

УПРАВЛІННЯ ЕКОНОМІКОЮ: ТЕОРІЯ ТА ПРАКТИКА

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TRENDS OF THE DEVELOPMENT OF DIGITAL ECONOMY IN UKRAINE

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In the article the ontological peculiarities of the concepts of "information economy" and "digital economy" and their interdependence were investigated. The features of the information economy and digital economy at the present stage of the development of the information society were determined. The stages of the development of informational, in particular, the digital economy in Ukraine, were analyzed. The description of the information and digital infrastructure of Ukraine was given, and its main disadvantages were determined. Directions of formation of the digital economy and information society in Ukraine were proposed.

Key words: information economy, digital economy, information and communication technologies, information society, economic development, digital infrastructure, information production.

Introduction. Modern information and communication technologies significantly change all social relations, in connection with which the formation of a new informational society and, accordingly, a new stage of economic development – the digital economy. Despite similar properties with traditional economic relations, the latter is largely different from them, which makes it relevant from the standpoint of the interest of the scientific community, particularly: Sagynbekova A., Porat M., Dyatlov. A., Heyets V., Kolyadenko S., Efimushkin V., Andieva E., Filchakova V., Vasilenko N.

One of the key directions of the state's development is economic development. The introduction of the digital economy is an important stage in the development of the economic structure and the information social environment, which makes it possible to expand the horizons of the information space, use the human intellectual potential and knowledge, creating a favorable safe social environment in the future. Thus, the problem of the formation and development of the digital economy is relevant not only in the theoretical, but also in practical terms, first of all, at the state level [1].

The purpose of research is to identify the concept of a digital economy, its development prospect, as well, as the consideration of the level of the digital economy in Ukraine and the trends of its development. For achieving this goal, the following tasks were set:

- interdependence of the concepts of "information economy" and "digital economy";
- ontology of the emergence and development of digital economy;
- analysis of development trends of the digital economy in Ukraine.

Main part. The development of globalization processes in the world creates prerequisites for accelerated development of the digital economy. However, this is primarily due to the informational and socio-economic inequalities that arise between developed and developing countries due to a significant difference in the growth rates of the volumes and nomenclature of goods and services which are produced and provided through information and communication technologies, communicative technologies. Therefore, for the formation and development of the digital economy, states first of all must form the necessary level of information economy.

The aforementioned justifies the necessity of conducting ontological studies of the concepts of "information economy" and "digital economy" and their interdependence.

In the process of developing the information economy in Ukraine, the foundations of its development in the legislative framework were consolidated. In particular, the Verkhovna Rada of Ukraine adopted the Law "On Approval of the National Strategy for the Information Society Development in Ukraine for 2006-2015" [2] and the Law "About the Basic Principles of the Information Society Development in Ukraine for 2007-2015" [3].

According to this strategy, one of the main priorities of Ukraine is development of information society in which the totality of social relations in different spheres of human activity (politics, economics, education, culture, leisure, personal life, etc.) takes place on the basis of widespread use of modern information and communication technologies, which allows everyone to create information and accumulate knowledge, have free access to them, provides opportunities for their dissemination and use for the sake of social progress and personal intellectual growth.

The term "information economy" was initially interpreted on the basis of the concept of the primary information sector and the secondary information sector, which served as an annex to the traditional four sectors [4]. The primary informational sector covers the field of information services, as well as the production of equipment necessary for the implementation of information technology. The concept of the primary information sector implies that the value of information products and services should be included in GDP. The secondary information sector covers the production of non-informative goods and services for the information sector. In other words, M. Porat has united in the informational economy both the information service industry and the industries that provide the functioning of the primary information sector [4, p. 70].

At the beginning of the XXI century, the paradigm of the information economy envisaged that all existing socio-economic phenomena have a common basis in the form of a stable information structure. Also, different economic phenomena, their forms of expression and quantitative characteristics can be described as a set of information components [6, pp. 78-79]. Accordingly, the information criterion as a way of obtaining and using information, as well as managing information processes allows us to classify the stages of development society and formulate the principles of building an information society and information economy, in particular:

- multilevel network organization of society;
- system integrity of the network organization of the information economy;

- hierarchy of goals;
- the presence of direct and inverse relationships between the elements of the network structure.

Later, the information economy was associated, first of all, with the knowledge economy, which envisaged the use of knowledge for economic development. Information and knowledge were used for the production of competitive products, which ensures economic development. Accordingly, the problems of obtaining and applying knowledge were considered one of the subjects of research in the information economy. At the same time, it should be noted that the knowledge economy differs from the information economy, since the main resource of the first is information, and the product is information and knowledge, whereas for knowledge economy the main resource is knowledge and the main product is intellectual capital [7].

Summarizing, it is advisable to characterize the information economy by the following provisions:

- based on information and knowledge as a production resource;
- provides for information production;
- uses information technologies that provide knowledge transfer.

