

E-governance of the economy of the future: world experience and prospects of Ukraine

The purpose of the article is to study the development of e-governance in the countries of the world and assess the prospects for use in Ukraine.

Research methods. Sociological, general scientific, theoretical and empirical methods are used in the study, in particular, the method of unity of analysis and synthesis, the method of observation, comparison. Theoretical and methodological basis: concepts, approaches, theories, regulations, conclusions considered in the scientific works of domestic and foreign scientists, communication theory, information technology, project management, electronic governance and electronic democracy; legal acts of state authorities (Constitution of Ukraine, laws of Ukraine, decrees of the President of Ukraine, resolutions and orders of the Cabinet of Ministers of Ukraine).

Research results. The normative legal acts on the use of e-government technologies in Ukraine are characterized. The main issues concerning modernization of public administration with the help of information and communication technologies are considered. The analysis of standards and regulations for e-governance technologies is carried out. The basic instruments of e-governance in the European Union (EU) and Ukraine are defined. The expediency of creation and use of e-government is substantiated.

The structure of public administration, methods of e-governance, components of its information and technological infrastructure, state policy on the development of e-government, its technical components and their purpose, problems and organization of measures for the implementation and development of e-government, foreign and national experience in the use of e-government, its regulatory and legal framework are considered. The methodological approaches and results of monitoring the implementation of e-governance tools as the basis for the provision of administrative services in electronic form (2020) are analyzed.

Scientific novelty. Stages of development and mechanisms of e-governance development management in Ukraine are analyzed. The analysis of Ukrainian and foreign practice of application of e-governance technologies is carried out. Global processes of e-governance of the economy are determined; the main regularities of formation and development of electronic governance in Ukraine and the world are investigated; - the essence and meaning of the basic methods and principles of e-government is revealed; - studied various models of implementation of e-governance at the national, regional and local levels; - problems and prospects of formation and development of e-governance, taking into account domestic practice; - the main stages and tasks of e-governance implementation in the context of the study of the best foreign practice are analyzed.

The period of crisis requires decisive, reasonable actions from the authorities, which is possible provided that the full amount of information on the state of affairs in the state is possessed. Such needs can be met by a system of national electronic information resources. Therefore, the organizational model of national information resources of Ukraine in e-government is considered. The importance of implementation of the proposed plan of actions of authorities on the organization of information resources in e-government is determined.

Practical significance. The use of recommendations on improving the organizational and information support of public administration in the spheres of information society development and the introduction of e-governance will allow in the future to expand useful for consumers electronic information resources, characterized by various forms of information, organizational and technological decisions, and are the basis for information and analytical support for management decision-making in the system current and strategic planning. Tabl.: 2. Figs.: 6. Refs.: 14.

Keywords: e-governance; economics; management; methodology; regulations; problems; tasks; technical components; experience; organization.

Lebid Oleksandr Vasylovych - assistant of the department of computer science and economic cybernetics, Vinnytsia National Agrarian University (3, Soniachna St., Vinnitsa, 21008)

E-mail: sshlebid@gmail.com

ORCID ID <https://orcid.org/0000-0003-4253-8696>

Scientific problem. Accelerated technological development in the context of the Fourth Industrial Revolution changed the nature of competition in world markets, increasing the value of technological capabilities as a source of competitive advantage and identifying technology as a key factor in production.

The changes that are taking place as a result of the revolution in information technology, and the multifaced political changes taking place in the world, signal the need for new approaches to politics. Technologies are being improved at a rather rapid pace, but the legislative framework at the level of both countries and individual cities is adapting to such changes slowly, which accordingly slows

down the processes of somatization. The need to reform infrastructure policy is exacerbated not only by the challenges associated with digitalization, but also with the growing urbanization. that forces the city authorities to abandon traditional management approaches ("from top to bottom") to move to flexible management based on multilevel network structures. This requires new forms of global cooperation and an understanding of the shared responsibility for the spread of digital technologies around the world, as well as effective interaction between the public, private, public and scientific sectors in order to coordinate actions and control.

Analysis of recent researches and publications. Studies of the aspect of e-governance and the main prerequisites for its implementation in Ukraine are covered in the works of such scientists, As: N. Hrytsyak, M. Demkova, V. Dreshpak, I. Koliushko, V. Malinovsky, I. Malukova, A. Semenchenko. In particular, the question of conceptual principles of e-governance and e-democracy is devoted to the textbook of A. Semenchenko and V. Dreshpak, scientific achievements of M. Demkov and I. Koliushko reveal the peculiarities of world experience in the implementation of e-governance and its specifics in Ukrainian realities, the mechanism of e-governance implementation at the local level was revealed in V. Dmytrenko's dissertation, in the scientific study of M. Ilnytskyi the peculiarities of administrative regulation of e-governance in the field of public administration in Ukraine were studied. Whereas, for example, R. Hasimov investigated e-governance as a mechanism for public administration and administration. As we observe, most scientific papers are aimed at researching the aspect of e-governance in the prism of a political tool and a means of achieving tasks in the field of public administration and administration. However, it can be said that in general, research on the role of e-governance in strengthening the competitiveness of the country's economy is not enough, which is the object of research.

The purpose of the article is to study the development of e-governance in the countries of the world and assess the prospects for use in Ukraine.

Statement of the main results of the study. The implementation of e-governance in Ukraine should be considered in the context

of administrative reform, where it is an integral part of it and is aimed primarily at providing state and administrative services online, creating a unified information telecommunication system for supporting personnel management in the civil service, introducing internal and inter-agency document management technologies without paperwork, integrating Ukraine into the world information space, ensuring openness and transparency of power, etc.

The authors of e-governance definitions apply different approaches, each of which reveals its features depending on the scope of application. At the same time the most used are [2, 10]: - technocratic, in which e-governance is considered as one of the basic technologies of the information society together with technologies such as e-commerce, e-commerce, culture, healthcare, science, environmental protection, etc., or as one of the stages of implementation of information and communication technologies (ICT) in public administration (computerization - informatization - e-governance), as an appropriate organizational and technical system; - theoretical, in which e-governance is considered as an appropriate ideology, concept, theory or as one of the modern forms of public administration competing or based on approaches such as new state management, political networks, synergistic and new institutional approaches [4].

