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Digitalization of the administrative services in various fields of activity

Впровадження цифровізації надання адміністративних послуг у різних сферах діяльності

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Abstract

The aim of the article was to analyze the state of the digital transformation of administrative services in various fields of activity. The main methodological tools were statistical, graphical, comparative analysis, and observation methods. The research found that national governments are taking a large number of initiatives related to digital public services. The DESI Index has shown itself to good advantage in the EU. It ranks Member States according to their digital performance and analyses their progress in providing e-government services. The AuroraAI programed developed in Finland will contribute to the improvement of electronic administrative services, smooth daily life, business, safe and ethical approach. The Finnish web portal My Kanta provides a wide range of applications that can be of benefit to citizens, healthcare professionals and organizations, government bodies. In Ukraine, the smooth functioning of the Diia web portal promotes the spread of digital skills, the inclusion of citizens in relation to receiving digital administrative services during the period of hostilities. Global geopolitical transformations have focused the efforts of states

Анотація

Метою статті було проаналізувати стан впровадження цифрової трансформації надання адміністративних послуг у різних сферах діяльності. Провідним методологічним інструментарієм виступили метоли статистичного, графічного, компаративного спостереження. Проведене аналізу, дослідження показало, що національні уряди висувають велику кількість ініціатив щодо надання цифрових державних послуг. Добре зарекомендував себе в ЄС Індекс DESI. Він ранжує держави-члени відповідно до їх рівня цифровізації та аналізує їх щодо досягнення прогресу наданні електронних адміністративних послугах. Розроблена у Фінляндії програма AuroraAI сприятиме покрашенню електронних надання адміністративних послуг, безперебійному повсякденному життю, бізнесу, безпечному та етичному підходу. Фінський вебпортал Му Kanta включає широкий спектр додатків, які можуть принести користь громадянам, спеціалістам у галузі охорони здоров'я та організаціям, державним органам. В Україні в безперебійне період воєнних дій

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on strengthening intersectoral cooperation of public authorities in the digitalization of administrative services. The availability of such services for the elderly remains unresolved. The adaptation of the positive practices of the government of Finland in Ukraine will become a vector for further research and thorough studies during the post-war reconstruction of the state. Particular attention will be paid to the issue of availability of the services under research.

Keywords: digitization, innovative technologies, artificial intelligence, electronic government, administrative service.

Introduction

Digitization refers to the socio-technical process of using digitized products or systems for the development of new organizational procedures, business models or commercial propositions. Technological advances enable greater use of digital methods, such as electronic scanning of documents and digital record keeping by storing images in the cloud. Digitization is accompanied by a reduced need to use copiers and printers. In addition to cost savings, digitization can also reduce the number of human errors associated with numerous administrative and manual procedures and tasks. The use of digital technologies not only increases the productivity of services, but also extends their coverage.

COVID-19 and military conflicts have become a sort of catalysts. They contributed to the greater use of digital technologies in the work organization and in an office, along with the presentation of unforeseen opportunities, challenges and costs.

In recent decades, the digital transformation has changed the relationship between governments and users. Examples of innovations include information and communication technologies (ICT), artificial intelligence (AI), blockchain, big data, 3D printing, QR codes, and the Internet of Things (IoT). Big data enabled delivery of faster, smarter and more personalized government services, and blockchain has become a catalyst for modernizing records and complying with regulatory requirements. Artificial intelligence programmers help to automate and optimize government functions. Advances in the Internet функціонування вебпорталу «Дія» сприяє поширенню цифрових навичок, інклюзії громадян відносно отримання цифрових адміністративних послуг. Глобальні геополітичні трансформації сфокусували зусилля держав на зміцненні міжсекторальної співпраці державних органів за напрямком цифровізації адміністративних Доступність таких послуг для осіб похилого віку залишається невирішеною. Адаптація позитивних практик уряду Фінляндії на території України стане вектором подальшого наукового пошуку та ґрунтовних досліджень під час післявоєнного відновлення держави. Окрему увагу буде приділено питанню доступності досліджуваних послуг.

