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SOCIO-ECONOMIC ASPECTS OF THE DIGITAL ECONOMY DEVELOPMENT IN UKRAINE

Abstract. The article deals with the basic concepts and tendencies of the digital economy. The current state of the digital economy and prospects for its development in Ukraine are analyzed. It is proposed to consider the digital economy development as an element of the social development strategy.

The research methodology includes neo-institutional and systemic approaches, as well as analysis of statistics and data from social studies. The work concerns equally the theoretical and applied aspects of the topic. The paper is based on secondary data that has been collected from the official statistics, the Internet, science articles, interviews, papers, etc.

The analysis results indicate a relatively unfavorable situation in Ukraine. The digital economy development entails dramatic changes in social relations. These processes include both risks (the market is being restructured in a new way, leading to challenges

related to jobs, skills, security and privacy), as well as prospects (stimulating innovation, increasing governance efficiency, improving service delivery, inclusion and sustainable economic growth, the well-being of citizens, countries and society).

The society and the state should be properly prepared for such changes. Therefore, the digital economy development in terms of public administration should be seen as an element of a social development strategy that requires proper scientific and expert substantiation. The concept of digital economy development in Ukraine envisages several measures aimed at addressing digital gap (from digital jobs to digital initiatives in the modern world, conducting digitalization of industry and business, defining basic digital services, preparing educational modernization measures, as well as forecasting digital development in Ukraine until 2020).

On January 17, 2018, the Cabinet of Ministers of Ukraine approved the Concept for the Development of the Digital Economy and Society of Ukraine for 2018-2020 and a plan of measures for its implementation. The document emphasizes that the path to the digital economy and digital society of Ukraine lies through the domestic product market, use and consumption of information and communication or digital technologies.

The digital economy development is a set of mechanisms, motivation factors, and incentives for the implementation of digital technologies, and, therefore, a branched digital infrastructure for harnessing the state's capabilities, enhancing its competitiveness, and increasing the well-being of citizens. Currently, Ukrainian market of information products and services is at the stage of formation.

The market of information products consists of technical and technological components (modern information equipment, powerful computers, advanced computer network and related information processing technologies, which enables to work on the global computer network Internet, search information, customers, goods, hypertext management technology, e-mail); regulatory and legal components (the legal basis for regulating the information market); organizational components (elements of state regulation of interaction between producers and distributors of information products and services).

At the same time, the tasks of identifying specific practical legal, regulatory (organizational), economic and financial infrastructural mechanisms for the development of the «digital society» that would facilitate the rapid growth of the digital economy remain unresolved.

Keywords: public administration, economy, information, digital economy, electronic economy, economic system, information economy, mechanisms of public administration

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JEL Classification: L86, O2, Z18

Introduction. In January 2018, the Cabinet of Ministers of Ukraine approved the Concept of Development of the Digital Economy and Society of Ukraine for 2018-2020 and approved a plan of measures for its implementation. The document emphasizes that the path to the digital economy and digital society of Ukraine lies through the domestic market for the production, use and consumption of information and communication technologies and digital technologies. The development of the digital economy entails dramatic changes in social relations. The market is being restructured in a new way, leading to challenges related to jobs, skills, security, and privacy. These processes contain both risks and prospects. If societies are properly prepared for them. Therefore, the development of

the digital economy should be seen as an element of a social development strategy that needs due attention from academics and experts.

Literature review and the problem statement. The problems of the digital economy are being considered by researchers around the world [Dźwigoł 2013; Dźwigoł 2014; Dźwigoł 2015; Dźwigoł 2016; Dźwigoł 2018; Dźwigoł 2019; Marszałek-Kawa, Chudziński, Miśkiewicz 2018]. M. Olbert and C. Spengel (Germany) researched the tax attractiveness for digital business models in an international comparison and the location attractiveness of Germany for companies of the digital economy [Olbert & Spengel 2017]. The 2017 Tax Digitization Index study analyzes for the first time tax location factors for investments in digital business models. They explained, that in an international comparison, Germany is one of the countries with the highest effective tax burden, while Ireland, Italy, and Hungary stand out as particularly attractive locations.