For the first time, the term "e-government" was used in 1997 on the initiative of the U.S. National Science Foundation to determine the process of administrative reform based on the ideology of new government management and the widespread implementation of ICT in public administration, primarily in executive authorities. In the future, to determine the reforms in public administration, which covered all public authorities and local self-government bodies, this term was modernized into an "electronic state". Democratization of public administration, including the introduction of e-democracy in e-government, led to the emergence of a new term - "e-governance" [5, 6].

E-governance is a form of public administration that promotes efficiency, openness and transparency of the activities of state authorities and local self-government bodies using information and telecommunication technologies to form a new type of state aimed at meeting the needs of citizens [7].

Taking into account international experience, the development of e-governance is one of the main factors in ensuring the success of reform and increasing the competitiveness of the country. The reform of any industry in modern conditions is aimed at the widespread use of modern information and communication technologies to achieve the necessary level of efficiency and effectiveness [9].

The purpose of e-governance is to develop e-democracy in order to achieve European standards of quality of e-public services, openness and transparency of government for citizens, society and business. Achieving this goal involves the implementation of a system of interrelated goals within the framework of the relevant state policy. On the basis of the above, the main goals and strategic tasks of e-governance were formed (Figure 1).

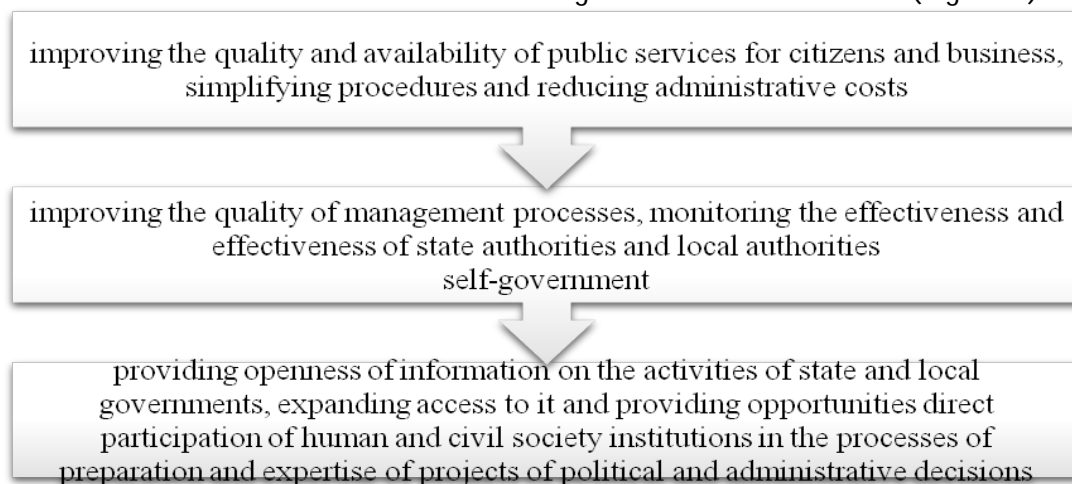


Figure 1. The main goals of e-governance

Source: Formed by the author.

Unfortunately, these goals in the existing official documents in Ukraine are presented mainly in qualitative form without the use of clear quantitative indicators of their achievement, which greatly complicates public administration (regulation) in this area.

According to the theory and practice of strategic planning and management, these goals are specified and detailed in the system of strategic tasks (Figure 2).



Figure 2. Strategic tasks of e-governance

Source: Formed by the author.

The Cabinet of Ministers of Ukraine approved the Concept for the development of e-governance in Ukraine, which will determine the main goals, priority directions and

development measures by 2020. The Government adopted the relevant order at a meeting on September 20, 2017.

It is important to note that over the past two years, Ukraine has risen by 25 positions in the world ranking of e-governance, by 45 positions and by 30 positions in the open data rankings. Further rapid development is possible only if revolutionary approaches and the most promising technologies are applied, which, in fact, is envisaged by the draft Concept. For example, the use of blockchain technology, which can really optimize many

processes qualitatively. In September 2017, the state System of electronic trading of seized property SETAM has already been transferred to the blockchain technology. By the end of the year, it is planned to transfer the Register of Property Rights and the State Land Cadaster of Ukraine to the blockchain. According to the document, the State Agency for E-Governance is instructed to implement measures in key areas (Figure 3).

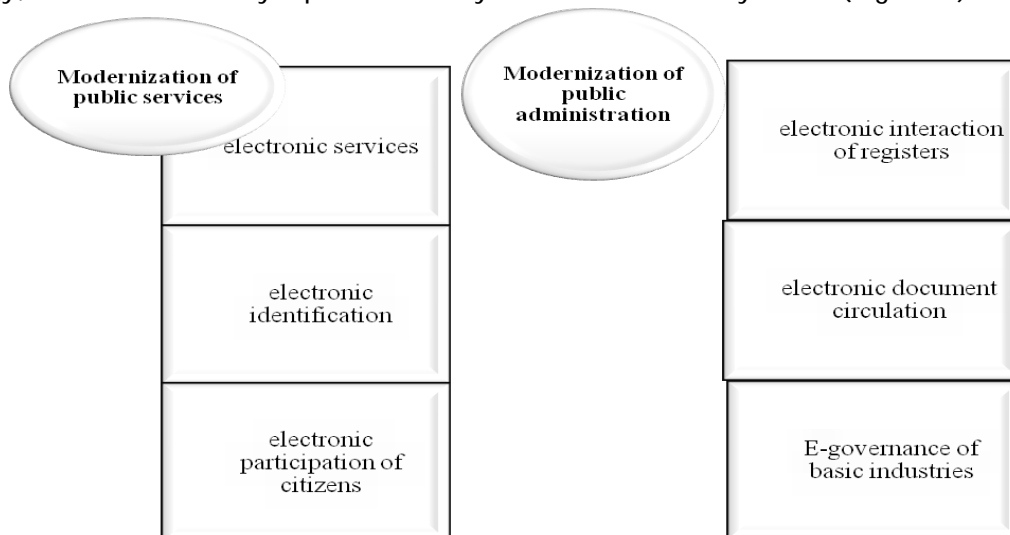


Figure 3. Priority areas

Source: generatEd by author based on source [11].

Diya is an online service where you can get public services, download digital versions of documents, such as a driver's license, a student

ticket and create an electronic cabinet of a citizen (Figure 4).



Figure 4. Available services of the e-democracy online platform "Interaction".

Source: Generated by author based on source [11].

Through the application "Diya" you can, in particular: apply for registration of a person as an individual entrepreneur; apply for the status of unemployed; get a police clearance certificate; get an extract about the land plot; check the license of truckers; receive social assistance at the birth of a child; restore or exchange a driver's license; Sign documents with an electronic digital signature. etc.