Ключові слова: цифровізація, інноваційні технології, штучний інтелект, електронний уряд, адміністративна послуга.

of Things and related sensor technologies inevitably shape infrastructure in cities and local communities.

The emergence and rapid spread of egovernment have given a new impetus to digital innovation in the public sector. The concept of egovernment for improving the quality of life is becoming increasingly important, while public eservices are becoming an increasingly significant topic on the public agenda. Electronic government refers to the process of introduction, distribution and use of information and communication technologies administration (Attour & Chaupain-Guillot. 2020). The goal to be achieved is innovative forms of information and public services.

The main target of digitization of public services is the provision of the population with highquality administrative services electronically. Electronic administrative service is an administrative service provided to the subject of the appeal electronically through the use of information and communication technologies (Krakovska & Babyk, 2022). Digital public services refer to the provision of public services using digital technologies, where the interaction with the public sector organization is mediated by the IT system (Lynn et al., 2022). The provision of public services is the main focus of e-government. The concept of digital public services is broader, as it covers all interactions between citizens and public authorities.

Interoperability is a key factor that enables making the goals of digital public services a reality in the process of digitizing the public sector. Modern countries strive to achieve the ability of administrations to cooperate and ensure the functioning of public services across borders, sectors and organizational boundaries.

In view of the foregoing, the aim of the article is the analysis of the implementation of digitization of administrative services in various fields of activity. The aim involved the following research objectives:

- determine the main current components and trends of legislative regulation of the provision of electronic administrative services in EU countries and Ukraine;
- 2) analyse the current state and prospects for the digitization of administrative services in the fields of electronic health care and permitting documents, which are necessary in the construction process in EU countries for the possible implementation of relevant positive experience in the process of digitization of administrative services in Ukraine.

Literature Review

The work of Lynn et al., (2022) was the main tool and the basis of the research. The research was focused on defining and revealing the role of digital public services. The author also comes to the conclusion that e-government services initiatives lack commonality. The study conducted by Lindgren et al., 2019, had an influence on the author's position on the issue under research (Lindgren et al., 2019). The authors conducted a comprehensive analysis of electronic government. The impact of digitization of public services on the interaction between citizens and the government was considered.

The findings of Attour and Chaupain-Guillot (2020) on digital innovations in the public sector were taken into account during the study. The importance of spreading e-government through technological innovation and administrative policy innovation is emphasized. The study of S. Hong et al., (2022) investigated the determinants of digital innovation in the public sector. It is concluded that there are demand-driven innovations in the public sector. The findings of Mamatova and Sydorenko (2020) on the definition of the main stages of the development of regulatory and legal support of the

administrative services system in Ukraine are worth noting. It is emphasized that the further vector of development will be directed mainly towards the end user of services.

In their studies, Krakovska and Babyk (2022), Kovtun et al., (2022) considered issues related to the current state and prospects for the development of digitization of administrative services in Ukraine as one of the main components of a service state. A conclusion was made about the need to improve access to electronic services for certain categories of citizens: the elderly and persons with disabilities. The study of Jarke (2021) was used when shaping the author's position. It was emphasized that many digital public services often do not take advantage of the contexts and practices of their target audiences. The importance of citizen involvement and increasing the role of citizen participation in socio-technical innovations was noted.

The article by Sulonen and Vastamäki (2021) on the potential of improving state land use processes by increasing the efficiency of the process of issuing construction permits is worth noting. In the works of Eriksson-Backa et al., (2021) analysed the main areas of application, opportunities, barriers and results of the Finnish web portal My Kanta. The social, technical and informational problems of the website of administrative services were identified. It was found that agreed and timely information from medical service providers should be available in electronic healthcare services.

An active study of the issues selected in the article confirms that the digitization of administrative services in various fields of activity requires special attention. The imperfect level of research into the delivery of electronic administrative services during military conflicts should be remarked. The researchers didn't deal with the issues of increased efficiency of digitization of administrative services in the context of the post-war recovery of states. Therefore, it is urgent to conduct research according to the relevant research criteria.