That is, the information economy includes the creation and use of information resources in a structured information space, and also provides opportunities for the production of intellectual capital and innovation, and thus affects economic processes and socio-economic relations.

Instead, the digital economy is more widely defined as a digital based economy. The digital economy is also sometimes called the Internet economy, a new economy, or a web economy [8].

Instead, the digital economy, in its simplest form, is defined as an economy based on digital computer technology. The digital economy is also sometimes called the Internet-economy, a new economy, or a web-economy [8].

According to the World Bank, the digital economy is a system of economic, social and cultural relations based on the using of digital information and communication technologies [9]. Some scientists distinguish three basic components of the digital economy: infrastructure, including hardware, software, telecommunications, etc. [10]; electronic business transactions, covering the business process, implemented through computer networks in the framework of virtual interactions between the subjects of the virtual market; E-commerce, which involves the supply of goods through the Internet and is currently the largest segment of the digital economy [11].

Leading experts believe that there are two approaches to the term "digital economy".

The first approach is "classic": the digital economy is an economy, based on digital technologies, which characterizes exclusively the area of electronic goods and services (telemedicine, distance education, sales of media content, etc.).

The second approach is expanded: "digital economy" is the economic production and use of digital technologies "(Digital economy: as experts understand this term. RIA News-2017) [12].

Thus, the main features of the digital economy are expedient to determine the following:

- economic activity focuses on the platforms of the "digital" economy;
- presence of personified service models;
- direct interaction between producers and consumers;
- distribution of economy of common use;
- a significant role of the contribution of individual participants.

Trends in the development of information, in particular, the digital economy in Ukraine, have made it possible to identify four main stages:

The first stage (2010-2013) – provided for stabilization of the socio-political and socio-economic situation, implementation of reforms, first of all in the field of public administration, providing the necessary organizational and economic conditions for reforming all spheres of public life within the framework of the European integration course, improvement of legislation on information society issues.

The second stage (2014-2015) envisaged the achievement of the goals and objectives set forth in the Law of Ukraine "On the Basic Principles of the Development of the Information Society in Ukraine for 2007-2015".

The third stage (2016-2020) should include the adjustment of the Strategy based on the evaluation of its implementation. In Ukraine, there is a potential for building the information economy due to the existing intellectual capital, a developed business environment in the field of information and communication technologies. The formation of the information economy is a large-scale task, which requires a harmonious combination of efforts of the state, civil society, professional associations, business and citizens on the basis of the implementation of the relevant National Strategy [13].

The fourth stage (2018) should be noted after the entry into force of the Law of Ukraine "On the Basic Principles of Cybersecurity of Ukraine" dated October 5, 2017, No. 2163-VIII [14] in particular, the legal and organizational framework for ensuring the protection of vital interests of man and citizen, society and state, national interests of Ukraine in cyberspace, the main aims, directions and principles of state policy in the field of cybersecurity and the creation of the Department of Cyberpolicies.

Developed digital infrastructure is the foundation of the digital economy. However, digital infrastructure itself is not only telecommunications but also includes a set of technologies, products and processes that provide computing, telecommunication and networking capabilities and work digitally. However, according to the rating of the World Economic Forum (WEF) on technological development, which includes two components – technological adaptation and use of information and communication systems, Ukraine in 2017-2018 gained only 81 place among other countries. Note that four indicators are used to assess the level of use of information and communication systems in determining the WEF rating: Internet users is 81th (2015-2016, 2016-2017 – 80th), fixed-broadband Internet subscriptions – 63th (72th in 2015-2016, 64th in 2016-2017), Internet bandwidth – 54th place (64th in 2015-2016, 68th in 2016-2017), mobile-broadband subscriptions – 115th place (121th in 2015-2016, 130th in 2016-2017,) (The Global Competitiveness Report, 2015-2018) (Fig. 1).