The Ministry of Digital Information plans to ensure 100% accessibility of public services to citizens and businesses by 2024; cover 95% of the population, social facilities and major roads coverage of high-speed Internet; attract 6 mln. citizens to the digital skills development program, to increase up to 10% the share of IT funding in the country's GDP.

Research results. The State Regional Development Strategy for 2021-2027 defines the general vector of sustainable development of the regions, namely: the new regional development policy should be based on the key challenges affecting the person, infrastructure, economy and the environment, as well as include building a culture of partnership and cooperation focused on the interaction of citizens and public institutions for development [10].

Today, more than 300 regulatory acts related to the information society, informatization, information security, information policy, e-governance, etc. have been developed in this area. In general, the regulatory framework established [8-10] is necessary for the implementation of e-governance, these documents define the basic principles of state policy, basic principles, priority goals and strategic objectives, mechanisms of public administration, etc. in the field of information policy, informatization, development of the information society and knowledge society, information security, e-governance and open government. is: its fragmentation, incompleteness, fuzziness, inconsistency, inconsistency, and sometimes the contradiction of some documents and the opacity of procedures, not adaptability to international acts, etc. A separate problem is the implementation of adopted legislative acts.

In Ukraine, there are changes in the creation of e-governance infrastructure. The factors that, in our opinion, prevent the accelerated development of this sphere are primarily the issue of inter-agency cooperation (including the lack of relevant regulations and regulatory and technical documents) and the lack

of formalized standard solutions for the provision of services by executive authorities remotely.

According to the Strategy for Sustainable Development "Ukraine-2020", approved by the Decree of the President of Ukraine No. 5/2015 of January 12, 2015, the development of e-governance, in particular the introduction of electronic services, has been identified as one of the main priorities for reforming the public administration system. Also, within the framework of the implementation of the Association Agreement with the European Union, Ukraine should ensure the comprehensive development of electronic services in accordance with European requirements. E-governance is aimed at using the latest information and communication technologies that will help improve the quality of governance, improve the interaction of government and citizens and promote social innovation in Ukraine [10].

In the Strategy for Public Administration Reform of Ukraine until 2021, the creation of an e-government is the main goal of the State Strategy for Regional Development for 2021-2027, which was approved by the Resolution of the Cabinet of Ministers of Ukraine no. 695 of 05.08.2020 [9].

In recent years, progress has been made in some areas: most government departments are represented online; some ministries and local self-government bodies have made significant progress in the field of internal automation, electronic document management, the creation of specialized databases and even the provision of a number of electronic services. A number of key elements of the e-government infrastructure have been created, and the necessary regulatory framework has been partially developed. However, in most areas, further work is needed to ensure the long-term benefits of e-governance for people, businesses and civil servants.

The slow progress, low efficiency and decisive role of the proposed solutions, rather than customer demand in e-governance projects in Ukraine, are explained by the delay in the start of the implementation of administrative reforms, which were the main driver of e-government development in most developed countries.

Among other approaches to the stageization of e-governance, it is necessary to note the approach, which is based on the degree of automation of the processes of electronic

interaction of authorities between themselves, society, business and international organizations, as well as the level of ensuring administrative reforms with the introduction of information technologies [7, 9].

Unlike Ukraine, both the European Union itself and the governments of most EU member states have a long and extensive experience in legislative and project support for the development of e-governance and the information sphere of society (it is, of course, about its innovative, computer-based sector). A somewhat conditional reference point here, obviously, can be considered the appearance in 1994 of a recommendation documents for the European Council - "Europe and the Global Information Society" prepared by a group of experts chaired by Martin Bangemann and now known as the "Bangemann Report".

Worldwide, it is evident that e-governance is continuing to increase, with 65% of member states now in a group with a high or very high level of performance. While it is possible to trace the relationship between the level of e-governance and the country's income level, financial resources are not the only critical factor according to the UN report [6]. that the availability of modern legislation in the field of e-governance and clarity of the set short and long-term goals for the development of the state is also an important factor on which the results in a particular state directly depend.

In particular, in the modern world, the following regional models of e-governance are considered the main [4]:

The continental European model is characterized primarily by the presence of non-governmental institutions, such as the European Parliament, whose recommendations are binding on all EU member states, a high degree of integration into a single information space and free access to information, strict legislation governing information relations. difference in the economic, political, cultural and technical potential of EU members. The most successful European model is implemented in France, Germany, Estonia, Norway, Austria, Bulgaria, etc.

Special features of *the Anglo-American e-governance* model are the fact that all electronic services are evenly provided through any information channels: the Internet, mobile communication, digital Television, etc., in addition, countries using this e-governance

model are leaders in the implementation and application of various forms of distance learning, primarily using the Internet network, which is also one of the most significant indicators of the level of development State. An important component of the success of the introduction of the Anglo-American e-government model was significant reforms of the entire structure of the state's work with information flows and the introduction of a system of personal responsibility for the informatization of state agencies [4].

Asian - built taking into account the high level of corporate culture of the countries of the region and the historical specifics of governance. Singapore, which has the first prototype of e-governance, is a classic representative of the Asian model of e-governance [1, 4].

Among the results of the introduction of e-governance in Ukraine, it should be noted that the implementation of the "single window" principle - the Unified State Portal of Administrative Services (poslugy.gov.ua), improved the content of the official web portals of public authorities, registered their accounts in the social networks "Facebook" and "Twitter". The next step is to create state authorities' own channels on YouTube, in particular with online broadcasts of their activities. The system of electronic declaration of public assets was launched on the website of the National Agency on Corruption Prevention (nazk.gov.ua). Work has begun in the field of "electronic medicine" (ehealth-ukraine.org). The "electronic legal proceedings" are being implemented. The system of electronic appeals using the Internet in accordance with the Law of Ukraine "On Citizens' Appeals" was introduced, first of all, petitions to the Verkhovna Rada (itd.rada.gov.ua/services/petitions/) and the President of Ukraine (petition.president.gov.ua) were the e-data.gov.ua most demanded. electronic reporting to the bodies of the State Fiscal Service, state statistics bodies and the Pension Fund of Ukraine. Access to the electronic VAT refund register has been opened. The system of public and public procurement has been reformed. In particular, public procurements are carried out exclusively in electronic form in the ProZorro system (prozorro.gov.ua). Banks (PrivatBank and Oschadbank) have developed a secure BankID system that allows you to confirm the user's identity on official

websites through his account in Internet banking [2, 5, 6].

