for forecasting, analysis and management. It is emphasised that in the context of digitalisation, special attention should be paid to cyber protection of citizens' data and state information systems. Therefore, the process of digitalisation in Ukraine is inextricably linked to the harmonisation of digital standards with European ones, which facilitates the country's integration into the EU's digital single market. The authors paid special attention to the role of key elements of e-governance, such as the development of the functionality of the online system "Diia" and the portal "Diia.Business", since the introduction of the Unified Portal of Public Services "Diia" is a significant step in the development of the "digital society". The author identifies four main stages of formation of the system of public administrative e-services in Ukraine. The most popular types of public services that can be accessed through digital technologies today are: 1) SRCSA services (state registration of civil status acts); 2) registration of an individual entrepreneur; 3) accruals for e-pensions; 4) electronic driver's office; 5) e-HELSI (doctor's appointment, medical record, e-prescriptions and treatment plan); 6) state land cadastre, etc. In the process of digitalising public administration, an important aspect is to simplify and accelerate procedures and mechanisms for making and implementing government decisions. This helps to reduce bureaucratic barriers and make processes more transparent and efficient. Digital technologies enable public services to respond more quickly to the needs of citizens and improve the quality of services provided. An important aspect of digital transformation is also increasing the accessibility of public services for different segments of the population, including those with limited physical or information mobility. Thus, the author has formed and confirmed the hypothesis that digitalisation is a strategic direction of public administration reform, and it really allows for qualitative changes in management processes, adaptation to modern challenges and increased public trust in state institutions, despite the most difficult challenges that Ukraine has been facing over the past three years.

**Keywords:** digitalisation of public administration, e-governance, Digital Agenda of Ukraine 2020, electronic government services, Diia, Diia.Business, ASC, eMaliatko, e-PFU, e-democracy, digitalisation.

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<sup>1</sup> Taras Shevchenko National University of Kyiv, Ukraine  
E-mail: [vv.savitska@gmail.com](mailto:vv.savitska@gmail.com)  
ORCID: <https://orcid.org/0000-0002-1403-125X>



## 1. Introduction

Digitalisation in public administration is the process of introducing digital technologies to optimise management functions, increase transparency, efficiency and accountability of public authorities. It involves not only the use of modern tools, such as e-governance and automated systems, but also the transformation of management approaches, which ensures a more flexible and effective response to public needs. Among the main characteristics of digitalisation in public administration is the use of digital tools, such as open data, electronic platforms and analytical systems, which facilitates citizens' access to information about the activities of public authorities, thus reducing corruption risks. Digitalisation makes public services more convenient, reduces the time it takes to complete them and increases public satisfaction. Automation and digitalisation of government functions reduce resource consumption, cut bureaucracy, and speed up decision-making. The process of digitalisation in Ukraine is inextricably linked to the harmonisation of digital standards with European ones, which facilitates the country's integration into the EU's digital single market.

That is why digitalisation is a strategic direction of public administration reform, which allows for qualitative changes in management processes, adaptation to modern challenges and increased public trust in government institutions. E-governance contributes to the openness of public authorities through access to public information via online platforms, registers and databases. It allows citizens and businesses to control the activities of government agencies. E-governance is an important component of harmonising Ukraine's governance processes with European standards, which contributes to the country's integration into the EU's digital single market.

The purpose of this article is to provide a comprehensive analysis of the economic and legal aspects of digitalisation of Ukraine's public administration system in the context of European integration processes. Digitalisation is not only a tool for modernising public administration, but also an important condition for increasing the transparency and efficiency of public authorities in the context of implementing European standards.

## 1. Methodology of Research

### 1.1. Analysis of Research and Publications

Modern trends and prospects for the development of the digital economy are the subject of scientific research by a large number of foreign and domestic scholars. Among foreign scholars, it is worth noting the works of. For example, Negroponte N. and White H. (2023), are the authors of the term "digitalisation"

and the founders of the theory of its development. Anthony Larsson, Robin Teigland (2019), examine the impact of the digital transformation process on the labour market and the provision of different employment opportunities for different groups of people; Tim Jordan (2020), examines in detail the functioning of the digital economy, its individual elements and informants (search algorithms, digital service providers, free economic activity and digital administrative services). Antonio Lopez Pelaez, Sang-Mok Suh, Sergei Zelenev (2022), investigate the impact of digitalisation and information and communication technologies on the availability of a wide range of social services for citizens, taking into account the level of their inclusiveness. Hudson White (2023), interprets the digital economy as an economy based on digital technologies and identifies its three components: e-business, e-business infrastructure and e-commerce, and the main areas of e-governance: healthcare, education, banking, public services and entertainment (Brechko, 2024).

The issues of digital transformation of public administration in various aspects are covered by the works of such Ukrainian scholars as: Mel'nykov M., Petrov K., Kobzev I. (2023), Pihariev Yu., Kosteniuk N. (2021), Razumei H. (2020), Tokar M. (2020), and others.

The team of authors led by Hrynenko O., Dmytrenko S. (2024), investigate the impact of digital transformations on economic relations, production efficiency and competitiveness of the national economy, as well as the reverse impact of socio-economic changes on digital development. Such scientists as Chorny S.V. (2021), Parkhomenko-Kutsevil O.I. (2024), study the introduction of digitalisation in e-governance processes and quality assurance of public services.

An extensive range of research has been done by Ukrainian scholars on the development and confrontation of public governance and administration processes in the last three years of military aggression: Matveieva O., Mamatova T., Borodin Y., Gustafsson M., Wihlborg E., Kvitka S. (2024), Pyrohova Y., Suray I., Prokopenko L., Prudius L. (2023), Belikova M.I. (2022), Makarenkov O. (2024).