Methodology

Scientific and methodological tools were widely used in the course of the research, the results of which were tested and reflected in the article. Figure 1 illustrates research stages.



The first stage of the research

- 1) Determining the main vectors of the study in the context of latest novations in the sphere of public services' digitization.
- 2) Justification of the appropriateness of searching for the latest approaches to identifying factors of effective transformation of digital tools in the field of administrative services.

The second stage of the research

- 1) Comparison of the legal regulation of digitization of administrative services in the European Union and Ukraine.
- 2) Establishing a causal relationship between the low effectiveness of national reforms and the level of legal nihilism. Justification of promising changes at the stage of post-war recovery in Ukraine in the studied area.

Main experiment

- operation of the vectors of cross-sectoral cooperation of public authorities in the field of administrative services in the European Union and Ukraine.
- 2) Finding promising solutions to overcome the digital divide between different social groups when receiving administrative services. Ensuring the availability of services under research.

Analytical stage

Drawing substantiated and theoretical and practical conclusions and making proposals for implementation in legal regulation and law enforcement practice of Ukraine during the postwar recovery period.

Figure 1. Stages of the research (defined by the authors)

The scientific principles of the general economic theory, the theory of regional economic progress and works on the subject by authentic scholars the theoretical background methodological framework of the research. Special attention was paid to intersectoral cooperation of public authorities during the provision of administrative services in the following areas: construction, registration of civil status, maintenance of state-wide registers, health care, and others. The positive practice of the European Union, the leaders of effective electronic government - Finland, Malta and the Netherlands, Ukraine's achievements in the digital development of administrative services are taken into account. A total of thirty-five sources were reviewed in the article.

Complex of methods was used in order to fulfill the research objectives outlined.

Combination of comparison and observation became the main methodological tools in the course of the research. These methods were used to establish the gradual introduction of the digital component into public services, to substantiate the factors of the rapid growth of digital administration.

The comparative law method occupies a special place, which was used in the process of comparative analysis of the current national legal norms of Ukraine. Special attention was paid to the public electronic services in the context of comparison with the legislation systems and scientific developments of other states. This method was used to identify a positive legislative practice, which is appropriate for approval in Ukraine at the stage of its post-war recovery.

Combination of graphic analysis with statistical method created the permanent basis for the complex representation of the matter under investigation. Such methods as analysis and synthesis in complex with deduction and induction produced the great impact on the authors' conclusions in the sphere of public electronic services' implementation. Statistical analysis of the public electronic services' development was used in accordance with



economic and statistical methods' approbation. Systemic economic analysis was used to characterize single processes of national and regional development in digitalization realities and reformation transformations of the studied public services. All specified methods created the most scientific conditions for research and formation of the authors' conclusions.

Results

Accelerated digital transformation of governments remains a top priority for the European Union. Europe strive for providing all key public services online by 2030. As part of its

strategy, the European Commission is taking particular actions to develop cross-border digital public services. These include, in particular, the creation of European interoperable platforms (European Commission, 2022c). One of the main goals is to create a network of digital public administrations which are expected to share data and find a common language for common digital solutions. Innovation is also encouraged by funding large-scale pilot projects. Europe has laid the foundations for more human-centred digital initiatives that respect European values in the Declaration on Digital Rights and Principles (European Commission, 2022d) – Figure 2.

Promoting the concept of sustainable development

Freedom of choice and a fair digital environment, promoting participation in the digital public space

Increasing safety, security and empowerment in the digital environment

Securing the rights that European citizens can exercise on the Internet

These include inclusion through connectivity, digital education, training and skills, fair working conditions and access to digital public services.

Figure 2. The main concepts of the Declaration on Digital Rights and Principles (European Commission, 2022d)

According to the 2022 Digital Economy and Society Index (DESI), Finland, Malta and the Netherlands are the leaders in effective e-government (European Commission, 2022b).