Gideon M. J. and R. Lazar (Sweden) have grounded, that the lack of adoption of eGovernment by citizens has been cited to be one of the reasons for the failures of most eGovernment initiatives [Gideon & Lazar 2019]. They have conducted a systematic literature review to shade light on the current status of the research in this area with a focus on the research goals, research design, research strategies, scientific theories used and research methods.

Mohamed Abo Bakr Abd Allah (Egypt) research digital economy in Egypt [Mohamed Abo Bakr Abd Allah 2019]. The Author focuses on studying the digital economy as one of the future economic aspects that helps to achieve sustainable development, and how to apply it in Egypt. He illustrates the global development in the digital economy and the current economic conditions in Egypt.

Mkrttchian V. (Australia), Y. Vertakova (Russia) research digital sharing economy [Mkrttchian & Vertakova 2019]. They decided, that one of the effects of global technological changes and digitalization of consumer experience was the development of a new form of trade and property relations - a sharing economy. Reorientation of consumer behavior from purchasing to sharing, exclusion of intermediaries from a «client - contractor» chain, strengthening the role of online reputation and self-regulation of the community to ensure the quality of services revolutionize a business model in many areas.

Ramija B. (India) research, the Indian economy [Ramija 2019]. The author showed the Indian economy is growing at noticeable rates. The online market is expected to grow by 56% in 2015-2020. Traditional markets are only expected 2% growth during the same time. The implication of e-commerce includes various issues such as economic, legislative, technological and social.

Research on digital economics, that A. Goldfarb (Canada), C. Tucker (USA) did, examines whether and how digital technology changes economic activity [Goldfarb & Tucker 2019]. In review 2019, the authors emphasize the reduction in five distinct economic costs associated with digital economic activity: search costs, replication costs, transportation costs, tracking costs, and verification costs.

Moroz M. (Poland) did a comparative analysis of the Level of development of the digital economy in Poland and selected European countries [Moroz 2019].

The impacts of the information economy on the social and economic processes in Ukraine are being considered by researchers A. Chukhno, O. Dzhusov, S. Apalkov, S. Kubov, S. Rybak, K. Lantratov, V. Tyutyunin, E. Zelinskaya, V. Konyukhov, E. Kocheneva, V. Pivovarova, E. Kholodilova, O. Shcherbatenko, E. Yumaev, T. Orekhova, Ya. Tertychnyi, O. Zubchik.

Chukhno A. thinks the global digital economy reaches maturity in developed countries but remains an area with untapped potential for Ukraine [Yukhymenko, Chukhno & Leonenko 2007]. Therefore, in his opinion, the concept of information and communication technologies (ICTs) is central both to the economic development and increased the potential for advancing progress towards social development nowadays.

Dzhusov O. A., Apalkov S. S. found out that the dynamical development of the global digital space is influenced by active investments of leading countries and the aggressive policy of the largest IT companies [Dzhusov & Apalkov 2017]. They revealed the following structural changes in the capital market: investments in global projects increased and formed the united consortia and integrations; global investments flowed to the technologies of «mass market» (online games, e-commerce) and storage arrays databases; the development of global and local digital market created favorable conditions for countries with high level of public education and informatization of national economies. They claim the evaluation of promising niches and segments of the global digital market requires the development of new approaches for predicting investment returns and assessing investment risks of digital technologies [Dzhusov & Apalkov 2017].

Kubiv S. believes that Ukraine is a strategic partner for the EU in expanding the Digital Single Market [Kubiv 2017]. In his address, Stepan Kubiv emphasized that this is an effective tool for economic growth, which creates wide opportunities for the use of modern advanced technologies in all sectors of the economy and life. The digital market will enable the creation of a successful trade, better security, attract more opportunities for entrepreneurs and better conditions for citizens. The Author also reminded that Ukraine is already part of the process of digital transformation, which includes the development of advanced communication technologies, cybersecurity, reduction of international roaming charges with the Eastern Partnership countries, development of digital infrastructure and e-commerce [Kubiv 2017].

