

SOCIAL AND ECONOMIC ASPECTS
OF INTERNET SERVICES MARKET
DEVELOPMENT

Monograph

Edited by

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Contents



I. WORLD EXPERIENCE OF ECONOMIC AND SOCIAL PROGRESS OF THE MARKET OF SERVICES IN THE INTERNET SPACE	6
1. GLOBAL COMPANY INVESTMENT MARATHON EdTech: NEW LEADERS AND OUTSIDERS	6
<i>Irina Tatomyr, Alexander Yatsun</i>	
2. ECONOMIC DEVELOPMENT OF THE GLOBAL ONLINE EDUCATION SERVICES MARKET.....	15
<i>Tetiana Ostapenko</i>	
3. INNOVATIVE-INDUSTRIAL MODEL OF ENTREPRENEURIAL UNIVERSITIES IN THE INTERNET SPACE	26
<i>Valerii Osetskyi, Tetyana Kuzmenko, Viktoriia Kulish</i>	
4. ADVANTAGES AND DISADVANTAGES OF ONLINE TRADE IN THE CONDITIONS OF GLOBALIZATION	36
<i>Yurii Shulzhik, Vladimir Mural, Oksana Kvasnii</i>	
5. FEATURES OF E-COMMERCE DEVELOPMENT IN THE COVID-19 PANDEMIC.....	45
<i>Liubov Kvasnii, Artem Ahekyan, Liubov Malik, Vasylyna Fedyshyn</i>	
6. DIGITAL TRANSFORMATION OF THE BUSINESS ENVIRONMENT: PROSPECTS AND PARADOXES	55
<i>Olena Dovgal, Georgiy Dovgal, Nataliia Goncharenko, Yelizaveta Fomina</i>	
7. AN APPLICATION OF THE MODERN INTERNET TECHNOLOGY IN TOURISM	67
<i>Olena Mukan, Liubov Hanas, Iryna Plish</i>	
II. THE LATEST TRENDS IN THE SOCIO-ECONOMIC DEVELOPMENT OF THE INTERNET SERVICES MARKET	79

8. PROSPECTS FOR THE DEVELOPMENT OF THE ONLINE FOOD MARKET	79
<i>Larysa Kapinus</i>	
9. THE INFLUENCE OF ARTIFICIAL INTELLIGENCE ON THE CREATION OF NEW JOBS	89
<i>Nataliia Hrushchynska</i>	
10. E-COMMERCE MARKET DEVELOPMENT TRENDS	100
<i>Anna Blakyta, Iryna Vavdiichyk</i>	
11. CZYNNIKI RYZYKA CYBERSUICIDALNEGO W NOWOCZESNYM SPOŁECZEŃSTWIE INFORMACYJNYM	110
<i>Natalia Warga, Bohdanna Gwozdecka, Natalia Nikon, Wiktoria Ruhl</i>	
12. FORMATION OF THE IMAGE AND THE COMPANY BRAND PROMOTION CONCEPT IN THE INTERNET SPACE.....	122
<i>Anna Danylyuk</i>	
13. IMPROVEMENT OF PUBLIC SERVICES AND DEVELOPMENT OF INTERACTION BETWEEN GOVERNMENT AND BUSINESS WITH THE HELP OF INFORMATION AND COMMUNICATION TECHNOLOGIES.....	133
<i>Zoia Kalinichenko</i>	
III. CHALLENGES AND OPPORTUNITIES FOR THE DEVELOPMENT OF THE INTERNET SERVICES MARKET IN UKRAINE	144
14. E-COMMERCE IN UKRAINE: FUNDAMENTALS, TRENDS AND CURRENT ISSUES.....	144
<i>Vita Makarenko, Edward Mokryak, Alina Kuzmych</i>	
15. MAIN TRENDS OF DIGITAL TRANSFORMATION OF UKRAINE'S ECONOMY IN THE CONTEXT OF GLOBAL MULTICANAL DIGITALIZATION.....	166
<i>Mariana Dorosh-Kizym, Vasyl Chemerys, Vitalii Dushka, Volodymyr Maksym, Marta Dorosh</i>	
16. DEVELOPMENT OF THE DIGITAL ECONOMY AS A	