Ukraine is actively implementing the idea of a "state in a smartphone". In particular, to this end, the Ministry of Digital Transformation was established in September 2019. One of the main achievements of the Cabinet of Ministers of Ukraine and the Ministry of Digital Transformation is the creation of the Diia application (State and I), which provides a number of administrative services online.

Through the application "Diya" you can, in particular: apply for registration of a person as an individual entrepreneur; apply for the status of unemployed; get a police clearance certificate; get an extract about the land plot; check the license of truckers; receive social assistance at the birth of a child; restore or exchange a driver's license; Sign documents with an electronic digital signature. etc.

The Ministry of Digital Information plans to ensure 100% accessibility of public services to citizens and businesses by 2024; cover 95% of the population, social facilities and major roads coverage of high-speed Internet; attract 6 mln. citizens to the digital skills development program, to increase up to 10% the share of IT funding in the country's GDP.

The State Regional Development Strategy for 2021-2027 defines the general vector of sustainable development of the regions, namely: the new regional development policy should be based on the key challenges affecting the person, infrastructure, economy and the environment, as well as include building a culture of partnership and cooperation focused on the interaction of citizens and public institutions for development [9].

Today, more than 300 regulatory acts related to the information society, informatization, information security, information policy, e-governance, etc. have been developed in this area. In general, the regulatory framework established [8-10] is necessary for the implementation of e-governance, these documents define the basic principles of state policy, basic principles, priority goals and strategic objectives, mechanisms of public administration, etc. in the field of information policy, informatization, development of the information society and knowledge society, information security, e-governance and

open government. is: its fragmentation, incompleteness, fuzziness, inconsistency, inconsistency, and sometimes the contradiction of some documents and the opacity of procedures, not adaptability to international acts, etc. A separate problem is the implementation of adopted legislative acts.

In Ukraine, there are changes in the creation of e-governance infrastructure. The factors that, in our opinion, prevent the accelerated development of this sphere are primarily the issue of inter-agency cooperation (including the lack of relevant regulations and regulatory and technical documents) and the lack of formalized standard solutions for the provision of services by executive authorities remotely.

According to the United Nations E-Government Survey 2020, Ukraine joined the group of countries with a high level of e-governance and became one of 12 countries that moved to a very high level in the e-participation index.

The study analyzes the level of e-governance of states by calculating two key indexes: the E-Governance Development Index (EGDI) and the Citizens Electronic Participation Index (EPI).

The EGDI index analyzes the level of e-government development. To calculate it, the data of independent surveys of the international level are analyzed, including the Online Service Questionnaire (OSQ), which analyzes the level of development of "online presence" of all 193 UN member states [4].

The EPI Index is an electronic citizen participation index that is key to measuring governance and one of the bases for sustainable development. Epi is evaluated by analyzing the level of development of national e-governance portals or other government platforms related to providing up-to-date information to citizens, public consultation and decision-making.

The results of the study of the UN Department for Economic and Social Affairs allow us to track and analyze the ratings of countries by the level of e-government development, as well as to determine trends in the development of this index of Ukraine.

List of countries of the world and Ukraine by e-government development index for 2014 and 2020 is shown in Table 1 [12].

Table 1. E-Governance Development Index in some countries of the world and in Ukraine for 2014 and 2020

Country	E-Governance Index		Difference, %
	2014	2020	
France	0,8938	0,8718	-0,022
Denmark	0,8162	0,9758	+0,1596
Singapore	0,9076	0,915	+0,0074
Poland	0,6482	0,8531	+0,2049
UNITED STATES	0,8748	0,9297	+0,0549
Sweden	0,8225	0,9365	+0,114
Czech Republic	0,607	0,8135	+0,2065
Slovakia	0,6148	0,7817	+0,1669
Romania	0,5362	0,7605	+0,2243
Ukraine	0,5032	0,7179	+0,2147
Somalia	0,0139	0,1293	+0,1154

Source: Raccoons of the Author.

From the data in Table 1, we see that over the past 6 years in all countries except France (the EGDI value in 2014 is 0.8938, while in 2020 - 0.8718, which is less by 0.022 in relation to 2014), we observe the development of e-governance, which reflects the value of the E-Governance Development Index, in particular: Denmark - 0.8162 (2014) and 0.9758 (2020), 0.1596 in relation to 2014; Singapore - 0.9076 (2014) and 0.915 (2020), which is more than 0.0074 in relation to 2014; Poland - 0.6482 (2014) and 0.8531 (2020), which is more than 0.2049 in relation to 2014; U.S. - 0.8748 (2014) and 0.9297 (2020), which is more than 0.0549 in relation to 2014; Sweden - 0.8225 (2014) and 0.9365 (2020), which is more than 0.114 in relation to 2014; Czech

Republic - 0.607 (2014) and 0.8135 (2020), which is more than 0.2065 in relation to 2014; Slovakia - 0.6148 (2014) and 0.7817 (2020), which is more than 0.1669 in relation to 2014; Romania - 0.5362 (2014) and 0.7605 (2020), which is more than 0.2243 in relation to 2014; Ukraine - 0.5032 (2014) and 0.7179 (2020), which is more than 0.2147 in relation to 2014 and, finally, Somalia - 0.0139 (2014) and 0.1293 (2020), which is more than 0.1154 in relation to 2014. Thus, we observe that during the analyzed period, the most rapid growth is inherent in such countries as Slovakia, Poland, the Czech Republic, Ukraine and Romania.

Also, it should be noted that there are a number of countries that have lost their place in the ranking (Table 2) [11].

Table 2. Rating of e-governance development of the countries of the world for 2014 and 2020

Country	Position	
	2014	2020
Moldova	6	79
Georgia	56	65
Hungary	39	52
Greece	34	42
Italy	23	37
Germany	21	25
Spain	12	17
UNITED STATES	7	9
United Kingdom	8	7
Ukraine	87	69

Source: Raccoons of the Author.