Orekhova T. V., Tertychnyi Ya. S. revealed that coordination of increasingly complex and scattered global production networks could not have been possible without significant improvement in communication capabilities [Orekhova & Tertychnyi 2017]. They claim information and communication technologies (ICTs) are a fundamental stimulus for the growth of international production. They found out directions of the main transformations taking place in the existing approaches to the organization and management of international production systems are determined.

Zubchik O. A. elicits the necessity of introduction of strategic planning for state competitiveness formation on national and regional levels [Zubchik 2019]. In order to form a strategy for increasing the state's competitiveness in the perspective of political time, the state regional policy needs to be improved, which should be formed on the basis of assessing the level of political, managerial and economic development of the region and its competitive advantages both at present and in future periods. The Author offers a set of administrative, political, organizational, economic and institutional tools to ensure the competitiveness of Ukraine. It suggests increasing the effectiveness of subjects of public administration and management, improving state policy for the development of economic freedom and entrepreneurship as a response to the challenges of educational emigration ('brain drain'), intensifying efforts of public administration authorities for the use of human resources, implementing the experience of leading states with the view of ensuring the state's competitiveness in the long term [Zubchik 2019].

Today, the digital economy has unconditional advantages over material commodity-cash exchanges, such as speed of delivery of goods or virtually instantaneous delivery of services. Another benefit of the digital economy is the lower cost. For example, an e-book is usually 25-55% cheaper than the printed version. But what else do we know about the digital economy - what are its drivers? What are its structural components? What are its features? Considering that the digital economy in the world is gaining momentum and is not happening in Ukraine, identifying features of government mechanisms and proposals for government support and development of the information economy in Ukraine is becoming increasingly relevant.

The primary tasks are to identify practical legal, regulatory (organizational), economic and financial infrastructural mechanisms, methods of development of the digital economy and «digital society», to define its goals and objectives, its specific indicative indicators, priority areas of development.

Purpose and main tasks - identifying opportunities for digital economy development as an element of Ukraine's social development strategy.

Research results. Thanks to technological advances, the development of information and communication technologies (ICTs) and the Internet, the concept of «digital economy» first emerged, in 1995, at the suggestion of an American scholar from the University of Massachusetts - Nichroponte Nicholas [Negroponte 1995]. The benefits of the digital economy, in Nicholas Negroponte's view, could be: lack of physical dimensions of products (in particular, weight, size) that are replaced by information volume, as well as lower resource costs for the production of electronic goods. Smaller area occupied by products, as well as virtually instantaneous movement of goods through the Internet [Yumaev 2017].

We consider the digital economy as a stage of the information economy. The driving force behind the growing digital economy is digital data and digital platforms. We consider the information economy as a part of the information society, in which information has become the most important productive, social and social development resource, information is almost a synonym for knowledge.

The Digital Agenda for Europe (2020) was developed and adopted in 2010. Most EU countries see it as a framework and adopt relevant National Information Society Development Programs for 1-3 years, setting out medium-term and short-term priorities and indicators for achieving those goals. Yes, Germany has already adopted the second program for 2017-2022. As part of the implementation of the Digital Agenda for Europe, the European Union has adopted the Digital Single Market strategy. The program is planned to invest € 300 billion over 7 years.

Thanks to the work of the Parliamentary Committee, Ukraine is able to join this strategy and in this case to expect 6-10 billion euro's in investments in digital infrastructure» [Ordinance of the Cabinet of Ministers of Ukraine of January 17].

The processes of digital transformation of the economy and society have many prospects for stimulating innovation, efficiency, improving service delivery and thus can contribute to inclusive and sustainable economic growth and increased well-being. However, the development of the digital economy entails dramatic changes in social relations, the structure of the organization of markets, which leads to the emergence of challenges related to jobs, skills, security and privacy [Dzhusov & Apalkov 2017].

In this context, R. Lipsey, exploring the link between technological change and economic development, noted that «the introduction of digital technology will have a significant impact

on society, characterized by an initial decline in productivity and a delay in productivity gains from the introduction of new technologies and staff cuts (since many old skills will no longer be needed), technological unemployment, growing income-sharing disparities that are temporary before OIG jobs are created, significant changes in the composition of productive forces, staff education and skills required, infrastructure, rules and regulations (intellectual property, antitrust, etc.), lifestyle» [Lipsey 2002].

