

DEVELOPMENT OF E-GOVERNMENT UNDER CONDITIONS OF DIGITALIZATION

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Summary

The article analyzes the scientific positions on the development of e-government in the context of digitalization. It is argued that e-government is an important factor in the activities of the modern state and increasingly absorbs into people's lives. Based on the analysis of theoretical approaches to understanding the concept of "e-government", it is determined that e-government is a form of public administration that promotes openness, efficiency and transparency of both public authorities and local governments through the use of information telecommunication technologies aimed at meeting the needs of citizens. Attention is paid to the essence of digitalization as a driving force of innovation management. It is concluded that e-government in digitalization provides an opportunity to change approaches to the nature of public authorities, make their activities more transparent and public, and proposed a number of measures to develop e-government in digitalization.

Keywords: e-government, digitalization, digital transformation, public administration, public authorities, local governments, electronic services.

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1. Introduction

E-government is one of the innovations of public administration, which expands the capacity of public administration bodies at the national, regional and local levels to disseminate their decisions promptly to the population by creating a socially responsible state, and citizens have access to quality administrative services.

E-government has been an important factor in the activities of the modern state for several decades, it is increasingly affecting people's lives. Thus, today it is difficult to imagine our lives without the ability to conduct various operations through the network. We make online payments, pay utility bills and receive administrative services without paperwork and queues. However, recent events related to the Covid-19 pandemic have set new demands on society and the state, namely to move most operations online. As a result, e-government has become not a desirable preference for the state but a vital necessity. International organizations and governments around the world are working together to overcome the global crisis and implement e-government at all levels of cooperation. Given the unfavorable epidemiological conditions around the world, the impact of e-government has increased as citizens of each country look forward to responding effectively and quickly to needs and daily challenges.

According to foreign experience, the introduction of digitalization in the activities of the authorities is currently quite effective. It will provide an opportunity for self-service and quick search for the necessary information on obtaining administrative services to citizens, reporting,

registration for an appointment with specialists etc. In fact, it is necessary for today's society, because the digitalization of the world is happening so fast that it becomes impossible to live without electronic services.

The aim of the study is to analyze the theoretical and legal foundations of e-government in the context of digitalization.

2. Main part

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It should be noted that the current legislation of Ukraine on the regulation of e-government has several dozen regulations. E-government is seen as a component of informatization and not as a separate area. There are also different levels of regulations that indirectly regulate this issue. However, it should be noted that the emergence of e-government was preceded by the informatization of government, and today we note the digitalization of public life and governance (*Karpenko, 2016: 157*).

Today, the concept of e-government is quite common and well-known. However, not everyone in Ukraine fully understands the essence of the concept of e-government. This concept is often identified with the network infrastructure of public authorities, forgetting that it is directly related to the activities of public authorities, their interaction and communication with citizens.

According to the Concept approved by the Cabinet of Ministers of Ukraine No. 649 of September 20, 2017, e-government is a form of public administration that promotes efficiency, transparency and openness of public authorities and local governments with the use of information and telecommunications technologies for the formation of a new type of state focused on meeting the needs of citizens (*order of the Cabinet of Ministers of Ukraine on approval of the Concept of e-government in Ukraine, 2017*).

The purpose of the Concept is to determine the mechanisms, directions and deadlines for the formation of an effective e-government system in Ukraine to meet the needs and interests of legal entities and individuals, improve public administration, stimulate socio-economic development, and increase competitiveness. The previous version of the concept was mostly declarative.

According to Roschuk, the concept envisages the introduction of e-government with the help of digital technologies in three key areas: modernization of public administration; modernization of management services and development of interaction between government, citizens and business; management of e-government development, which will create an opportunity to increase the effectiveness and quality of implementation of tasks in this area (*Roschuk, 2018: 21*).

E-government combines two components, i.e., external and internal information infrastructures that interact with legal entities and individuals. The first component integrates government information resources (portals and websites), provides access to them, and creates a system of electronic services.

Thus, e-government provides a way of organizing public power through segments of the global information network and local information network systems, which provides real-time work and makes the most convenient, simple and accessible daily communication with the relevant authorities, because through information communication technologies, any person can apply to public authorities, local governments for administrative services (electronic services) and any other information (submit a declaration, register a legal entity, obtain a certificate, permit, certificate, etc.). It allows applicants to spend as little time as possible on obtaining certain administrative services without queuing, on searching for other resources, and it will help save budget funds for administration.