Despite the number and diversity of studies that are constantly being conducted and updated, it should be noted that the processes of public administration are also actively transforming, and the identification of the main trends, problems and opportunities for overcoming them require constant research and refinement. Therefore, this article explores the issues related to the specifics of the impact of public administration digitalisation on the development of Ukraine's digital transformation, which remain largely unexplored and require further study.

## 2. Research Results

### 2.1. Harmonisation of EU Standards in the Practice of Public Administration in Ukraine

Analysing the experience of digitalisation of public administration in the European Union, an important area is the development of e-governance. The final document of the Tallinn Summit on Digitalisation, held on August 29, 2017, contains statistics showing that 79% of EU citizens aged 16 to 74 regularly use the Internet, and since 2016, almost all enterprises have had access to this network (Atamonova, Lunyachenko, 2024). These data show significant progress in the use of digital technologies in the European Union, which is becoming the basis for further development of e-governance and improvement of public administration in this region.

Analysing the study of Polyovy P.V. (2021), it is advisable to define the system of elements of e-government development as a system of interconnected mechanisms for the security of the information space, electronic interaction, provision of electronic services, e-democracy and e-government.

In the context of these areas of research, the modern doctrine identifies several main features of the digital transformation of public administration. These include the following: the transition of content from analogue, physical and static to digital format, leading to its mobility and personalisation. Each person is able to manage their own content, send information requests, and form an individual path of information activity.

Transition to simple communication technologies, where technology becomes only a communication tool, and its main characteristic is the ability to control; Heterogeneity of communication, where vertical and hierarchical communication becomes irrelevant, and there is a transition to a network structure of communication (Chorny, 2021).

As is well known, the UK has been among the leaders in the introduction of digital tools and solutions in the work of government agencies and has set an example for many other EU countries in this area. The use of information technology in public administration has improved access to public services, reduced bureaucratic barriers, and promoted greater citizen engagement in government decision-making. The creation of e-government in Europe dates back to 2000, when the Lisbon Strategy was developed to improve the competitiveness and development of the European Union. One of the important components of this strategy was the development of the digital sector and the use of information technology in public administration, which influenced the further development of e-government in Europe (Cherednichenko, 2021).

Although, the term "digitalisation" itself emerged in 1995 and is considered to be coined by Negroponce N. (1995). In this context, digitalisation is the integration of digital and information and communication technologies into certain areas of social relations.

In Ukraine, significant progress in the development of the digital transformation of public administration has been observed since 2016, when the Digital Agenda of Ukraine 2020 programme was developed, which was adapted to the standards of the European Union's Digital Agenda and included plans for the transition to digital transformation of public administration and the Ukrainian economy (Razumei, 2020).

The conceptual framework of the Digital Agenda of Ukraine 2020 includes 16 chapters, with one of the key areas being Digitalisation of Public Administration. In accordance with this conceptual framework, the main strategic technologies for the public sector of Ukraine are the following: 'digital workplace, multi-channel information and engagement of citizens, open data, electronic identification of citizens, large-scale analytics, smart machines and devices, Internet of Things, digital government platforms, software architectures (software configurable architectures) and blockchain technology (Digital Agenda of Ukraine – 2020).

The introduction of the Diia Unified Portal of Public Services is a significant step in the development of the digital society. The Ministry of Digital Transformation is responsible for the implementation of this project. The Diia portal was created thanks to the co-operation of the Ministry of Digital Transformation with the support of the USAID/UK aid project 'Transparency and Accountability in Public Administration and Services/TAPAS', the EGAP Programme funded by the Swiss Agency for Development and Co-operation and implemented by the Eastern Europe Foundation and Innovabridge, the USAID project 'VzaiemoDiia!' (The Support to Anti-Corruption Champion Institutions/SACCI) and the EGOV4UKRAINE project (Diia. Public Services Online).

The Concept for the Development of the Digital Economy and Society of Ukraine for 2018-2020, which was approved by the Cabinet of Ministers of Ukraine on January 17, 2018, No. 67-p, states that when digital technologies are introduced as part of a systematic state approach, these technologies will significantly contribute to the development of an open information society. This is considered to be one of the key factors in the development of democracy in Ukraine, increasing productivity, economic growth and improving the quality of life of Ukrainian citizens (The Resolution of the Cabinet of Ministers of Ukraine "On Approval of the Concept for the Development of E-Governance in Ukraine", 2017).

Among other things, the above Concept actually formed the guiding ideas for digitalisation, which include the following.

According to European experience, effective e-government depends on the establishment of a National Interoperability Framework. This is a regulatory document of an organisational and technical nature that defines and describes clear organisational and technical requirements for projects and systems used by public authorities in the field of e-government.

The development of an appropriate set of standards and their harmonisation with European standards and existing regulatory and technical documents is an important prerequisite for the systematic development of e-government in Ukraine. Thus, regulatory requirements and technical standards should be the basis for digital change in the country.

## 2.2. Determination of the Structure and Efficiency of Digitalisation Implementation in the Processes of Public Administration

Digitalisation is one of the key trends in the modern development of society. It not only changes the way people and businesses interact, but also transforms the way public resources are managed. With limited financial resources, an important task for governments is to find effective mechanisms to optimise costs. Digital technologies offer new tools to achieve this goal.