Among the benefits for society from developing the digital economy, he calls «providing better and cheaper access to knowledge and information, which accelerates the implementation of operations and business processes, lowers their value, which in turn increases the benefit of citizens and consumers» [Lipsey 2002]. Therefore, today the main task of political figures is to identify a set of measures that would increase society's benefits from the development of the digital economy.

Only a comprehensive and systematic policy approach will benefit from digital transformation for more inclusive growth. Despite the alleged remoteness of the prospects for the digital revolution, experts from the Organization for Economic Co-operation and Development (OECD - an international organization with 34 countries and 70 partner countries today) are convinced that action is needed now, as new technologies such as The Internet of Things (IoT) is gaining ground in the modern world, and current government practices are becoming less and less relevant in this environment of change.

Therefore, in 2017 the OECD has identified 4 key technologies for the development of digital transformation, namely: the Internet of Things (IoT), Big Data Analysis Technology (BD), Artificial intelligence (AI) and Blockchain technology [Digital economy outlook 2018].

The Internet of Things (IoT) includes devices and objects that can be changed via the Internet. So far, we can see unsystematic development in this direction in Ukraine. In particular, by 2016, the number of Internet users in Ukraine was growing rapidly and exceeded 60% - in early 2016, almost two-thirds (62%) of Ukrainian adults were using the Internet.

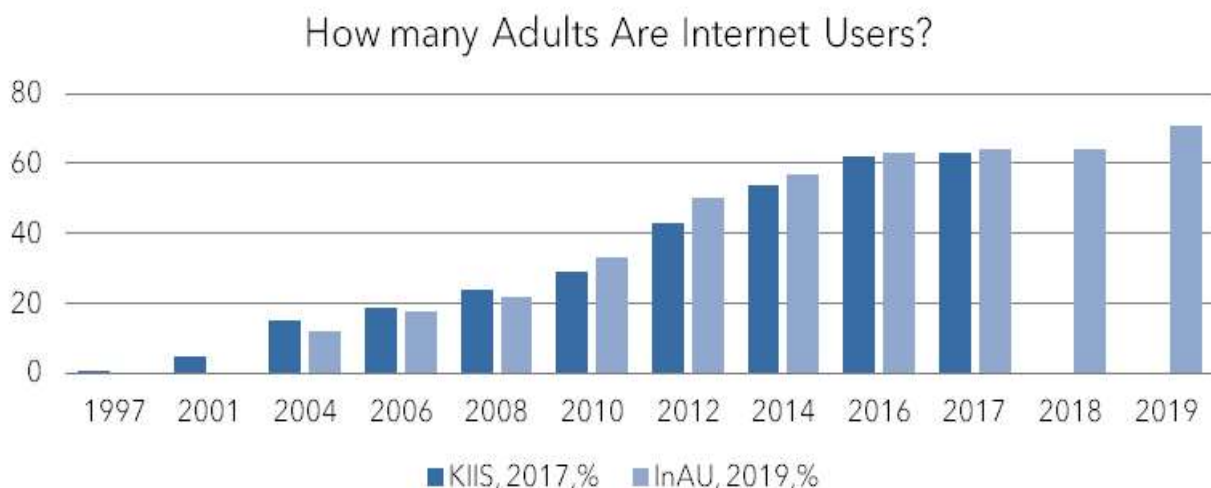


Figure 1 - Share of Internet users among the adult population of Ukraine

Source: 1) *Dynamics of Internet usage in Ukraine, 2017*; 2) *Internet penetration in Ukraine, 2017*.

The share of users among 18-39 year olds in Ukraine reached 91%, according to KIIS survey data. In the spring of 2017, 63% of the adult population of Ukraine were Internet users.

Compared to most developed countries in Western Europe and North America, Internet penetration in Ukraine is somewhat slower [Dynamics of Internet usage in Ukraine 2017].