DETERMINING FACTOR FOR PROVIDING COMPETITIVE ADVANTAGES OF UKRAINE INDUSTRIES.....	188
<i>Larysa Hryshyna, Elena Pogoryelova, Natalia Mihai, Nataliia Hryshyna, Irina Khmarska</i>	
17.BOOSTING CREATIVE INDUSTRIES DEVELOPMENT IN UKRAINE: INSTITUTIONAL AND FINANCIAL ASPECTS..	202
<i>Nazar Demchyshak, Anatolii Klek</i>	
18.PECULIARITIES OF INTERNET BANKING DEVELOPMENT AND FUNCTIONING IN UKRAINE.....	215
<i>Oleh Dorosh, Roksana Filiuk, Inna-Mariia Zadorizhna</i>	
19.ORGANIZATION OF THE INTERNET SERVICES MARKET IN THE SYSTEM OF SUSTAINABLE DEVELOPMENT OF THE TOURIST SPHERE IN UKRAINE	227
<i>Serhiy Stasevych, Olha Nedzvetska</i>	
20.MEASURES COMPLEX FORMATION FOR THE TOURIST INTERNET PORTAL PROMOTION AT THE B2B MARKET	239
<i>Halyna Synytsyna, Olena Fylypenko</i>	
21.IMPLEMENTATION OF CLOUD TECHNOLOGIES IN THE EDUCATION PROCESS OF HIGHER EDUCATION INSTITUTIONS IN UKRAINE	250
<i>Tetiana Tsalko, Svitlana Nevmerzhytska</i>	
22.PSYCHOLOGICAL AND PEDAGOGICAL ASPECTS OF INTRODUCTION OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN UNIVERSITY EDUCATION OF UKRAINE.....	263
<i>Andrii Pecheniuk</i>	
23.CURRENT ASPECTS OF INTERNET INSURANCE IN UKRAINE DEVELOPMENT AND OPERATION CURRENT ASPECTS OF INTERNET INSURANCE IN UKRAINE DEVELOPMENT AND OPERATION.....	273
<i>Mariana Dorosh-Kizym, Lesya Babych, Oksana Dadak, Marta Dorosh</i>	

**16. DEVELOPMENT OF THE DIGITAL ECONOMY AS A
DETERMINING FACTOR FOR PROVIDING COMPETITIVE
ADVANTAGES OF UKRAINE INDUSTRIES**

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Introduction. The modern stage of development of the world economy was the era globalization, a characteristic feature of which at the beginning of the XXI century is transition to the knowledge economy and information society, strengthening digitalization. Today, all sectors of the economy activities, not only the field of information and telecommunications, covered by the introduction of information and communication technologies, using various programs and networks that allows processing of a huge digital flow of information, without which it is impossible to imagine the functioning of the modern enterprises, region,

country. It is the rapid development of digital technologies that has intensified the deep interest in the formation of the foundations of the digital economy and the study of its impact on economic growth. Digital issues have become a defining factor in the G20 summit (2015), when the Internet economy was recognized as the foundation of global growth. Since 2016 the G20 proposed the G20 Development and Cooperation Initiative in the Digital Economy, in which the digital economy is characterized as a key factor in increasing productivity and optimizing the structure of the economy. [5].

It should be noted that Ukraine has actively joined the processes digitization, and policy making in the digital segment became one of the components of defining strategic directions sustainable development of the country. Yes, the evidence of this was the acceptance Concepts of development of digital economy and society of Ukraine on 2018–2020, which defines the main goals and principles digital development of the country, as well as an indicative plan for them implementation [12]. The digital economy will be an important factor growth of high-tech products, ensuring the competitiveness of the domestic economy, raising the social standard of living and economic growth of Ukraine as a whole.