According to the 2022 e-Government Benchmarks, Malta is the country with the highest e-Government rating of 96% (European Commission, 2022a). It is followed by Finland, Estonia, Luxembourg, Iceland, the Netherlands, and Denmark. The main goals of electronic government in the field of administrative services in the EU countries were identified based on the conclusions. One of them is prioritizing user-cantered design. The goal is also to rationalize the provision of e-government services. This goal is to enable users to access all services through single service centres. An important goal is also to optimize the interaction between different levels and departments of government to ensure a more consistent and less cumbersome work.

Finnish government has agreed that public services will be mostly digital in the future. As much as 92% of Finnish internet users use e-

government services. The government quickly adapts to new conditions, creates ecosystems around the life cycles of people and businesses. The national artificial intelligence programme -AuroraAI — is based on the strategic goal of building a dynamic and prosperous Finland (Ministry of Finance of Finland, 2022). The goal of AuroraAI is to offer citizens personalized services at the right time in various life situations and events. The AuroraAI network is designed to create technical conditions to ensure information exchange and interaction between different services and platforms. This will improve access to services as well as increase profitability, especially in the provision of public services. For example, the AuroraAI user will be automatically informed about services provided by various parties in certain cases, such as a job change. This service can support the user during the transition to a new job without the unemployment period. The AuroraAI network will be available to citizens and organizations by the end of 2022.

Suomi.fi - the government web portal - provides identification, notifications, authorization, payments, maps, a directory of public services





available in Finland. The portal also includes a service of test materials, quality tools, a data sharing layer, open data and an interaction platform. The most popular services provided through Suomi.fi are identification (200 million transactions in 2021), authorization (more than 30 million electronic credentials created by users since 2017) and messaging (almost a million users). Information and services for citizens include such areas as registration of documents that are necessary for creating families, when a child is born, etc. It also provides services related to social protection, health, medical care, teaching and education. Services in the field of rights and responsibilities, personal finance, travel. employment, relocation. housing. construction are also provided.

For example, in the field of electronic healthcare, the system of personal medical cards is already available to all citizens in Finland. People can view their medical records and prescriptions on the national My Kanta portal. You can enter the corresponding page using bank codes, mobile certificates or an ID card with a chip that allows using online services. Laboratory and X-ray examinations, as well as data on a dependent child under the age of 10 can be viewed. The data of a child aged 10 to 17 are available. It will be possible after the health care service makes the necessary changes to the patient data systems. There is also a service for entering data about personal well-being and the ability to share it with the authorities. My Kanta enables requesting a repeat prescription and save medical will and organ donation will. A consent or refusal to share personal data can be recorded on the service portal.

The services for providing construction permits are also an example of the careful development of public electronic services. In 2021, the number of construction permits increased by 16% in the EU compared to 2020 (+52 million m² or +269,000 buildings in absolute terms) (Eurostat, 2022). Digitalization of construction permits issuance involves technologies for checking the compliance of project proposals with regulatory documents, followed by digitization of regulatory documents. For example, a valid construction permit is required in Finland to start construction, which must be obtained from the

state construction supervision authority. A valid deviation decision is required if there is a need to deviate from, the local detailed plan or building regulations for a good reason. Often an application is submitted for a construction permit for an area not covered by a local detailed plan. This requires a valid planning decision before a building application is submitted. Housing company shareholders must inform the housing company of their renovation or redeveloping plans. The housing company must assess the impact of the work and the need for supervision. The e-services website offers a total of 42 construction and repair services (Suomi.fi, 2022).

European integration processes in Ukraine intensified further implementation of the institute of administrative services. The administrative services provided to the population were developed through the creation of the corresponding Administrative Service Centres (ASCs). Special attention was paid to the creation of provisions for electronic maintenance (Decree No. 558/2019, 2019). The peculiarities of the provision of public (electronic) services began to be taken into account (Law of Ukraine No. 1689-IX, 2021). The stipulations for accomplishing the availability of administrative services were legislatively enshrined (Decree No. 831-2021, 2021). Special attention in the Strategy for Public Administration Reform in Ukraine for 2022-2025 was paid to increasing quality, availability of administrative services, and their decentralization (Decree No. 831-2021, 2021).