A survey by the Internet Association of Ukraine confirms that in 2017 and 2018 for the first time since 2004, when Internet surveys began, the number of users decreased. However, the penetration of regular Internet users in Ukraine as to the end of the third quarter of 2018 decreased to 20.8 million (63%) from 21.35 million in the second quarter [Internet penetration in Ukraine 2017].

Among Ukrainian Internet users, 40% have an average income level, 40% have below average, 38% of internet users have a secondary education, 32% have a university degree.

The main indicators for the audience of Internet users as of 2019 are: 71% share of regular users; 65% home internet accessibility.

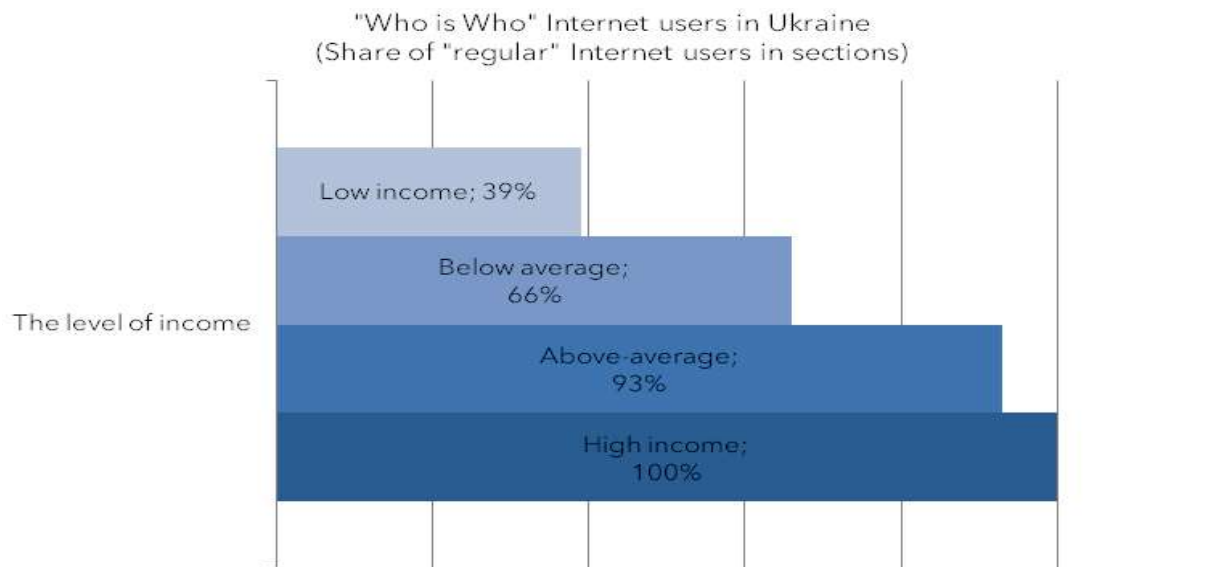


Figure 2 - Distribution of users by income level

Source: *Internet penetration in Ukraine, 2019*

The socio-demographic structure of "regular" Internet users is 47% for men and 52% for women [Internet penetration in Ukraine 2019].

According to the sources cited above, the development of the Internet generates this kind of social differentiation (and possibly information discrimination) in Ukraine as the rural population, low-income people and older age groups use the Internet much less than others.