The Digital Era Governance, which replaced the New Public Management, envisaged a more modern 'digital' governance with an emphasis on "customer-oriented" integrity and digitalisation. At the same time (Kuybida, Karpenko, 2018), together with co-authors, draw attention to the controversial use of English-language concepts related to digital transformations in the domestic scientific field, in particular, the words "digitalisation", "digitisation" and "digital transformation".

As a result of the analysis, scientists understand the term "digitalisation" as the process of introducing digital technologies to improve the life of a person, society and the state. Hence, digital governance will be perceived as a digital implementation of public power (digital form of public governance), which will become a stage of evolutionary implementation of information and communication technologies in the activities of public authorities ("informatisation of public administration" → "e-government" → "digitalisation of public governance") (Razumei H., 2020).

At the same time, the digitalisation of public administration is the process of implementing digital transformations in the public sphere (in the context of a radical transformation of the activities of public authorities), which has led to a leapfrog

transition to digital governance through the use of digital technologies (digital workplace tools, artificial digital intelligence for making standard management decisions, blockchain, smart, portal, cloud, network services, and so forth). That is, in a narrower sense, the digitalisation of public administration is a leapfrog process of digital transformation of public administration into digital governance (digital management) (Pihariev, Kosteniuk, 2021).

Thus, one can define the digitalisation of public administration as a process of radical change in the mechanisms of public administration in general and the activities of public authorities in particular, based on the introduction of digital technologies in all aspects of activity and leading to the progressive development of digital transformations in the country.

European practice shows that the effectiveness of e-government is ensured by the National Interoperability Framework, a regulatory and legal document of an organisational and technical nature that establishes and describes clear organisational and technical requirements for e-government projects and systems of public authorities.

The development of an appropriate set of new and harmonisation of existing regulatory and technical documents with European standards is the main prerequisite for the systemic development of e-government in Ukraine (Atamonova, Lunyachenko, 2024). Thus, it is legislative and technical norms that should underpin digitalisation as the next stage of digital change in the country.

In general, the functional activities of e-government can be divided into four components (Razumei, 2020):

- G2G (government to government) is the sector of electronic interaction between authorities;
- G2B (government to business) is a sector of electronic interaction between public authorities and business entities;
- G2C (government to citizens) is a sector of electronic interaction between public authorities and citizens;
- G2E (government to employees) is a sector that automates the processes of co-operation between the government system and employees, officials, and consultants in the field.

It is impossible to achieve high rates of transformation in any area without the introduction of digital technologies, so e-government should be the key to reforms in Ukraine. E-government is not limited to the relationship between the state and its citizens. It also has an internal manifestation: within the system of government, different levels and different branches should also interact using electronic technologies in the process of providing public services.

Ukraine started implementing elements of e-governance back in 2003 through the E-Government information system and a number of regulations that have not been fully implemented. However, one can

state that no significant steps have been taken, as in 2010, after the adoption of the Concept for the Development of E-Governance in Ukraine, even though separate specialised bodies existed – the National E-Governance Support Centre and later the State Agency for E-Governance of Ukraine (Razumei, 2020).

Back in 2016, the Digital Agenda of Ukraine 2020 programme was developed, which was adapted from the European Union's Digital Agenda and envisaged the transition to digitalisation of public administration and the country's economy. The vision of the programme is the following statement: "Digital technologies are the basis of Ukraine's well-being; the sphere that defines the essence of transformations in the country – for better life, work, creativity, education, and recreation." (Digital Agenda of Ukraine – 2020)

The Concept for the Development of the Digital Economy and Society of Ukraine for 2018-2020 and the approved action plan for its implementation (Digitalization, 2023) envisaged measures to introduce appropriate incentives for the digitalisation of the economy, public and social spheres, respond to existing challenges to the development of digital infrastructures, and the acquisition of digital competencies by citizens, as well as to identify critical areas and projects of digitalisation, stimulate the domestic market for the production, use and consumption of digital technologies.

The areas of digital development were identified as follows: bridging the digital divide through the development of digital infrastructures; development of digital competencies; implementation of the concept of digital jobs; digitalisation of the real economy (development of Industry 4.0); implementation of digital transformation projects; public safety; education; healthcare; tourism; e-democracy; ecology and environmental protection; urban life (building a smart city); cashless payments; harmonisation with European and global scientific initiatives; and public administration.

With the support of international partners such as the USAID/UK aid project, the EGAP Programme, and the Innovabridge Foundation, the eMaliatko service, BankID and MobileID electronic identification, the e-health platform, and the single emergency number 112 were also launched.

To further intensify the development of digitalisation in public administration, the Ministry of Digital Transformation of Ukraine (Mintsyfra) was established in 2019 to ensure the formation and implementation of state policy in the following areas:

- Digitalisation, digital development, digital economy, digital innovations, e-governance and e-democracy, development of the information society, informatisation;

- development of digital skills and digital rights of citizens;

- open data, development of national electronic information resources and interoperability, development of broadband Internet access and telecommunications infrastructure, e-commerce and business;

- provision of electronic and administrative services;

- electronic trust services and electronic identification;

- development of the IT industry (The Regulations on the Ministry of Digital Transformation of Ukraine, 2019).

The full-scale invasion and military aggression that has been ongoing since 24.02.2022 has slowed down and slightly transformed the government's goals, but the general strategic directions remain stable, including the following:

- 1) 100% of public services are available to citizens and businesses online;

- 2) 95% of the transport infrastructure, settlements and their social facilities have access to high-speed internet;

- 3) almost 6 million Ukrainians are involved in digital skills development programmes;

- 4) 10% – the share of IT in the country's GDP (Parkhomenko-Kutsevil, 2024).