In 2019, the Ministry of Digital Transformation of Ukraine focused on one of the main vectors — the introduction of innovative changes in digital public administration at all levels. The mobile application Diia was created for this purpose (Resolution of the Cabinet of Ministers of Ukraine No. 1137, 2019). By February 2022, eleven administrative services have already become available through Diia (Figure 3). For example, 11 services are available in the Unified State Electronic System for the Construction Sector (EDESSB) located on the Diia portal. These are, in particular, obtaining a construction permit, a declaration of operational availability of CC1 objects, and issuing a project data sheet.



- registration of residence
- repayment of debt awarded in executive proceedings
- electronic submission of declarations of individual entrepreneurs to the tax service
- replacement of driver's license
- vaccination against COVID-19
- electronic exchange of vehicle registration documents
- paying fines for traffic violations
- paying income tax by individual entrepreneurs
- notification of court cases

Figure 3. The main functions of Diia (Diia, 2022)

The share of ICT in the GDP of Ukraine was more than 4% and had the potential to grow at the end of 2021. During this period, the Ukrainian IT sector grew by 36% compared to 2020. More than 100 electronic public services (75+ through the portal and 20+ through the mobile application) were available on the single state web portal of electronic services (National Council for the Recovery of Ukraine from the Consequences of War, 2022a). Since the beginning of the Russia's military aggression in February 2022, the single state web portal of electronic services and the Diia mobile portal have continue to work. The disadvantages of the Diia portal are lack of access to electronic services for certain categories of citizens: the elderly and people with disabilities. Legal nihilism of citizens, businesses, and government officials also hinders the development of of administrative provision services electronically.

New challenges appeared during the provision of electronic administrative services in connection with the military operations. But administrative services are still being carried out in Ukraine despite the shortcomings. Citizens' use of administrative services in matters related to family, pensions, benefits and assistance is becoming especially relevant. Military operations caused a number of changes in the provision of administrative services. As of June

7, 2022, there were 4,816,923 refugees from Ukraine registered in Europe alone, and a total of 5.5 million people left the country (National Council for the Recovery of Ukraine from the Consequences of War, 2022b). In Ukraine, it was allowed to go abroad with an internal Ukrainian passport, children were given the opportunity to go abroad with one of their parents. The mandatory certified permission for the child's departure by the second parent was cancelled. The link of marriage registration, pension assignment and social assistance services to the place of residence was abolished. Considerable amendments were made for military personnel regarding permission to marry and make a will (Resolution of the Cabinet of Ministers of Ukraine No. 164, 2022) without leaving the site of hostilities. The import of humanitarian aid and cars has become more orderly. New services were launched during the period of hostilities. They relate to financial assistance — eSupport. The notification of property damage or destruction occupies a special place among the new services.

Important changes have taken place in the field of issuing permits and licenses. The types of economic activity that cannot be carried out on the basis of the submission of a declaration during martial law are regulated at the legislative level. So, for example, innovative changes were introduced in relation to construction (Table 1).



Table 1.Digital transformations in the field of construction declaration

Type of economic activity	A type of document that gives the right to conduct economic activity	
Performance of preparatory work specified by construction	notification of the start of preparatory	
regulations	work	
Performance of construction operations on construction sites,	notification of the start of construction	
which belong to objects with minor consequences (CC1)	operations	
according to the class of consequences (responsibility)		
Acceptance into operation of completed construction objects, which belong to objects with minor consequences (CC1)		
according to the class of consequences (responsibility)	construction object for operation	
Performance of preparatory works (if they have not been		
carried out earlier according to the notification of the start of		
preparatory work) and construction operations on		
construction sites, which belong to the objects with medium Construction permit		
(CC2) and significant (CC3) consequences according to the		
class of consequences (responsibility)		
Acceptance into operation of completed construction objects,		
which belong to objects with medium (CC2) and significant	Certificate of acceptance into	
(CC3) consequences according to the class of consequences	operation of the completed object	
(responsibility)	- · · · · ·	