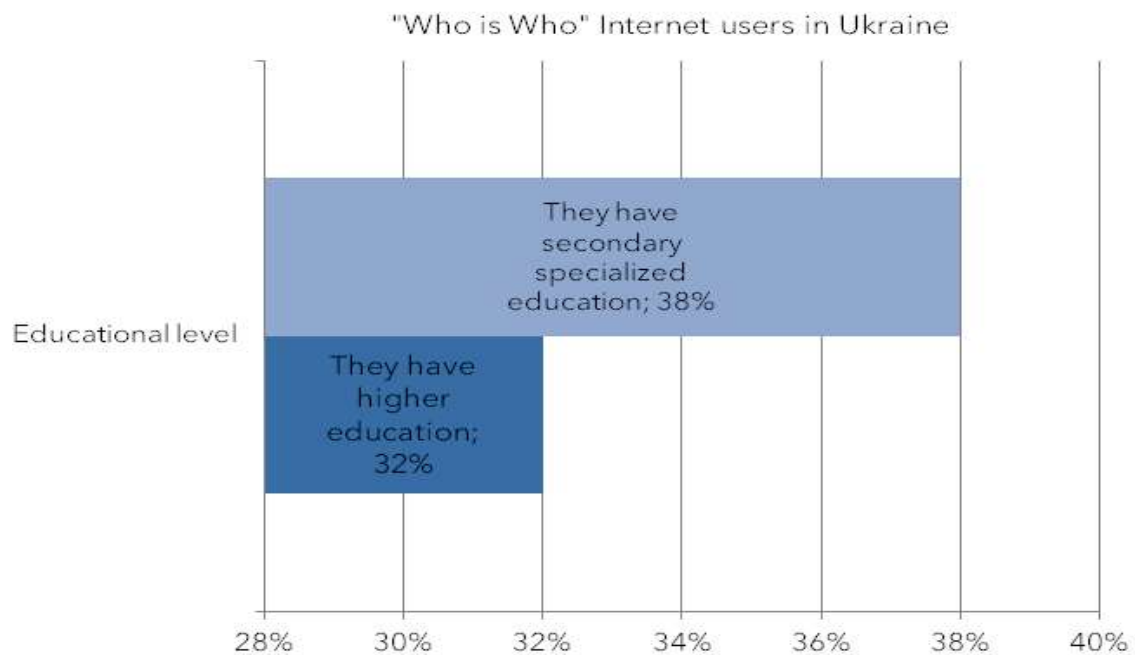


Figure 3 - Distribution of users by education level

Source: *Dynamics of Internet usage in Ukraine, 2017*

But despite the fact that Ukraine is not at the forefront of countries such as Estonia, Ireland, Sweden, Israel, the United Kingdom, Australia, where ROI investments in digital transformation reach 500%, the Government of Ukraine also demonstrates its ability and willingness to develop the digital economy. In January 2018, the Concept of Development of the Digital Economy and Society of Ukraine for 2018-2020 was approved, underlining that Ukraine also has certain opportunities in extending services, modern products to improve the quality and competitiveness of the economy [Ordinance of the Cabinet of Ministers of Ukraine of January 17].

To analyze these opportunities, let us turn to the criteria by which experts determine the state of development of the digital economy. By organizing these criteria, we get two blocks of criteria. The first is the quantitative indicators and indices that characterize the degree of penetration of ICT into the economy and social life.

The second is the indicators that in 2017 the OECD identified as key technologies for the development of digitalization and digital transformation - the Internet of Things, Big Data Analysis Technology, Artificial Intelligence and Blockchain Technology [Digital economy outlook 2018].

The first block is quantitative indicators, in particular, the number of subscribers of wireless Internet access. These are active subscribers to mobile, satellite, wireless landline fixed and mobile Internet and broadband Internet services - individuals / entities that have concluded contracts / contracts for the use of data transmission network services at the end of the reporting period. Indicators of the number of state and local government bodies provided electronically. Indicator of innovation is the number of goods, works, services that are new or that have undergone various technological changes over the last three years. The following rating indicators of Ukraine (based on global development indices) were determined: «1) in 2020 Ukraine - №40 in the Networked Readiness Index (WEF) rating (64th

place in 2016); 2) in 2020, Ukraine - № 40 in the Global Innovation Index (INSEAD, WIPO) ranking (56th place in 2016); 3) in 2020, Ukraine - №50 in the Global Competitiveness Index (WEF) ranking (85th place in 2016, cumulative index)»[Digital Agenda of Ukraine 2020 2016]. Consider what they mean. The Global Innovation Index is formed on the basis of 81 indicators that reflect the key factors of innovative development of countries [The Global Innovation Index 2017]. The WEF Networked Readiness Index is a prerequisite for the spread of ICT for socio-economic development [The Global Information Technology 2016]. The ICT Development Index (ITU) is the degree of development of the ICT infrastructure and the demand for ICT by the population. It shows the scale of the «digital divide» between developed and developing countries [Measuring the Information Society Report 2017]. The E-government Development Index - demonstrates the degree of readiness of countries to implement and use e-government services [Measuring the Information Society Report 2017]. Global Cybersecurity Index - the calculation uses data on the development of legal, technical and organizational measures in the field of cybersecurity, the availability of state educational and scientific institutions, partnerships, cooperation mechanisms and information exchange systems [Global Cybersecurity Index 2017].