Ramsbottom of Table 2 data, we are seeing a sharp decline in the position of countries in the world for the development of e-governance, in particular Moldova - 6 position in 2014 and 79 in 2020, Georgia - 56th position in 2014 and 65th position in 2020; Hungary - 39th position in 2014 and 52nd position

in 2020; Greece - 34th position in 2014 and 42nd position in 2020; Italy - 23rd position in 2014 and 37th position in 2020 year; Germany - 21 positions in 2014 and 25th position in 2020; Spain - 12th position in 2014 and 17th position in 2020; U.S. - 7th position in 2014 and 9th position in 2020; The UK is 8th in

2014 and 7th in 2020. However, we see that in Ukraine the e-governance development index indicates that Ukraine ranked 69th in 2020, rising 18 places compared to 2014.

Thus, according to the forecasts of the index "e-government development" in Ukraine (Figure 5) on the use of a polynomial mathe-

matical model of 3 degrees, the expected growth of this indicator in 2022 to the value of ~0.82 was obtained, which will characterize the approach of the level of development of e-governance in the country to the level of developed countries of the EU and the world.

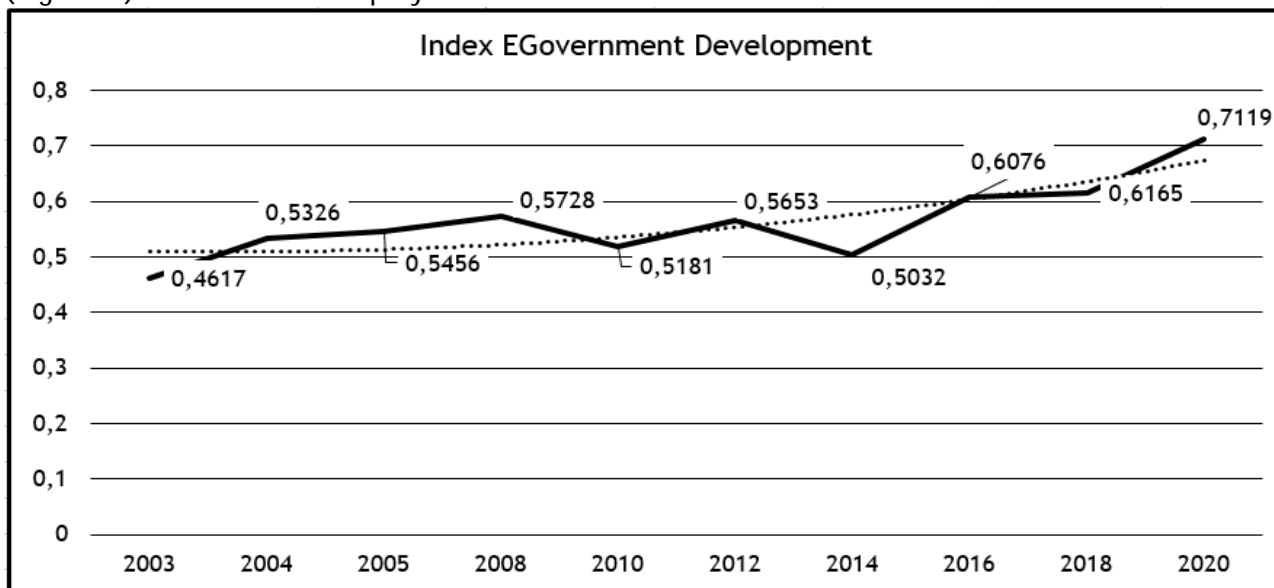


Figure 5. Trends in changing the value of the index "e-government development" in Ukraine

Source: [1].

When constructing a regression forecast for the "e-participation" index, none of the standard mathematical models will be able to give a sufficient explanation of the variation of this indicator. Therefore, given the significant fluctuations in the value of this index for the study period (Figure 6) and taking into account the intensification of the government's

actions in the development and maintenance of e-governance in Ukraine, we can talk about fixing the level of index reached in 2020 at 0.81 and insignificant growth, which characterizes a fairly high level of interaction between Ukrainians and executive authorities through the use of online services.

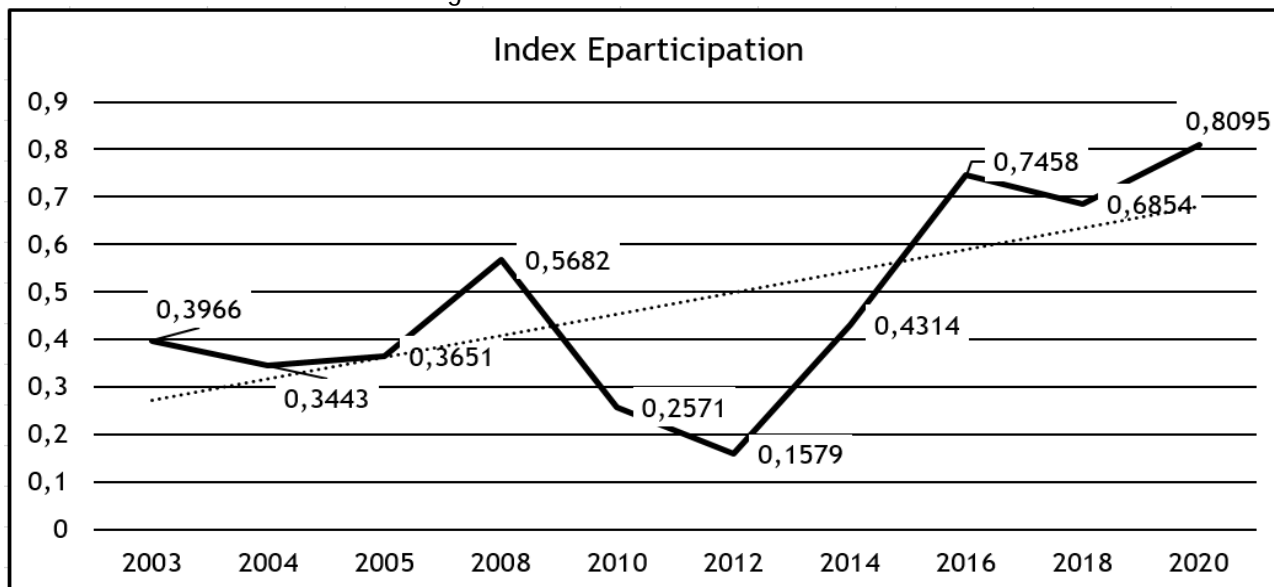


Figure 6. Trends in changing the value of the index "e-participation" in Ukraine

Source: [1].