E-government should not be confused with the mechanical replacement of state procedures by information technology, as it is important to preserve democratic values and political culture of governance (*Hrabovets, Tarasova, 2016: 115*).

According to Mieziatsev, today e-government is not just the application of modern information technology or network infrastructure of the executive branch. It is a holistic latest concept of governance, the basis for public governance and the functioning of the information society (*Mieziatsev, 2015: 66*).

According to Koval, e-government is a kind of adaptation of public administration to the new requirements of social development, which includes direct services provided by public authorities and local governments to their citizens, and interaction between them through the support and implementation of feedback. communication with the help of modern communication and information technologies (*Koval, 2008: 82*).

Some researchers note that e-government is a rather complex process that requires a significant and systematic solution to a number of technological, material, legal, and administrative issues (*Kulaha, Tkachenko, Klivak, 2020: 41*).

Ukrainian scholars Tkachuk and Stakhova note that it is advisable to create a legal, organizational, technical and information-analytical base, the development of ICT by civil servants for the development of e-government (*Tkachuk, Stakhova, 2020: 171*).

According to Diuzhnyk, e-government is one of the newest forms of public administration, which is reflected in the use of various telecommunications tools such as local information networks and the global information network (*Diuzhnyk, 2020: 133*).

Thus, e-government is a form of public administration that promotes openness, efficiency and transparency of both public authorities and local governments through the use of information and telecommunication technologies aimed at meeting the needs of citizens.

Solomko considers it expedient to take a number of such actions for the transition to e-government:

- the use of the Internet by the authorities and the provision of interactive services that will enable an individual or legal entity to fill in various forms, make appointments, ask questions, look for work, etc. by visiting the relevant official website, while providing feedback via electronic mail;
- providing the opportunity to receive administrative services via the Internet (electronic services), i.e., obtaining relevant licenses, certificates, permits, filing declarations, paying fines, applying for certain social issues, etc. However, the implementation of these actions requires improving the security of e-government infrastructure, which can be achieved through the use of electronic signatures, certificates, a comprehensive information security system, etc.;
- creation of special web portals by the authorities, which would make it possible to move from one service to another without the need to re-identify (*Solomko, 2018: 136*).

Such informatization will lead to a significant rethinking of the meaning, role and structure of government. Through simple interaction with the authorities and access to public information, decisions and official documents of administrative bodies, citizens will be able to be better informed and more involved in public affairs, ensuring broad public participation in decision-making.

Thus, the introduction of e-government provides access to public information through modern information technology, openness and transparency of public authorities, the ability to receive round-the-clock administrative services, improve the quality of administrative services, save time and material resources of both applicants and officials, increase the level of society democratization.

It is worth noting that in today's world it is no longer enough to simply involve Internet technologies in all processes related to government.

Mikhrovskaya notes that new times require new decisions. That is why international organizations are increasingly using such a new concept as digital government, which is related to such concepts as digital divide, digitalization, digitalization, etc., quickly and inevitably displaces the concept of e-government in international and national law of most developed countries (*Mikhrovska, 2020: 273*).

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In Ukraine, the concept of digital governance is currently not reflected in the legislation. The Concept of e-Government Development states that everyday life of citizens is becoming increasingly digital, while providing a high level of expectations from the authorities, including the development of modern electronic forms of interaction, openness and transparency and involving citizens in management decisions (*Concept, 2017*).

Thus, digitalization is taking up more and more of our lives every year. Business organizations are interested in finding new ways to optimize the main and auxiliary business processes, increase the effectiveness of managerial influences to ensure the growth of their competitiveness.

The term digitalization was first used in the United States as a process of transferring information to digital form, i.e., the conversion of paper books into electronic, photographs into images on the screen, etc. (*Vasylev, Komarova, 2018: 203*).

According to Lytvynov, digitalization is a phenomenon that causes successive transformations of the socio-cultural code united by a common vector of development. The researcher connects digitalization with social communication and analyzes the change of social institutions and the further change of human development (*Lytvynov, 2020: 170*).

According to Kuprina, digitalization is understood as providing digital information (*Kuprina, 2016: 259*). However, using this approach, we can equate digitalization and automation because the most significant difference between them is that automation can be partial or gradually change the existing structure of business services, public services and other areas of public activity. Digitalization is associated with a change in approach to business, the state and public life in general (*Prokhorov, 2019*).