The implementation of these areas in the shortest possible time can really lead to a digital revolution in Ukraine, which will give impetus to the development of the digital economy and increase the welfare of society, despite the terrible military aggression, physical destruction of economic and social infrastructure and a difficult period of transformation of state public administration processes.

The main goal of the Ministry of Digital Transformation is to implement the Digital State project, which should eventually unite all agencies into a single convenient and efficient online system called Diia (Derzhava i ya which means "State and me") (Diia. Public Services <https://diia.gov.ua/>). The Diia portal is now available not only as a website, but also as a mobile application, which makes it much easier to use. Its content is being added to at a rapid pace: in less than a year, 30 electronic services for both citizens and businesses have been digitised, combining several services into one to avoid unnecessary movements, and confirming a person's identification in certain situations through an electronic student card, ID card and biometric passport, driver's licence, educational documents, and marital status. E-passports in Diia are digital analogues of paper documents, which is approved by law.

Work is also underway to fill out the Diia.Business portal, which will create a single catalogue of links to free business opportunities for training, international grants and government support programmes, useful document templates, etc.

In addition, in order to save taxpayers' money and avoid outsourcing IT services, the Ministry of Digital Transformation has established the state-owned enterprise DIIA Company, whose main task is to develop and digitise services for the portal and mobile application. This decision, according to the Ministry of Digital Transformation, will save at least 2 billion UAH for tenders, reducing the risk of corruption and theft of these funds (The Ministry of Digital Transformation, <https://thedigital.gov.ua>).

Therefore, to improve the mechanisms of public governance and administration in the field of digital transformation, it is necessary to develop national programmes at the state level that would be aimed at supporting and developing the infrastructure of Ukrainian society as a whole. To this end, the state needs to support the promotion and development of digital technologies, in particular, the system of cultivating digital skills at the primary, secondary and higher education levels. It is important to consider the possibility of education for older people, who will be able to acquire additional knowledge that would meet their needs and interests, and use new opportunities of digital technologies.

### 2.3. Formation of the System of Administrative Public Services in Ukraine

The paper identifies the following trends in the provision of public administrative e-services in Ukraine:

1) 2006-2008 – the beginning of the formation of the system of administrative services (provision of services in paper form), digitisation of documents and the creation of citizen databases;

2) 2009-2013 – streamlining of the administrative services sector and widespread use of computer technologies of that time to respond to citizens' requests, and continued creation of citizen databases;

3) 2014-2017 – creation of a network of administrative service centres, adoption of the concept of e-government development (2017): modernisation of public services; introduction of electronic services, including administrative services;

4) since 2018 – development of the ASC network, modernisation and digitalisation of public services (Suray, 2024).

It is also important to note the importance of the Law of Ukraine "On Amendments to Certain Legislative Acts of Ukraine on Optimisation of the Network and Functioning of Administrative Service Centres and Improvement of Access to Administrative Services Provided in Electronic Form" of 03.11.2020 No. 2679-IX for improving the provision of administrative services to citizens, improving their quality and accessibility, which amended the legislation of Ukraine, in particular, with regard to monitoring the quality of administrative services, taking into account the requirements of personal data protection legislation. An important event was the adoption of the Law on February 17, 2022 (The Law of Ukraine "On Electronic Identification and Electronic Trust Services", 2017).

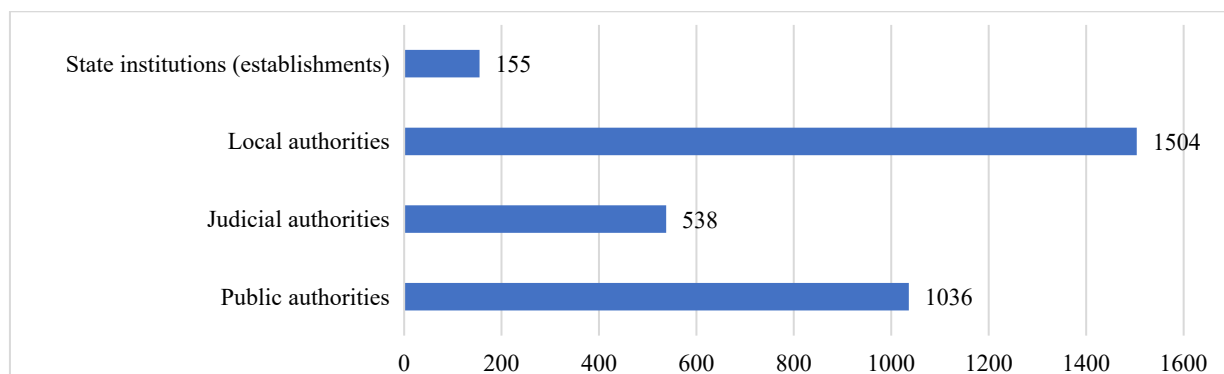
by the Verkhovna Rada of Ukraine and entering into force on 15 December 2023. The Law of Ukraine "On Administrative Procedure", which should ensure a proper balance between the interests of citizens, society and the state's obligations (The Law of Ukraine "On Amendments to Certain Legislative Acts of Ukraine on Ensuring Conditions for Restoration and Development of Electronic Communication Networks", 2022). The digitalisation of public services in Ukraine is accompanied by the development of digital democracy tools, including e-petitions, e-appeals, e-consultations, participatory budgeting, etc. It should be noted that local self-government bodies are the most active in using e-democracy tools, with 97% of them having access to a high-quality Internet network (Table 1).