Thus, the State Regional Development Strategy for 2021-2027 provides for a number of measures aimed at the development of e-governance and e-democracy at the regional level, namely:

- to provide full coverage of the territories of agglomerations, large cities and settlements bordering them, modern means of mobile communication and high-speed Internet in order to simplify citizens' access to administrative, social and commercial services;

- to promote the introduction of innovative technologies in urban development management systems based on the smart city concept;

- provide all social institutions with broadband Internet speeds of 100 Mbps and arrangement of open Wi-Fi zones for visitors and staff;

- ensure the availability of social services and administrative services;

- to stimulate the development of information and communication technologies in rural areas: to provide coverage of 100% of rural areas with fixed broadband Internet access and 95% of the population with mobile Internet for the possibility of forming new interregional connections;

- to stimulate the development of small and medium-sized enterprises in rural areas, primarily remote and low-density population, through the use of financial, methodological and organizational tools, including providing affordable training for entrepreneurship online, offline and mixed learning format, as well as expanding the network of entrepreneurship support centers "Diia. Business".

- ensure the use and administration of the national portal for entrepreneurs "Diia. Business" to inform the entrepreneurs of the region about opportunities in a particular region; - to popularize the development of entrepreneurship in the regions by introducing educational programs on entrepreneurship in schools and higher education institutions, affordable (free) training for entrepreneurs using the possibility of a free online school for entrepreneurs "Diia. Business";

- to introduce tools to support the participation of small and medium-sized enterprises in smart specialization projects;

- to attach all regions of Ukraine to the European Smart Specialization Platform (S3 Platform) in order to open access to the platform tools for the regions of Ukraine;

- provide modern technical and informational and software for the functioning of the electronic healthcare system;

- to ensure proper material and technical equipment of healthcare institutions, in particular, broadband Internet access and modern technical and informational software for the functioning of the electronic healthcare system;

- to conduct a full computerization of general secondary education institutions with the involvement of various sources of funding, training of pedagogical workers of digital literacy;

- to increase the level of digital literacy of rural population, in particular, through the implementation of the project "Diia. Digital education". A number of reforms are envisaged in the areas of digital communications and digital infrastructure.

Therefore, in my opinion, it should be expedient to form the main ways and aimed at strengthening the development of e-governance in Ukraine, namely: to analyze the needs of citizens, business and government in the medium and long term and prospects; the creation of a single centralized database and data on the identified needs of all stakeholders; developed guidelines for e-governance; developed a unified National Standard in e-governance based on the European e-governance standard, taking into account the loss of validity of the Concept for the Development of E-Governance in Ukraine at the end of 2020; modernize the ICT-based public administration structure and institutional transformations; conduct regional projects and case studies; refocus on long-term projects, abandoning the short-term; creating such conditions for transparency and accountability in e-governance projects; creating institutional governance. to promote initiatives aimed at synergistic use of ICT as a stimulating tool for improving the effectiveness and effectiveness of e-governance; to restructure state and administrative institutions in order to improve public administration through the use of ICT achievements.

Conclusions. Summing up the above, we note that e-governance is a form of public administration organization that contributes to increasing the efficiency, openness and transparency of the activities of state authorities and local self-government bodies using information and telecommunication technologies to form a new type of state aimed at meeting the needs of citizens.

Thus, to date, the regulatory and legislative framework has already been adopted and appropriate organizational prerequisites for the successful implementation and development of e-governance in Ukraine have been formed. The state and society clearly understand that the implementation and develop-

ment of e-governance will significantly increase the level of transparency and openness of public authorities, the level of citizen involvement in democratic processes and, most importantly, reducing the level of corruption in Ukraine.

Список бібліографічних посилань

1. Бахарєва Я. В. Тенденції розвитку інформаційних технологій у сфері надання державних публічних послуг в Україні. *Ефективна економіка*. 2021. № 6. URL: <http://www.economy.nayka.com.ua/?op=1&z=8986>.
2. Берназіук О. О. Електронне урядування як особлива форма публічного управління: поняття та проблеми запровадження. URL : http://www.visnyk-juris.uzhnu.uz.ua/file/No.55/part_2/9.pdf.
3. Демкова М. Електронне урядування: світовий досвід та українські реалії. Електронне урядування: окремі аспекти становлення. *Вісник Програми сприяння Парламенту України*. Київ, 2002. С. 33-57.
4. Дмитренко В. І. Механізми впровадження електронного урядування на місцевому рівні. Київ, 2018. 248 с. URL : <http://ipk.edu.ua/wp-content/uploads/2019/05/Dysertatsiia-Dmytrenka.pdf>.
5. Електронне урядування : міжнар. наук. фах. журн. URL : <http://E-Governance/www.egov.in.ua>.
6. Електронне урядування в Україні: аналіз та рекомендації. Результати дослідження / за ред. І. Г. Малиукової. Київ: ООО «Поліграф-Плюс», 2007. 254 с.
7. Електронне урядування та електронна демократія : навч. посіб. у 15 ч. / за заг. ред. А. І. Семенченка, В. М. Дрешпака. Київ, 2017. 74 с.
8. Ільницький М. П. Адміністративно-правове регулювання електронного урядування у сфері публічного управління в Україні : дис. канд. юр. наук: 12.00.07. М. П. Ільницький. Ужгород, 2017. 217 с. URL : <https://www.uzhnu.edu.ua/en/infocentre/get/12995>.
9. Мицишин В. І., Жежич П. І. Аналіз особливостей побудови систем електронного урядування в Україні. *Вісник Національного університету "Львівська політехніка"*. 2011. № 699. С. 164-175.
10. Моніторинг, оцінювання та прогнозування розвитку системи електронного урядування / за ред. С. К. Полумієнко. Київ : ФОП Москаленко О. М., 2017. 64 с.
11. Семенченко А. І. Електронне урядування: основи та стратегії реалізації. Електронне урядування та електронна демократія : навч. посіб. у 15 ч. / за заг. ред. А. І. Семенченка, В. М. Дрешпака. Київ, 2017. 72 с.
12. Соловійов С. Г. Проблеми розвитку електронної демократії в умовах модернізації державного управління України : наук. розробка / С. Г. Соловійов, В. Г. Даниленко. Київ : НАДУ, 2012. 68 с.
13. Царенко. І. О. Електронне урядування як інструмент посилення конкурентоспроможності країни. *Ефективна економіка*. 2020. № 8. URL : <http://www.economy.nayka.com.ua/?op=1&z=8123>.
14. Щеглюк С. Д. Електронне урядування як інструмент модернізації державного управління міським розвитком. *Регіональна економіка*. 2015. № 2. С. 44-54.