Teteriatnyk proposes to interpret digitalization as a process of automation carried out manually and based on paper media, processes in the framework of economic activity are possible through the digitization of information (*Teteriatnyk, 2017: 184*).

Lytvyn and Krupnova note that digitalization should be defined as a process aimed at replacing paper media with electronic ones. The authors believe that digitalization in government is a process of creating electronic services for more effective management decisions and providing quality services to citizens (*Lytvyn, Krupnova, 2020: 73*).

In other words, digitalization is a way in which many areas of social life are beginning to be built around digital communications and information infrastructure, it is a way to digitize any kind of information.

Digitalization affects all spheres of business and public life; it is not a short-term phenomenon. It will continue to open up new sustainable streams of great opportunities in the long run. Therefore, now is the time for companies to secure their future by actively engaging in new challenges that offer the translation of information into digital forms.

Analyzing the experience of e-states, Savon notes that the effectiveness of governance also depends on digital government. The development of digital government in the country contributes to improving business and reducing unemployment. Digitalization also leads to a reduction in public spending on civil servants and a reduction in corruption in the state (*Savon, 2021: 107-108*).

It should be noted that low levels of corruption, transparency, equal and free access to public services and public control over tenders and the budget will contribute to improving the lives of citizens, a positive reputation in the world and even greater impact on foreign audiences.

So, today, digitalization is the driving force behind innovation management. It encourages companies to pay more attention to its implementation in business processes at all levels because achieving sustainable development is impossible without the use of digital technologies.

Digitalization is a necessary key factor that affects the openness, transparency and efficiency of both public authorities and local governments in the provision of electronic services.

Thus, the transition to the use of e-government technologies in the context of digitalization should take place in all areas of interaction between public administration, business and public sector, because the lag of any of these sectors will disrupt the dynamics of information development.

Of course, the transition to e-government means the transformation of all major forms of government, its success depends on the right tactics and strategy at each stage of implementation, rational organization, coordination and interaction of all participants in the process, namely legislative, executive, judicial branches, educational institutions, business, and public sector.

According to the Strategy for the Development of the Information Society in Ukraine, the improvement of regulatory and legal support is among the priority principles of e-government development (*Strategy, 2013*).

According to Serenok, the legislative provision of e-government is mostly declarative in nature, as the relevant regulations are strategic and directly related to the implementation of the Association Agreement with the EU. However, the implementation of e-government technologies at the appropriate level and their legal regulation is not fast, it requires both time and considerable effort to adapt existing national legislation. Unfortunately, the issues of introduction of electronic document management in the activities of central executive bodies remain unresolved or are at the initial stage of implementation.

The issue of a single government body responsible for the policy of e-government and coordination of actions in this area of various ministries and agencies, working groups that do not currently interact but compete with each other is also relevant (*Serenok, 2015: 10*). We hope that the Intersectoral Council on Digital Development, Digital Transformations and Digitization will become such a body.

3. Conclusions

Thus, e-government in the context of digitalization provides an opportunity to change approaches to the nature of public authorities, make their activities more transparent and public, e-government is also an effective means of preventing corruption, which will stimulate socio-economic development in Ukraine and improve investment climate.

The introduction of e-government involves the creation of qualitatively new forms of organization of both public authorities and local governments, their relationships with citizens and businesses by providing access to public information resources, providing opportunities to receive electronic administrative services, apply to public authorities and local governments using the Internet.

In Ukraine, the introduction of e-government is regulated by a large number of regulations which closely combine information and administrative law.

The current state of legal support for the implementation and development of e-government indicates the diversity of norms, the presence of duplicate norms and the lack of an effective practical mechanism for implementation.

Therefore, we propose to carry out a number of systematic measures for the effective development of e-government in the context of digitalization:

- to improve the regulatory framework by eliminating duplications and inconsistencies in their content; adopt a special legislative act on e-government in Ukraine to interpret such key concepts as e-government, digitalization, digital transformation, etc.;
- introduce state programs for the development of information technology and develop training programs on e-government;
- develop a list of public services that citizens can receive in electronic form;
- to introduce electronic document management in public authorities and local governments, to expand the use of electronic digital signatures;
- develop a standard list of information to be disclosed;
- unify the requirements for public authorities' websites;
- introduce mandatory quality standards for the provision of services in the Centers for Administrative Services;
- to guarantee information security when using electronic tools and protecting the personal data of relevant users.