Table 1

#### Application of digital e-democracy tools in Ukraine (2023)

Digitalisation direction	Total number	Distribution by branches of government			
		Public authorities	Judicial authorities	Local authorities	State institutions (establishments)
Number of institutions that had access to the Internet, units	14850	3970	642	8074	2164
Share of institutions that had access to the Internet in the total number of institutions that participated in the survey, %	94,6	91,7	87,9	97,4	92,1
Number of institutions that provided the opportunity to use e-democracy tools such as E-appeal, E-petition, E-consultation, Participatory Budget (public budget) and other e-democracy tools, units	3233	1036	538	1504	155
Among them: E-appeals	2564	904	514	1026	120
E-petition	467	-	-	451	-
E-consultation	262	101	-	151	10
Participatory Budget (public budget)	341	27	-	314	-

(compiled on the basis of information from the Ministry of Digital Transformation, <https://thedigital.gov.ua>, Digitalisation (2023) Razumkov Centre: <https://razumkov.org.ua/statti/tsyfrovizatsiia-perevagy-ta-shliakhy-podolannia-vyklykiv>).



**Figure. Distribution of e-democracy services by branches of government**

Source: (The Ministry of Digital Transformation, <https://thedigital.gov.ua>)

The impact of digital technologies on public services is most clearly manifested in the introduction and popularisation of digital online services, which allow for the provision of public services in an online format. The most popular types of public services that can be accessed through digital technologies today are: 1) SRCSA (state registration of civil status acts); 2) registration of a sole proprietorship; 3) accruals for e-pensions; 4) electronic driver's office; 5) HELSI (doctor's appointment, medical records, e-prescriptions and treatment plan); 6) state land cadastre, etc.

The state of public administration in Ukraine in the context of globalisation, democratisation, digitalisation, constant transformational changes, and martial law continues to change constantly, both due to internal and external changes. In particular, Ukraine has made significant progress in the provision of administrative services and e-governance. Thus, a network of administrative service centres (hereinafter referred to as ASCs) has been established.

By the beginning of 2022, the ASC network in Ukraine had grown to about 3,000 locations, including: 1,027 ASCs, 1,712 remote workplaces, 124 territorial units and 28 mobile ASCs. Compared to 2020, the network has grown by 1,500 points, and it continues to grow today. Public services are being digitised (The Ministry of Digital Transformation, <https://thedigital.gov.ua>).

The Unified State Web Portal of Electronic Services, otherwise known as Portal Diia, has been developed and is currently in operation. This portal enables citizens to access electronic services and information regarding themselves from state electronic information resources.

To date (within the EU4DigitalUA project), 54 services have been developed for the Diia portal and application. The Ukrainian electronic signature was recognised in the European legal area, the Diia. Engine portal was created and more than 10 registers were modernised. The Trembita system was created

and scaled up, with 5 billion transactions already completed (Suray, 2024).

The most popular online service in the field of state registration of civil status acts (SRCSA) is the comprehensive online service eMaliatko for parents of newborns. With one application submitted online, it is possible to register the birth of a child and receive up to 10 state services from various authorities required at the birth of a child. The service became available in 2020 and is provided free of charge. The application can be submitted on the Diia portal using the eMaliatko service within 30 days of the child's birth. The application process takes 10 minutes (The Law of Ukraine "On Peculiarities of Provision of Public (Electronic Public) Services", 2021).

The eMaliatko service, which combines services related to the birth of a child, has already been used by more than 100,000 Ukrainian families. As of April 15, 2021, just over 100,000 applications were submitted, and as of June 2, 2023, about 153,000 applications have already been submitted (The Ministry of Digital Transformation, <https://thedigital.gov.ua>).

Over 78% of parents register births through eMaliatko, and the level of satisfaction with the service is over 90%. Just a year ago, parents had to visit several government agencies and submit a lot of different documents to get all the services they needed for their baby. On average, this process took about 10 days (The Law of Ukraine "On Amendments to Certain Legislative Acts of Ukraine on Optimisation of the Network and Functioning of Administrative Service Centres and Improvement of Access to Administrative Services Provided in Electronic Form", 2020).

Along with the comprehensive eMaliatko service, the automatic registration of individual entrepreneurs is very popular among citizens. Since the introduction of this online service (data for the period from May 1, 2021 to September 13, 2023), Ukrainians have used this service more than 400,000 times and

started their own business through it. A total of 524,004 sole proprietorships were opened during this period. That is, 4 out of 5 individual entrepreneurs were registered online in an automatic mode through the Diia portal. This is not surprising, as automatic services are not only convenient for people but also help save time (Suray, 2024). The highest number of individual entrepreneurs is registered in Kyiv, Dnipro, Kharkiv, and Odesa oblasts.

Furthermore, the Diia portal facilitates the automated initiation and cessation of a sole proprietorship. This functionality is instrumental in scenarios where business expansion necessitates the establishment of an LLC. Since the initiation of this service, Ukrainians have utilised this online portal 200,000 times.