References

1. Bakhariyeva, Ya.V. (2021). Tendentsii rozvytku informatsiynykh tekhnolohii v sferi nadannia derzhavnykh publichnykh posluh v Ukraini [Trends in the development of information technologies in the field of provision of public services in Ukraine]. *Efektivna ekonomika*, 6. Retrieved from : <http://www.economy.nayka.com.ua/?op=1&z=8986>. [In Ukrainian].
2. Bernaziuk, O.O. (2019). Elektronne uriaduvannia yak osoblyva forma publichnoho upravlinnia: poniattia ta problemy zaprovadzhenia [E-government as a special form of public administration: concepts and problems of implementation] Retrieved from : http://www.visnyk-juris.uzhnu.uz.ua/file/No.55/part_2/9.pdf [In Ukrainian].
3. Demkova, M. (2002). Elektronne uriaduvannia: svitovy dosvid ta ukraïnski realii [E-government: world experience and Ukrainian realities]. *Elektronne uriaduvannia: okremi aspekty stanovlennia*. *Visnyk Prohramy spriannia Parlamentu Ukrainy*. Kyiv, pp. 33-57 [In Ukrainian].
4. Dmytrenko, V.I. (2018). Mekanizmy vprovadzhenia elektronnoho uriaduvannia na mistsevomu rivni [Mechanisms for implementing e-government at the local level]. Kyiv. Retrieved from : <http://ipk.edu.ua/wp-content/uploads/2019/05/Dysertatsiia-Dmytrenka.pdf> [In Ukrainian].
5. Elektronne uriaduvannia : mizhnar. nauk. fakh. zhurn [International scientific professional journal "E-Government"]. Retrieved from : <http://E-Governance/www.egov.in.ua> [In Ukrainian].
6. Maliukova, I.H., et al. (2007). Elektronne uriaduvannia v Ukraini: analiz ta rekomendatsii. Rezultaty doslidzhennia [E-government in Ukraine: analysis and recommendations]. Kyiv: ООО «Polihraf-Plius» [In Ukrainian].
7. Semenchenko, A.I., Dreshpak, V.M., et al. (2017). Elektronne uriaduvannia ta elektronna demokratiia : navch. posib. u 15 ch. [E-government and e-democracy: textbook in 15 vol.]. Kyiv [In Ukrainian].
8. Ilytskyi, M.P. (2017). Administratyvno-pravove reguliuvannia elektronnoho uriaduvannia u sferi publichnoho upravlinnia v Ukraini [Administrative and legal regulation of e-government in Ukraine in the field of public administration in Ukraine]. *Candidate's thesis*. Uzhhorod. Retrieved from : <https://www.uzhnu.edu.ua/en/infocentre/get/12995> [In Ukrainian].
9. Myshchysyn, V.I. & Zhezhnych, P.I. (2011). Analiz osoblyvosti pobudovy system elektronnoho uriaduvannia v Ukraini [Analysis of peculiarities of construction of e-governance systems in Ukraine]. *Visnyk Natsionalnoho universytetu "Lvivska politekhnika"*, 699, pp. 164-175 [In Ukrainian].
10. Polumiienko, S.K., et al. (2017). Monitorynh, otsiniuvannia ta prohnozuvannia rozvytku systemy elektronnoho uriaduvannia [Monitoring, evaluation and forecasting of the development of the e-governance system]. Kyiv : FOP Moskalenko O.M. [In Ukrainian].
11. Semenchenko, A.I., Dreshpak, V.M., et al. (2017). Elektronne uriaduvannia: osnovy ta stratehii realizatsii. Elektronne uriaduvannia ta elektronna demokratiia : navch. posib. u 15 ch. [E-government: basics and implementation strategies. E-government and e-democracy: textbook in 15 vol.]. Kyiv [In Ukrainian].
12. Soloviov, S.H., Danylenko, V.H., et al. (2012). Problemy rozvytku elektronnoi demokratiï v umovakh modernizatsii derzhavnoho upravlinnia Ukrainy : nauk. rozrobka [Problems of development of electronic democracy in the conditions of modernization of public administration of Ukraine: sciences. development] Kyiv : NADU [In Ukrainian].

13. Tsarenko, I.O. (2020). Elektronne uriaduvannia yak instrument posylennia konkurentospromozhnosti krainy [E-government as a tool to strengthen the country's competitiveness]. *Efektivna ekonomika*, 8. Retrieved from : <http://www.economy.nayka.com.ua/?op=1&z=8123> [In Ukrainian].

14. Shchehliuk, S.D. (2015). Elektronne uriaduvannia yak instrument modernizatsii derzhavnoho upravlinnia miskym rozvytkom [E-government as a tool for modernization of public administration of urban development]. *Rehionalna ekonomika*, 2, pp. 44-54 [In Ukrainian].

Лебідь О. В. Електронне урядування економіки майбутнього: світовий досвід та перспективи України

Мета статті – розглянути стан розвитку електронного урядування в країнах світу та оцінити перспективи використання його в Україні.

Методика дослідження. У процесі дослідження використано соціологічні, загальнонаукові, теоретичні та емпіричні методи, зокрема метод єдності аналізу й синтезу, метод спостереження, порівняння. Теоретико-методологічна основа: концепції, підходи, теорії, положення, висновки, що розглядаються в наукових працях вітчизняних і зарубіжних вчених, теорії комунікацій, інформаційних технологій, проєктного менеджменту, електронного урядування та електронної демократії; нормативно-правові акти органів державної влади (Конституція України, закони України, укази Президента України, постанови та розпорядження Кабінету Міністрів України).

Результати дослідження. Охарактеризовано нормативно-правові акти з питань використання технологій електронного урядування в Україні. Розглянуто основні питання щодо модернізації державного управління за допомогою інформаційно-комунікаційних технологій. Проведено аналіз стандартів та регламентів для технологій електронного урядування. Визначено основні найбільш поширені інструменти електронного урядування в Європейському Союзі та Україні. Обґрунтовано доцільність створення та використання електронного урядування.

Розглянуто структуру державного управління, методи електронного урядування, складові його інформаційно-технологічної інфраструктури, державну політику з розвитку електронного урядування, його технічні складові та їх призначення, проблеми й організацію заходів з впровадження та розвитку електронного урядування, зарубіжний і національний досвід використання електронного урядування, його нормативно-правову базу. Проаналізовано методологічні підходи та результати моніторингу впровадження інструментів електронного урядування як основи надання адміністративних послуг в електронному вигляді (2020 р.).