References

1. Vasylev N.V., Komarova O.M. (2018) *Didzhitalizatsiya rossiyskogo biznesa, kak faktor rosta yego ekonomicheskoy effektivnosti* [Digitalization of Russian business as a factor in the growth of its economic efficiency] *Student. Aspirant. Issledovatel'. № 11 (41). S. 203–210. [in Russian].*
2. Hrabovets I.V., Tarasova O.V. (2016) *Elektronne uryaduvannya yak zasib rozvytku demokratiyi* [E-government as a means of developing democracy] *Sotsial'ni tekhnolohiyi: aktual'ni problemy teorii ta praktyky. № 69–70. S. 110–117. URL: <http://soctech-journal.kpu.zp.ua/archive/2016/69-70/16.pdf> [in Ukrainian]*
3. Diuzhnyk D.O. (2020) *Elektronne uryaduvannya v Ukrayini: stan vprovadzhennya ta perspektyvy rozvytku* [E-government in Ukraine: the state of implementation and prospects for development] *Zhurnal skhidnoyevropeys'koho prava. № 83. S. 131–139. URL: http://nbuv.gov.ua/UJRN/jousepr_2020_83_16 [in Ukrainian]*
4. Karpenko O.V. (2016) *Mekhanizmy formuvannya ta realizatsiyi servisno-oriyentovanoi derzhavnnoi polityky v Ukrayini* [Mechanisms of formation and implementation of service-oriented state policy in Ukraine] : *dys.... d-ra nauk z derzh. upr.: spets. 25.00.02 «Mekhanizmy*

- derzhavnoho upravlinnya». *Nats. akad. derzh. upr. pry Prezydentovi Ukrayiny*. K. 466 s. [in Ukrainian]
5. Koval R.A. (2008) *Derzhavne upravlinnya v informatsynomu suspil'stvi: perspektyvy elektronnoho uryaduvannya* [Public administration in the information society: prospects for e-government] *Ekonomika ta derzhava*. №4. S. 81–84. [in Ukrainian]
6. Kulaha I., Tkachenko O., Klivak V. (2020) *Komparatyvnyy analiz uprovadzheniya ta rozvytku elektronnoho uryaduvannya v Ukrayini ta Estonii* [Comparative analysis of the introduction and development of e-government in Ukraine and Estonia] *Stratehiya ekonomichnoho rozvytku Ukrayiny*. № 46. S. 36–52. [in Ukrainian]
7. Kuprina K.A. (2016) *Didzhitalizatsiya: ponyatiye, predposylki vozniknoveniya i sfery primeneniya* [Digitalization: concept, prerequisites for the emergence and scope] *Vestnik nauchnykh konferentsiy. Kachestvo informatsionnykh uslug: po materialam mezhdunarodnoy nauchno-prakticheskoy konferentsii 31 maya 2016 g. Tambov*. № 5-5 (9). S. 259–262. URL: <https://www.elibrary.ru/item.asp?id=26383210> [in Russian].
8. Lytvyn N.A., Krupnova L.V. (2020) *Didzhitalizatsiya yak zasib pidvyshchennya vidkrytosti, prozorosti ta efektyvnosti diyal'nosti orhaniv derzhavnoyi vlady ta orhaniv mistsevoho samovyaduvannya shchodo nadannya elektronnykh posluh* [Digitalization as a means of increasing the openness, transparency and efficiency of public authorities and local governments in the provision of electronic services] *Irpins'kyi yurydychnyy chasopys: naukovyy zhurnal*. Vyp. 3. S. 69–76. DOI 10.33244/2617-4154.3.2020.69-76 [in Ukrainian]
9. Lytvynov O.M. *Didzhitalizatsiya: na porozhi tsyfrovoho dakhau* [Digitization: on the threshold of a digital roof] *Derzhava i zlochynnist'. Novi vyklyky v epokhu postmodernu : zb. tez dop. nauk.-prakt. konf., prysvyach. pam'yati vitse-prezydenta Kryminolohichnoyi asotsiatsiyi Ukrayiny, profesora O. M. Lytvaka (m. Kharkiv, 23 kvit. 2020 r.)*. MVS Ukrayiny, Kharkiv. nats. un-t vnutr. sprav, Kryminol. asots. Ukrayiny. Kharkiv : KHNUVS, 2020. S. 170–172. URL: <http://dspace.univd.edu.ua/xmlui/handle/123456789/9635> [in Ukrainian]
10. Mieziantssev A. (2015) *Elektronne uryaduvannya, elektronna demokratiya – pidkhody do vyznachen'* [E-government, e-democracy - approaches to definitions]. *Teoriya ta praktyka derzhavnoho upravlinnya*. Vyp.1(48). S.64–69. [in Ukrainian]
11. Mikhrovska M.S. (2020) *Tsyfrove uryaduvannya yak novyy riven' vzayemodiyi derzhavy ta suspil'stva* [Digital governance as a new level of interaction between the state and society]. *Yurydychnyy naukovyy elektronnyy zhurnal*. 2020. № 7. S. 272–275. DOI <https://doi.org/10.32782/2524-0374/2020-7/70> [in Ukrainian]
12. *Rozporyadzhennya Kabinetu Ministriv Ukrayiny “Pro skhvalennya Kontseptsiyi rozvytku elektronnoho uryaduvannya v Ukrayini”* [On approval of the Concept of e-government development in Ukraine: order of the Cabinet of Ministers of Ukraine]: № 649-r vid 20.09. 2017 r. URL: <https://zakon.rada.gov.ua/laws/show/649-2017-p#Text>
13. Prokhorov M. *Shcho take didzhitalizatsiya* [What is digitalization]. *Ukrayins'ke radio – radio platforma Suspil'noho movnyka Ukrayiny Natsional'noyi suspil'noyi teleradiokompaniyi* 2019. URL: <http://www.nrcu.gov.ua/news.html?newsID=91042> [in Ukrainian]
14. Roshchuk M. (2018) *Rozvytok elektronnoho uryaduvannya v Ukrayini: pravovyy aspekt zabezpechennya bezpeky informatsiyi* [Development of e-government in Ukraine: the legal aspect of information security] *Bezpeka informatsiyi*. T. 24. № 1. S. 17–22. DOI: 10.18372/2225-5036.24.12309 [in Ukrainian]
15. Savon K.V. (2021) *Ponyattya «didzhitalizatsiya» v konteksti tsyfrovoho uryadu* [The concept of "digitalization" in the context of digital government] *Aktual'ni problemy polityky*. Vypusk 67. S. 107–111. DOI <https://doi.org/10.32837/app.v0i67.1159> [in Ukrainian]