The Pension Fund of Ukraine (PFU) e-services web portal provides the following services: 1) applying for a pension; 2) applying for a housing subsidy or benefit; 3) obtaining data from the register of insured persons; 4) obtaining insured data from the Unified Register of Insurers; 5) obtaining an archive of user applications to the Pension Fund; 6) submitting an application for pension recalculation; 7) submitting a request for paper documents; 8) obtaining data from the Electronic Register of Sick Leave Certificates; 9) filling out a questionnaire to amend the Register of Insured Persons; 10) submitting an application for insurance payment; 11) obtaining information about employment; 12) familiarisation with the electronic pension file; 13) acquaintance with the insured's reporting information; 14) making an appointment; 15) making changes to the electronic pension file; 16) requesting electronic documents; 17) appeals (questions, suggestions, complaints, petitions); 18) pension calculator [10]. As of the end of 2023, two more services were under development: 1) notification of the need to legalise labour relations; 2) voluntary payment of insurance contributions for compulsory state pension insurance (accession agreement) (The official website of the Ministry of Digital Transformation: <https://thedigital.gov.ua>; Pyrohova, Suray, 2023). To receive these services, one needs to go to the Pension Fund's electronic services web portal using "Diia. Signature" or a qualified electronic signature (QES), or the means of the Integrated Electronic Identification System "ID.GOV.UA", including the use of Bank.ID technology.

Since the launch of the Pension Fund's electronic services web portal in 2018, the number of QR-coded certificates received by users as of 20.12.2023 amounted to 16.25 million certificates, including 9.84 million since 24.02.2022 (Electronic services web portal, 2024). For comparison, as of 14.11.2022, users received 9.95 million certificates through their personal account on the Pension Fund's electronic services web portal, including 3.58 million since 24.02.2022 (Electronic services web portal, 2024).

The analysis of the above data reveals an increase in the number of certificates received, which successfully illustrates their popularity among users due to the obvious convenience and speed of the online service "Driver's Electronic Cabinet" developed and implemented through the co-operation of the Main Service Centre of the Ministry of Internal Affairs and the State Agency for E-Governance and with the support of the USAID/UK aid project "Transparency and Accountability in Public Administration and Services"/TAPAS and the Eastern Europe Foundation (Brechko, 2024).

The online service 'Driver's Electronic Cabinet' is available on the website (Lopez Pelaez, Suh, Zelenev, 2022) and on the Government portal in the section "Electronic Services". Access to the e-driver's account will be provided by means of a digital signature and BankID (Driver's electronic cabinet. URL: <https://e-driver.mvs.gov.ua>).

It should be noted that the expanding use of digital technologies in all spheres of public life leads not only to the digitalisation of public administration, but also to the transformation of public administration.

## Conclusions

The digitalisation of public administration is the use of digital technologies and online communication capabilities in the process of making and implementing public administration decisions, providing administrative services, and forming effective mechanisms for implementing public policy in all spheres of public life.

The introduction of digital technologies serves as a mechanism for economic growth through increased efficiency and productivity. An important aspect is to promote the development of the information society, media, creative environment and market. In addition, Ukraine's digital transformation should be focused on international, European and regional co-operation with a view to Ukraine's integration into the EU and access to the European and global e-commerce, banking and stock exchange markets, as well as co-operation in regional markets.

The strategic goal of modernising public services in Ukraine is to make them online. In Ukraine, digitalisation has covered a fairly large list of public services. Among them, the most popular are: SRCSA (state registration of civil status acts); registration of a sole proprietorship; accruals for e-pensions; electronic driver's office; HELSI (doctor's appointment, medical record, e-prescriptions and treatment plan); and state land cadastre. The Diia portal is the tool for accessing the vast majority of electronic services. The vast majority of the analysed e-services are integrated into Diia, but there are still a number of e-services that operate autonomously.



Further development of e-services should focus on: systematically expanding the list of services provided online; integrating online e-services into the Diia single portal; systematically upgrading the Diia mobile application to reflect innovations; improving cybersecurity; expanding Internet connectivity; and increasing the level of digital literacy of citizens.

This, firstly, simplifies the procedure for obtaining important administrative services and permits for citizens, secondly, reduces the financial costs of maintaining the administrative service system offline, and thirdly, minimises corruption, as there is no direct contact between the administrative service provider and the citizen.

Digital technologies in public administration in Ukraine are at the heart of the reform of this sector and serve as an example for the whole country, demonstrating how to take advantage of the digital world. The synergistic potential of social, mobile, cloud, data analytics and IoT technologies together have the potential to bring about transformational changes in public administration and to make it more efficient, responsive and valuable. Modern digital technologies are affecting social, cultural, commercial and administrative structures, as well as the way people interact, communicate and collaborate, and how they perceive and use information. This opens up new opportunities for access to information, knowledge sharing and interaction between citizens and organisations.

The uniqueness of the Ukrainian project lies in the rapid pace of implementation and the high adaptation of citizens to digital services, even with limited funding. E-governance, both in Ukraine and in the EU, demonstrates significant benefits in optimising public

administration and service accessibility. Integrating best practices will ensure an even higher level of efficiency and convenience for citizens and businesses.

One of the key barriers to the effective development of e-governance in Ukraine is the uneven level of access to digital technologies, especially in rural and remote areas. Insufficient development of Internet networks, especially high-speed broadband, limits the ability of citizens to use electronic services. The high cost of connecting to the Internet and purchasing modern devices is an obstacle for low-income families. Another challenge is the insufficient level of knowledge and skills in using digital technologies among a large part of the population.

The effective development of e-governance in Ukraine depends not only on the introduction of modern technologies, but also on solving infrastructure problems and increasing the level of digital literacy of the population. Ensuring equal access to digital services for all citizens is the basis for building a transparent and efficient public administration system. Co-operation between the state, business and educational institutions can be the key to overcoming existing challenges and creating conditions for sustainable e-governance development.

The digitalisation of the public administration system in Ukraine is an important and necessary step towards the modernisation of the state apparatus. The introduction of modern digital technologies will improve the accessibility and efficiency of public services, reduce corruption risks and increase the transparency of government. The implementation of the proposed practical recommendations will contribute to the creation of a more effective and inclusive governance system that meets the demands of the times and the needs of citizens.