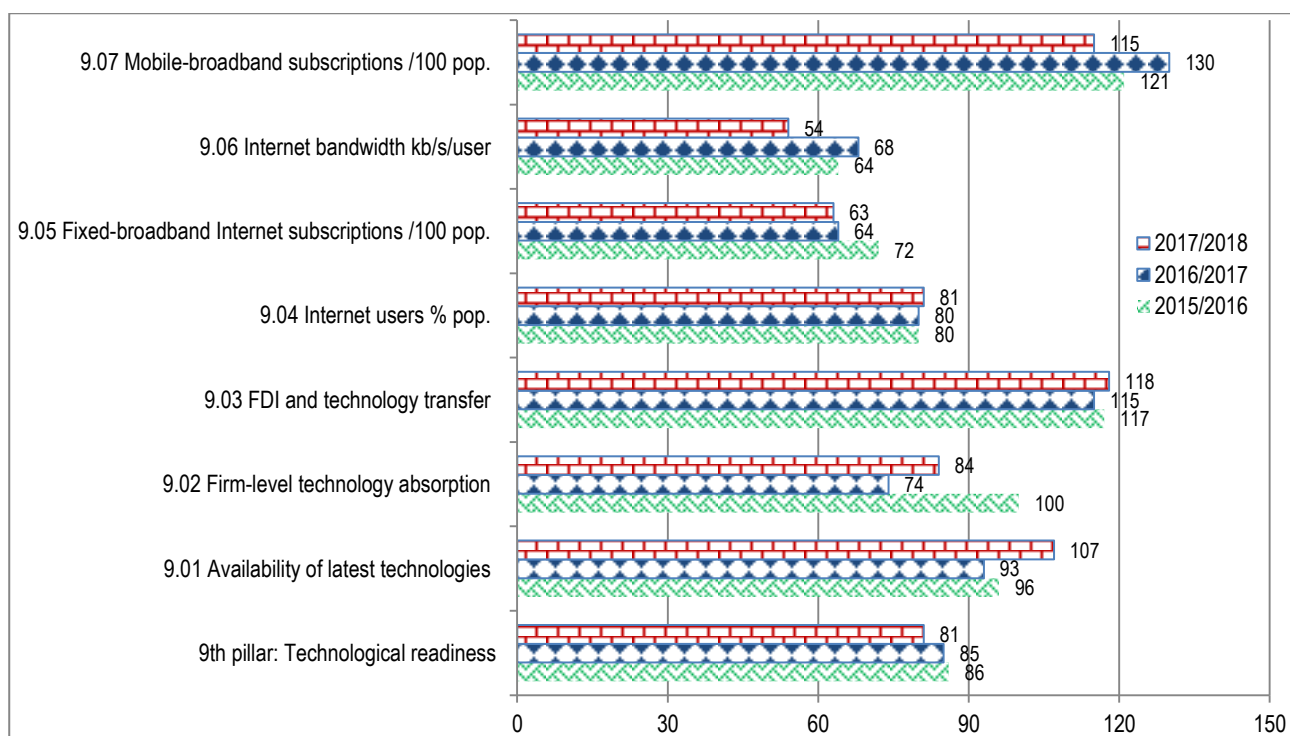


Fig. 1. WEF rating for technological development of Ukraine in 2015-2017.
(compiled by the authors on the basis of The Global Competitiveness Report, 2015-2018 [15])

Conclusions. Consequently, an analysis of the use of information and communication technologies in Ukraine has shown the growth of the digital divide, a significant lag in Ukraine regarding the development of digital technologies.

Today, the digital economy is an effective foundation for the development of the system of public administration, economy, business, social sphere and society as a whole. The formation of the digital economy is also a matter of national security and independence of Ukraine, competition of domestic companies, the country's position on the world stage for the long-term perspective. For the successful development of the digital economy in Ukraine, effective state policies are needed to over-

come the "digital divide" and stimulate the development of the digital economy. The key strategy for Ukraine's "digitalization" should be to work with the internal market, and key initiatives are the formation of motivations and needs in digital technologies for consumers (business, state, citizens). It is necessary to approve at the state level the project "Digital agencies of Ukraine – 2020" in which to envisage the active role of the state in implementation of the implementation of the strategy for the development of the digital economy, the digitalization of all spheres of activity, the active implementation of the Industry 4.0, the formation of the necessary professional skills.

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Маркіна І.А., Дячков Д.В. Тенденції розвитку цифрової економіки в Україні

У статті досліджено онтологічні особливості понять «інформаційна економіка» та «цифрова економіка» та їх взаємозалежність. Визначено особливості інформаційної економіки та цифрової економіки на сучасному етапі розвитку інформаційного суспільства. Проаналізовано етапи розвитку інформаційної, зокрема, цифрової економіки в Україні. Охарактеризовано інформаційну та цифрову інфраструктуру України, визначені її основні недоліки. Запропоновано напрями формування цифрової економіки та інформаційного суспільства в Україні.

Ключові слова: інформаційна економіка, цифрова економіка, інформаційно-комунікаційні технології, інформаційне суспільство, економічний розвиток, цифрова інфраструктура, інформаційне виробництво.

Маркіна И. А., Дячков Д.В. Тенденции развития цифровой экономики в Украине

В статье исследованы онтологические особенности понятий «информационная экономика» и «цифровая экономика», их взаимозависимость. Определены особенности информационной и цифровой экономики на современном этапе развития информационного общества. Проанализированы этапы развития информационной, в частности, цифровой экономики в Украине. Охарактеризовано информационную и цифровую инфраструктуру Украины, определены ее основные недостатки. Предложены направления формирования цифровой экономики и информационного общества в Украине.

Ключевые слова: информационная экономика, цифровая экономика, информационно-коммуникационные технологии, информационное общество, экономическое развитие, цифровая инфраструктура, информационное производство.

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