Елементи наукової новизни. Висвітлено етапи розвитку та механізми управління розвитком електронного урядування в Україні. Проаналізовано українську та зарубіжну практику застосування технологій електронного урядування. Визначено загальносвітові процеси електронного урядування економіки. Досліджено основні закономірності становлення і розвитку електронного урядування в Україні та світі; розкрито сутність і значення основних методів і принципів електронного урядування; розглянуто різноманітні моделі впровадження електронного урядування на загальнодержавному, регіональному та місцевому рівнях; проблеми і перспективи формування і розвитку електронного урядування з урахуванням вітчизняної практики; проаналізовано основні етапи та завдання впровадження електронного урядування в контексті вивчення кращої зарубіжної практики.

Період кризи вимагає від органів влади рішучих й обґрунтованих дій, що можливо за умови володіння повним обсягом інформації про стан справ у державі. Такі потреби може задовольнити система національних електронних інформаційних ресурсів. У статті розглянуто організаційну модель національних інформаційних ресурсів України в електронному урядуванні. Визначено важливість виконання запропонованого плану дій органів влади щодо організації інформаційних ресурсів в електронному урядуванні.

Практична значущість. Використання рекомендацій стосовно удосконалення організаційного та інформаційного забезпечення державного управління у сферах розвитку інформаційного суспільства та впровадження електронного урядування дасть змогу в майбутньому розширити перелік корисних для споживачів електронних інформаційних ресурсів, які характеризуються різноманітними формами надання інформації, організаційними та технологічними рішеннями, що є основою для інформаційно-аналітичної підтримки прийняття управлінських рішень у системі поточного та стратегічного планування. Табл.: 2. Рис.: 6. Бібліогр.: 14.

Ключові слова: електронне урядування; економіка; управління; методологія; нормативно-правові акти; проблеми; завдання; технічні складові; досвід; організація.

Лебідь Олександр Васильович – асистент кафедри комп'ютерних наук та економічної кібернетики, Вінницький національний аграрний університет (21000, м. Вінниця, вул. Сонячна, 3)

E-mail: sshlebid@gmail.com

ORCID iD <https://orcid.org/0000-0003-4253-8696>

Лебедь А. В. Электронное управление экономики будущего: мировой опыт и перспективы Украины

Цель статьи – рассмотреть состояние развития электронного управления в странах мира и оценить перспективы использования его в Украине.

Методика исследования. В процессе исследования использованы социологические, общенаучные, теоретические и эмпирические методы, в частности, метод единства анализа и синтеза, метод наблюдения, сравнения. Теоретико-методологическая основа: концепции, подходы, теории, положения, выводы, рассматриваемые в научных трудах отечественных и зарубежных ученых, теории коммуникаций, информационных технологий, проектного менеджмента, электронного управления и электронной демократии; нормативно-правовые акты органов государственной власти (Конституция Украины, законы Украины, указы Президента Украины, постановления и распоряжения Кабинета Министров Украины).

Результаты исследования. Охарактеризованы нормативно-правовые акты по вопросам использования технологий электронного управления в Украине. Рассмотрены основные вопросы модернизации государственного управления с помощью информационно-коммуникационных технологий. Проведен анализ стандартов и регламентов для технологий электронного управления. Определены основные наиболее распространенные инструменты электронного управления в Европейском Союзе и Украине. Обоснована целесообразность создания и использования электронного управления.

Рассмотрены структура государственного управления, методы электронного управления, составляющие его информационно-технологической инфраструктуры, государственная политика по развитию электронного управления, его технические составляющие и их назначение, проблемы и организация мер по внедрению и развитию электронного управ-

ления, зарубежный и национальный опыт использования электронного управления, его нормативно-правовую базу. Проанализированы методологические подходы и результаты мониторинга внедрения инструментов электронного управления как основы предоставления административных услуг в электронном виде (2020 г.).

Элементы научной новизны. Освещены этапы развития и механизмы управления развитием электронного управления в Украине. Проанализирована украинская и зарубежная практика применения технологий электронного управления. Определены общемировые процессы электронного управления экономики. Исследованы основные закономерности становления и развития электронного управления в Украине и мире; раскрыты сущность и значение основных методов и принципов электронного управления; рассмотрены различные модели внедрения электронного управления на общегосударственном, региональном и местном уровнях; проблемы и перспективы формирования и развития электронного управления на основе отечественной практики; проанализированы основные этапы и задачи внедрения электронного управления в контексте изучения лучшей зарубежной практики.

Период кризиса требует от органов власти решительных и обоснованных действий, что возможно при условии владения полным объемом информации о состоянии дел в государстве. Такие потребности может удовлетворить система национальных электронных информационных ресурсов. В статье рассмотрена организационная модель национальных информационных ресурсов Украины в электронном управлении. Определена важность выполнения предложенного плана действий органов власти по организации информационных ресурсов в электронном управлении.

Практическая значимость. Использование рекомендаций по совершенствованию организационного и информационного обеспечения государственного управления в сферах развития информационного общества и внедрения электронного управления позволит в будущем расширить перечень полезных для потребителей электронных информационных ресурсов, характеризующихся разнообразными формами предоставления информации, организационными и технологическими решениями, что является основой для информационно-аналитической поддержки принятия управленческих решений в системе текущего и стратегического планирования. Табл.: 2. Илл.: 6. Библиогр.: 14.

Ключевые слова: электронное управление; экономика; управление; методология; нормативно-правовые акты; проблемы; задачи; технические составляющие; опыт; организация.

Лебедь Александр Васильевич – ассистент кафедры компьютерных наук и экономической кибернетики, Винницкий национальный аграрный университет (21000, г. Винница, ул. Солнечная, 3)

E-mail: sshlebid@gmail.com

ORCID iD <https://orcid.org/0000-0003-4253-8696>

The article has been received 20.09.2021

Revision 12.10.2021

Бібліографічний опис для цитування:

Lebid O. V. E-governance of the economy of the future: world experience and prospects of Ukraine. *Економіка АПК*. 2021. № 10. С. 98 – 110. <https://doi.org/10.32317/2221-1055.202110098>

Lebid, O.V. (2021). E-governance of the economy of the future: world experience and prospects of Ukraine. *Ekonomika APK*, 10, pp. 98 – 110 [In English]. <https://doi.org/10.32317/2221-1055.202110098>

* * *