## References:

- Atamonova, N. V., & Lunyachenko, I. I. (2024). On the issue of digitalization of public administration in Ukraine. *Scientific Bulletin of the International Humanitarian University. Ser.: Jurisprudence*, Vol. 68. Available at: <https://www.vestnik-pravo.mgu.od.ua/archive/juspradenc68/3.pdf>
- Belikova, M. I. (2022). The impact of martial law on the development of e-government in Ukraine. *Scientific perspectives. Series: Law*, Vol. 8(26), p. 243–251.
- Byrkovych, T. I., Byrkovych, V. I., & Kabanets', O. S. (2019). Mechanisms of public management in the field of digital transformations. *Derzhavne upravlinnia: udoskonalennia ta rozvytok*, Vol. 9. DOI: <https://doi.org/10.32702/2307-2156-2019.9.2>
- Brechko, O. (2024). Impact of digital transformations on public services. *Bulletin of Khmelnytskyi National University*, Vol. 1.
- Chorny, S. V. (2021). Concepts and prospects for the development of digitalization in the sphere of public administration. *Kyiv Law Journal*, Vol. 4, p. 224–229.
- Cherednichenko, N. S. (2021). Digitalization of public administration. Available at: <https://conf.ztu.edu.ua/wp-content/uploads/2021/01/354.pdf>
- Digital Agenda of Ukraine – 2020. Available at: <https://ucci.org.ua/uploads/files/58e78ee3c3922.pdf>
- Diia. Public services online. Available at: <https://diia.gov.ua/>
- Digitalization (2023). Benefits and Ways to Overcome Challenges. Razumkov Center. Available at: <https://razumkov.org.ua/statti/tsyfrovizatsiia-perevagy-ta-shliakhy-podolannia-vyklykiv>
- Driver's electronic office. Available at: <https://e-driver.mvs.gov.ua>

Electronic services web portal (2024). Number of certificates with QR codes received by users of the electronic services web portal of the Pension Fund of Ukraine as of 14.11.2022. Available at: <https://www.pfu.gov.ua/2154689-killkist-otrymanyh-korystuvachamy-vebportalu-elektronnyh-poslug-pensijnogo-fondu-ukrayiny-dovidok-iz-qr-kodom-stanom-na-14-11-2022>

Goncharuk, N., Pyrohova, Y., Suray, I., Prokopenko, L. & Prudius, L. (2023). Reformation Public Administration in Ukraine in the Context of European Integration: Current State, Problems and Priorities. *Economic Affairs*, 68, 03, 1613–1627, September 2023. DOI: <http://dx.doi.org/10.46852/0424-2513.3.2023.27>

Hrynenko, O., & Dmytrenko, S (2024). Current trends and problems of digitalization of public administration in Ukraine. *Current Problems of Innovative Economics and Law*, Vol. 3. Available at: <http://apie.org.ua/uk/suchasn%D1%96-tendenc%D1%96%D1%97-ta-problemi-didjit/>

Jordan, T. (2020). *The Digital Economy*. Publisher: Polity; 1st edition. 204 p.

Kuybida, V. S., Karpenko, O. V. & Namestnik, V. V. (2018). Digital Governance in Ukraine: Basic Definitions of the Conceptual and Categorical Apparatus. *Bulletin of the National Academy of Public Administration under the President of Ukraine. Series: Public Administration*, Vol. 1, p. 5–10. Available at: [http://nbuv.gov.ua/UJRN/vnaddy\\_2018\\_1\\_3](http://nbuv.gov.ua/UJRN/vnaddy_2018_1_3)

Larsson, A., & Teigland, R. (2019). *The Digital Transformation of Labor: Automation, the Gig Economy and Welfare* (Routledge Studies in Labour Economics). Publisher: Routledge; 1st edition. 372 p.

The Law of Ukraine "On Peculiarities of Provision of Public (Electronic Public) Services" of July 15, 2021 No. 1689-IX. Bulletin of the Verkhovna Rada (BVR). Available at: <https://zakon.rada.gov.ua/laws/show/1689-20#Text>

The Law of Ukraine "On Cloud Services" of February 17, 2022 No. 2075-IX. Bulletin of the Verkhovna Rada (BVR). Available at: <https://zakon.rada.gov.ua/laws/show/2075-20#Text>

The Law of Ukraine "On Electronic Identification and Electronic Trust Services" 2155-VIII. Bulletin of the Verkhovna Rada (BVR), 2017, No. 45, p. 400.

The Law of Ukraine "On Amendments to Certain Laws of Ukraine on Ensuring the Functioning of Information and Communication Systems, Electronic Communication Systems, Public Electronic Registers" of March 15, 2022 No. 2130-IX. Bulletin of the Verkhovna Rada (BVR). Available at: <https://zakon.rada.gov.ua/laws/show/2130-20#Text>

The Law of Ukraine "On Amendments to Certain Laws of Ukraine on Improving Governance in the Field of Electronic Communications" of August 16, 2022 No. 2529-IX. Bulletin of the Verkhovna Rada (BVR). Available at: <https://zakon.rada.gov.ua/laws/show/2529-20#Text>

The Law of Ukraine "On Amendments to Certain Legislative Acts of Ukraine on Ensuring Conditions for Restoration and Development of Electronic Communication Networks" of August 16, 2022 No. 2530-IX. Bulletin of the Verkhovna Rada (BVR). Available at: <https://zakon.rada.gov.ua/laws/show/2530-20#Text>