Source: (Decree No. 314-2022-n, 2022)

The issuance of documents which give the right to carry out economic activities, including in the construction sector, was temporarily simplified. It should be noted that military operations are still causing destruction and damage to property in Ukraine. As of June 14, 2022, 12,900 apartment buildings (~13.5 million m²), 107,707 private houses (~1.9 million m²) were destroyed/damaged (National Council for the Recovery of Ukraine from the Consequences of War, 2022b). The Post-War Recovery and Development Draft Plan for Ukraine was developed. It is planned to simplify the mechanism of allocating land plots and obtaining construction permits for the construction of

social and cooperative housing, housing for temporary residence of IDPs, and non-profit housing rental. The acceptance into operation of completed objects will also be automated. Besides, the Register of Damaged or Destroyed Property on the Diia portal is being developed, and launch of test operation is ongoing (National Council for the Recovery of Ukraine from the Consequences of War, 2022a).

The Post-War Recovery and Development Draft Plan for Ukraine provides for a significant improvement in the provision of electronic administrative services through the intensification of digitalization (Table 2).

Table 2. *Reform measures for the implementation of digitalization at the stage of post-war recovery of Ukraine*

Timing	Recovery stages	Necessary actions
2022	Economy and institutions of the wartime - "Everything for victory!"	Implementation of complex electronic public services, restoration of the network of administrative service centres
2023-2025	Recovery - "Recovery, restart of the economy and institutions"	Conversion of key public services to electronic form, expansion and modernization of the network of ASCs
2026-2032	Modernization - "Structural modernization and full integration into the EU"	Most of the public services are available electronically, and the number and quality of public services in ASCs increased

Source: (National Council for the Recovery of Ukraine from the Consequences of War, 2022a)



So, the provision of electronic administrative services will be restored and improved in stages until 2032. This should result in the availability of most public services electronically. It is also planned to achieve a significant increase in the number and quality of public services in ASCs. The planned launch of national mobile roaming on the entire territory of Ukraine from January 1, 2024, joining EU initiatives on the development of digital infrastructure will help in this direction.

Discussion

It can be stated that the modern vector of development of administrative services is mostly oriented towards the final consumer. Governments adapt to changes in the social, political and technological environment, and innovation is critical for governments to adapt to the changing environment (Hong et al., 2022). Researchers emphasize that localities with a high proportion of young voters tend to actively experiment with digital innovations. The vertical spread of accepted management standards and policies influence the level of development and the type of e-government services offered (Attour and Chaupain-Guillot, 2020). Citizens constantly demand greater transparency, efficiency and responsiveness from public organizations. In turn, politicians engage in innovation when there is a high level of electoral competition (Hong et al., 2022). According to researchers. individual characteristics leadership play an important role in involvement in digital innovations. Thus, the introduction of websites is mostly explained by competition, citizen pressure and a favourable economic context (Mamatova and Sydorenko, 2020).

The increasing adoption of digital technologies in the provision of administrative services is a key element in governments' response to such needs (Lynn et al., 2022). Automation can also entail new risks. New technology multi-user providers are emerging that are typically private institutions. They are responsible for the security and maintenance of several different service delivery platforms, which creates additional risks (Lindgren et al., 2019). The researchers state that the authorities can use the same technology to restrict, control and monitor citizens.

It was established that public sector services should be designed in such a way that enables citizens to manage their lives the most efficiently. They should be based on an understanding of experiences and services to integrate them into the user's world (Menezes et al., 2022). Special attention should be paid to e-

mail, comment sections, chat rooms, search functions, broadcasts of government events and website personalization. The elderly should be involved in the identification, conceptualization and development of digital public services (Jarke, 2021). The researcher emphasizes that this innovation makes administrative services more relevant and significant.