16. Serenok A.O. (2015) *Normatyvno-pravove zabezpechennya vprovadzhennya elektronnoho uryaduvannya v Ukrayini: initsiatyvy Prezydenta Ukrayiny [Regulatory and legal support for the introduction of e-government in Ukraine: initiatives of the President of Ukraine]*. Derzhavne budivnytstvo. № 1. URL: http://nbuv.gov.ua/UJRN/DeBu_2015_1_7
17. Solomko Yu. (2018) *Elektronne uryaduvannya: ponyattya, sutnist', pryntsyipy ta napryamy rozvytku [E-government: the concept, essence, principles and directions of development]*. Efektyvnist' derzhavnogo upravlinnya. Vypusk 2(55). CH. 1. S. 135–143. URL: http://nbuv.gov.ua/UJRN/efdu_2018_2_16 [in Ukrainian]
18. *Stratehiya rozvytku informatsynoho suspil'stva v Ukrayini, Rozporyadzhennya Kabinetu Ministriv Ukrayiny [Strategy for the Development of the Information Society in Ukraine, Order of the Cabinet of Ministers of Ukraine]* vid 15.05. 2013 №386-2013-r. URL: <https://zakon.rada.gov.ua/laws/show/386-2013-r#Text>
19. Teteriatnyk B.S. (2017) *Tendentsiyi didzhitalizatsiyi ta virtualizatsiyi yak vektor suchasnoho rozvytku svitovoho hospodarstva [Trends of digitalization and virtualization as a vector of modern development of the world economy]*. Naukovyy visnyk Mizhnarodnoho humanitarnoho universytetu. Seriya : YurySprudentsiya. Vyp. 29(2). S. 21–23. URL: http://nbuv.gov.ua/UJRN/Nvmgu_jur_2017_29%282%29_7 [in Ukrainian]
20. Tkachuk L., Stakhova O. (2020) *Pidvyshchennya efektyvnosti publicznego upravlinnya zasobamy elektronnoho uryaduvannya. The system of public administration in the context of decentralization of power: Collective monograph*. Riga: Izdevnieciba Baltija Publishing. S.167–183. [in Ukrainian]