The second block of criteria is the OECD-defined digital economy (Internet of Things, Big Data, Artificial Intelligence, and Blockchain). The first problem for Ukraine is that there are no standards when using the Internet of Things. At the national level, they are accepted in Germany, the Netherlands, Japan and Spain. The OECD has announced that it will continue to work to develop standards for the Internet of Things within the framework of the 2017-2018 horizontal Going Digital project [Digital economy outlook 2018]. It is a multidisciplinary, integrated initiative by OECD member countries to help policy figures better understand the digital changes taking place in various sectors of the economy and society at large. This implies the development of policy instruments that will contribute to the prosperity of the economy and society in the context of universal digitization. The result of the project is to formulate recommendations for a proactive rather than passive policy that will drive economic growth and social well-being and help address the slowdown in growth, unemployment and growing inequality in many countries. As part of this project (2017 - 2018), OECD experts are exploring the opportunities and prospects for further deployment of digital technologies, including in the fields of science, financial markets, education and skills, public administration and commerce. The project brings together the experience and practice of OECD member countries in the digital economy and supports discussions at the international level to address the challenges posed by digital transformation. The Going Digital project was officially launched on January 12, 2017 at a conference jointly organized by the OECD and the German Ministry of Economy and Energy in Berlin. Key issues of the project: the need to increase investment in digital infrastructure; the need to stimulate competition in the information and communication sector, international cooperation and cooperation between antitrust authorities; the need for cooperation between stakeholders to improve the reliability and security of digital networks, respect for personal freedoms and consumer rights, and the compatibility of digital standards; the need to guarantee the benefits of digital transformation for countries of all levels of economic development, for businesses of all sizes, people of all ages and educational backgrounds; the need to improve the measurement of digital transformation, its implications, including data flows and macroeconomic statistics; the need to adapt the public sector and services to change. The project should be implemented within two years (2017-2018). This should also be a top

priority for Ukraine, which works closely with the OECD. In addition, the OECD conducts regular peer reviews in the Member States and, in exceptional cases, non-member countries. Conducting every such OECD survey in Ukraine contributes to deepening cooperation. Surveys are of great practical importance as they provide specific recommendations for improving public policy in a particular area. In 2014, the OECD Council decided to deepen cooperation with Ukraine by providing the Organization with experience to address existing public administration issues and carry out the necessary reforms.

Another one technology, as defined by the OECD, is Big Data technology, which is a set of methods and tools used to process and interpret large amounts of data. They are widely used for establishing relationships and dependencies, preparing forecasts (public sector data, health care, education).

Artificial intelligence is a technology that performs human-like cognitive functions. Experts believe that the use of artificial intelligence will help to solve complex of problems, increase productivity, competitiveness.