The Law of Ukraine "On the National Informatisation Programme" of December 1, 2022 No. 2807-IX. Bulletin of the Verkhovna Rada (BVR). Available at: <https://zakon.rada.gov.ua/laws/show/74/98-%D0%B2%D1%80#Text>

Lingur, L., Martyniuk, O., Ivchenko, I., & Ivchenko, O. (2022). Creating digital space of socially sustainable development for food enterprises. *Eastern-European Journal of Enterprise Technologies / Transfer of technologies: industry, energy, nanotechnology*, Vol. 4 (13 (118)), p. 22–33. DOI: <https://doi.org/10.15587/1729-4061.2022.263540>

Lopez Pelaez, A., Suh, S.-M., & Zelenev, S. (2022). *Digital Transformation and Social Well-Being: Promoting an Inclusive Society*. Publisher: Routledge; 1st edition.

Mel'nykov, M., Petrov, K., Kobzev, I. (2023). Digitalization of public administration. *Intellectual capital is the foundation of innovative development*. Part 4, p. 51–60. DOI: <https://doi.org/10.30890/2709-2313.2023-18-04-003>

Mamatova, T., & Sydorenko, N. (2020). The system of providing administrative services in Ukraine: features of regulatory and legal regulation. *Aspects of public administration*, Vol. 8(6), p. 164–177. DOI: <https://doi.org/10.15421/1520115>

Makarenkov, O. (2024). Digitisation of Legal Algorithms to Prevent Public Procurement Corruption. *Baltic Journal of Economic Studies*, 10(5), 254–265. DOI: <https://doi.org/10.30525/2256-0742/2024-10-5-254-265>

Matveieva, O., Mamatova, T., Borodin, Y., Gustafsson, M., Wihlborg, E., & Kvitka, S. (2024). Digital Government in Conditions of War: Governance Challenges and Revitalized Collaboration between Local Authorities and Civil Society in Provision of Public Services in Ukraine Proceedings of the 57th Hawaii International Conference on System Sciences, 2024. P. 2002–2011.

Mykhajlovs'ka, O. V. (2020). Theoretical aspects of communication interaction in the science of public administration. *Teoriia ta praktyka derzhavnoho upravlinnia*, Vol. 4, p. 32–37. DOI: <https://doi.org/10.34213/tp.20.04.043>

Negroponte, N. (1995). *Being Digital*. New York: Knopf, 256 p. Available at: <https://web.stanford.edu/class/sts175/NewFiles/Negroponte.%20Being%20Digital.pdf>

The Official website of the Ministry of Digital Transformation of Ukraine. URL: <https://thedigital.gov.ua>

The Law of Ukraine "On Administrative Services" of September 6, 2012 No. 5203-VI. Bulletin of the Verkhovna Rada (BVR). Available at: <https://zakon.rada.gov.ua/laws/show/5203-17#n3>

The Resolution of the Cabinet of Ministers of Ukraine "On Approval of the Concept for the Development of E-Governance in Ukraine" of September 20, 2017 No. 649-p. Available at: <https://zakon.rada.gov.ua/laws/show/649-2017-%D1%80#Text>

The Regulations on the Ministry of Digital Transformation of Ukraine (2019). Regulations on the Ministry of Digital Transformation of Ukraine. Approved by the Resolution of the Cabinet of Ministers of Ukraine of September 18, 2019. No. 856. Available at: <https://zakon.rada.gov.ua/laws/show/856-2019-%D0%BF>

The Law of Ukraine "On Amendments to Certain Legislative Acts of Ukraine on Optimisation of the Network and Functioning of Administrative Service Centres and Improvement of Access to Administrative Services Provided in Electronic Form" of November 3, 2020 No. 2679. Bulletin of the Verkhovna Rada (BVR). Available at: <https://zakon.rada.gov.ua/laws/show/943-20#Text>

Parkhomenko-Kutsevil, O. I. (2024). Introduction of digitalization into the process of ensuring the quality of public services. *Scientific innovations and advanced technologies. Series "Management and Administration"*, Vol. 2(30), p. 235–245.

Piharev, Yu., & Kosteniuk, N. (2021). Digitalization of public administration as a factor in the digital transformation of Ukraine. *Aktual'ni problemy derzhavnoho upravlinnia*, Vol. 2, p. 92–96. DOI: <https://doi.org/10.35432/1993-8330appa2832021237257>

Pigarev, Y., & Kosteniuk, N. (2021). Digitalization of public administration as a factor of digital transformation of Ukraine. *Current problems of public administration*, Vol. 2(83), p. 92–96.

Polyovy, P. V. (2021). Modernization of public administration in the context of the development of a digital society. Mechanisms of public administration. *Bulletin of the Academy of the Customs Service of Ukraine. Series: State Administration*, Vol. 2 (29), p. 37–43.

Razumei, H. Yu., & Razumei, M. M. (2020). Digitalization of public administration as a component of digital transformation of Ukraine. *Public Administration and Customs Administration*, Vol. 2 (25), p. 139–145. DOI: <https://doi.org/10.32836/2310-9653-2020-2.25>

Suray, I. (2024). Trends in the Provision of Public Administrative Services in Ukraine. Public administration: concepts, paradigm, development, improvement. Iss. 8.

Tokar, M. (2020). Digitalization as optimization of interaction between public authorities and public organizations. *Aspekty publichnoho upravlinnia*, Vol. 8. Special issue № 1, pp. 130–132. DOI: <https://doi.org/10.15421/152060>

White, H. (2023). *The Digital Economy*. Publisher: Willford Press. 254 p.

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