It can be concluded that AuroraAI is designed for a human-centred society based on artificial intelligence, with predictive capabilities and the restoration of the public sector as the ultimate goal. If the Finnish AuroraAI programme can find a suitable practical solution, it will be a big step forward in making citizens' life easier (Leikas et al., 2022). The programme will create a generic AuroraAI chatbot component that organizations can customize and use in their own services.

It can be contended that the municipalities and government institutions in the EU consider the issuance of construction permits as one of the priorities. However, excessive detailing of the processes of obtaining construction permits affects the complexity of construction. In Finland, differences between municipalities, municipal organizations and even official practices are perceived as additional difficulties (Sulonen & Vastamäki, 2021). Researchers hold that digitization will contribute to the improvement of the efficiency of the issuance of construction permits in the long run.

It can be stated that the My Kanta portal is one of the most respected and popular public Internet services in Finland. The My Kanta portal can be improved by adding features that are necessary and useful for users. These include separate sections for specific information such as blood type or care instructions (Eriksson-Backa et al., 2021). It is necessary to simplify navigation and offer text scalability for the elderly. More interactivity can be added through the patients' ability to add their personal information or communicate with healthcare professionals through secure messaging. The researchers state the possibility to implement a reminder function that is sent from the system. A mobile app can be useful for attracting younger users (Eriksson-Backa et al., 2021). EHealth solutions can significantly improve system productivity, ease of access, and quality of service (Bendig et al., 2022). According to researchers, they should be developed with a view to the needs of a specific group of patients and subsequently tested in this group.



A conclusion can be made that overcoming legal nihilism can solve a number of problems occurring during the provision of electronic administrative services in Ukraine. It is also necessary to provide elderly citizens with smartphones financed under the government and presidential programmes (Kovtun et al., 2022). The researchers maintain that the implementation of the Diia. Barrier-free programme for people with disabilities is also important.

Conclusions

The relevance of the research is determined by the need to improve the existing research in the field of electronic administrative services. The intensifying interstate cooperation during the military conflicts justifies the need to reduce administrative barriers, increase the availability of services, extend the deadlines for submitting documents and procedures, etc. This situation necessitates immediate electronic modernization of the administrative service system.

In Europe, the role of functional interoperability in the development of digital public services is increasing in the context of modern challenges, the impact of the initiative is analysed at the level of the European Union. Decentralized digital services, reusable design for future infrastructure development form a strong cross-border foundation and interoperable trans-European digital communication for the administration sector. Strengthening crosssectoral cooperation of public authorities during the provision of electronic services to ensure a digital environment favourable to the elderly is still the main challenge.

Finland's national artificial intelligence programme - AuroraAI - remains exemplary for adaptation. Its implementation will allow the authorities to provide administrative services directly during people's life events through timely and active cooperation with other service providers. My Kanta, the Finnish electronic web portal, contributes to improving medical practice, simplifying the appointment of diagnostic procedures, sending warnings and reminders. In the EU countries, special attention is also paid to the issuance of construction permits. The municipalities and public institutions in the EU consider this service as one of the priorities in the field of public services.

Russia's aggression against Ukraine burst out on February 24, 2022 fundamentally changed the provision of administrative services in the country. Among other things, the deadlines for

submitting documents and procedures were extended, the process of providing administrative services was simplified. New duties on administrative bodies were imposed, new services were created. These included registration of damaged property, reimbursement of the cost of accommodation of temporarily displaced persons, etc.

The Ukrainian administrative service system showed a high level of stability during military operations. The positive points include the availability of Internet access, the functioning of electronic services, and the operation of the Diia mobile application at a high level.

The findings can be used by the government of Ukraine for the simplification and deregulation of administrative services after the war. Some of the solutions for the provision of electronic administrative services implemented during wartime may become permanent after reevaluation and adaptation to peacetime.

The experience of providing electronic administrative services by the leading countries in digital governance can become the basis for finalizing digital innovations in the field of administrative services during the post-war recovery of Ukraine. Particular attention will be paid to the availability of services under research. The adaptation of the positive practices of the Finnish government on the territory of Ukraine will become a vector for further research and thorough studies.

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