Blockchain is a decentralized and disintegrated technology that facilitates economic transactions and peer-to-peer interactions. Allows you to eliminate the need of use of trusted powers or intermediary operator (in insurance, financial sphere, virtual currencies). Ukraine has already launched an electronic state auction based on cryptographic technology. Also, the organizational and economic structure of digital economy entities in the context of globalization and innovation development no longer meets the current objective needs of Ukrainian society - «only 17% of Ukrainian industries use innovation, while in the EU this figure reaches about 49%. We lose or waste our potential due to low production efficiency» [Kubiv 2017]. Therefore, there is a need to create effective information support for society in order to receive as many stakeholder benefits as possible from the development of the digital economy as part of a social development strategy. After all, «the digital economy is also the Digital Single Market. If Ukrainian IT companies can afford the most up-to-date equipment, then small and medium-sized businesses, potential buyers of their goods and services in Ukraine, are limited in both technology and finance. This also applies to the average consumer who, for the same reasons, does not have modern digital goods (such as «smart housing», automated mobile shops, or even the most primitive self-checkout offices). Here is a simple formula: more available functionality of goods and services - more money, more jobs» [Shcherbatenko 2018]. In the global economy, 20% of the digital economy was overcome in 2015. Today, the digital economy has an unconditional advantage over material commodity exchanges, such as speed of delivery of goods or virtually instant service delivery. Another benefit of the digital economy is the lower cost. For example, an e-book is usually 25-55% cheaper than the printed version. One of the key benefits of the digital economy over material exchanges is that electronic goods are virtually endless and exist in electronic form. Material - always limited in quantity. It is much more difficult to access them [Tyutyunin 2015]. Today, the e-economy has already gone beyond the commercial aspects. It is implemented in large companies and corporations, as well as in the social spheres of life of the population of the countries. In addition, there is a «digitalization» of governmental organizations and structures in the world, in particular, Ukraine's neighboring countries are introducing digital technologies in government at a rapid pace [Rybak & Lantratov 2017]. In addition, the digital economy has a basic network structure at its core. Society received a new type of social structure, became a «network society».

In these new conditions, public administration is developing and transforming. Flexible management and new public management change centralized administrative control [Zubchik 2018]. From the policy of restriction of monopoly there is a transition to creation of conditions of free enterprise and investment, development of competitive environment, development of innovative activity. This is done through various organizational and economic methods and tools. The Cabinet of Ministers of Ukraine approved the above-mentioned Concept of Digital Economy Development and Society of Ukraine for 2018-2020 and approved the plan of measures for its implementation. This document was developed jointly by Hi Tech Office Ukraine, the Cabinet of Ministers of Ukraine, the Ministry of Economic Development and Trade of Ukraine, the Committee on Information and Communication and a group of leading experts. It emphasized that the path to the digital economy and digital society of Ukraine lies through the domestic market of production and, most importantly, the use and consumption of information and communication technologies and digital technologies. The concept of digital economy development is an important step towards stimulating the domestic consumption, adoption and production of digital technologies. The document identifies the first steps to implement appropriate incentives and create conditions for digitization in the real economy, society, education, medicine, ecology, etc., challenges and tools for digital infrastructure development, digital competencies for citizens, and identifies critical areas and projects for digitalization in the country.

Conclusions. The development of the digital economy is a set of mechanisms, motivations and incentives for the development of digital technologies, and therefore a branched digital infrastructure, in order to use the state's capabilities, enhance its competitiveness, and increase the well-being of citizens. Currently in Ukraine the market of information products and services is at the stage of formation. The main components of the information products market are the following: technical and technological components (modern information equipment, powerful computers, advanced computer network and related information processing technologies, which enables to work on the global computer network Internet, search information, customers, goods, hypertext management technology, e-mail); regulatory and legal component (the legal basis for regulating the information market); organizational component (elements of state regulation of interaction between producers and distributors of information products and services).

The digital economy is a new kind of economic relationship that causes changes in social relations that have prospects and risks. Perspectives are stimulating innovation, increasing governance efficiency, improving service delivery, inclusion and sustainable economic growth, the well-being of citizens, countries and society. Risks - a new market is being structured, leading to job, skills, security and privacy challenges. The public and the state must be properly prepared for such changes. Therefore, the development of the digital economy in terms of public administration should be seen as an element of a social development strategy that needs proper scientific and expert substantiation. The concept of digital development from the Ukrainian government envisages the implementation of a series of measures aimed at closing the digital divide (from digital jobs to digital initiatives in the modern world, conducting digitalization of industry and business, defining basic digital services, preparing educational modernization measures, as well as Ukraine's digital development projections to 2020. At the same time, the tasks of identifying specific practical legal, regulatory (organizational), economic and financial infrastructural mechanisms for

the development of the «digital society» that would facilitate the rapid development of the digital economy remain unresolved.

The results of the study can be used to further study and develop programs and strategies for the development of the digital economy in Ukraine. It is especially important to study this topic in the context of the concept of sustainable socio-economic development.

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