Literary review. Theoretical and practical problems of development digital technologies are of great interest among leading scientists and researchers from the state and society. Among Ukrainian scientists who study problems formation and development of information and communication technologies in all spheres of public life should be noted such scientists as A. Vasylyk, O. Guseva, A. Danylytska, I. Irtysheva, L. Ligonenko, G. Lopushnyak, O. Mykhaylenko, K. Pugachevska, B. Teteryatnyk, S. Tsymbalyuk and others. In particular, according to B. Teteryatnyk, the use of opportunities information and communication technologies in the activities of entities management will help achieve their goals functioning as a result of the formation of a «new form Economic Relations-Digital» [15]. Exploring the formation of digitalization strategy in business organizations, scientists L. Ligonenko, A. Khripko, A. Domansky note that the introduction of information communication technologies, first of all, change certain business processes and then form a holistic virtual digital business model [10]. An important aspect of the development of new digital competencies staff as a prerequisite for successful operation enterprises, ensuring their competitiveness on based on digital technologies, studied by scientists A. Vasylyk, G. Lopushnyak, A. Stanchenko [11]. Paying tribute to the scientific achievements of scientists is necessary emphasize that in a highly dynamic world and national economy further need research issues of digital economy development as an important factor ensuring competitive industries of Ukraine with taking into account economic and political changes.

Results. According to the methodology of the Global Report competitiveness, the competitiveness of the country - this a set of institutions, strategic directions and a set of factors, determining the productivity of its economy [18]. To calculate the global competitiveness index 114 indicators are assessed, which are grouped into 12 groups by level development of the necessary conditions. According to these indicators, Ukraine is in transition from resource-oriented model of the economy to the model of the economy, whose competitiveness is based on efficiency, as the index of competitiveness of the Ukrainian economy is 4 points out of a maximum of 7 points. Unfortunately, world rankings for the share of high-tech industries in national GDP, high-tech products in Ukraine's national exports lag far behind developed ones countries.

World experience shows that the levels achieved in the country labor productivity, use of the latest technologies, direction of investments in high-tech production act as determining factors competitiveness of economies of successful countries [6]. And such factors such as favorable geographical location, ownership natural resources, low labor prices and natural resources in providing competitive advantage have secondary nature. Yes, among the key factors influencing industry competitiveness of successful countries the most important are: highly qualified human resources (Germany - 97.4%; USA - 89.5%, Japan - 88.7%), innovative politics and infrastructure (USA - 98.7%, Germany - 93.9%), reliable logistical infrastructure (Germany -100%; USA - 90.8%, Japan - 89.9%). According to a study by the World Economic Forum, that reflected in The Global Competitiveness Report (Schwab, 2019) provides an assessment of the effectiveness of the world economy at based on the Global Competitiveness Index (GCI 4.0), these countries are among the G20 among the top ten values of this index (USA (2 position), Japan (6), Germany) (7) and the United Kingdom (9)) [1].

In the third industrial revolution and the onset of its fourth era, the country's competitiveness is determined not so much by the size of gross domestic product or exports, but by the amount of value added created in industry and the country's place in global value chains. According to the methodology of the State Statistics Service of Ukraine, gross value added (GVA) is calculated as the difference between output and intermediate consumption[1]. It contains the primary income generated by the participants in production. Wholesale and retail trade have the largest share in the structure of GVA, which is about one-seventh, namely its share in 2010 was 14.5%, in 2017 - 13.7%, in 2018 - 13.2%. The processing industry occupies almost the same share of GVA (16.2% in 2010, 16.7% in 2017, and 11.6% in 2018). The share of agriculture in the structure of GVA has changed significantly: from 7.4% in 2010 to 10.2% in 2017, 10.1% in 2018 (Table 14).

Unfortunately, activities in the field of information and telecommunications in the structure of airborne forces have some of the lowest values: in 2010 - 3.0%, in 2017 - 3.7%, in 2018 - 3.9%.

Table 14

Characteristics of the main types of economic activity in Ukraine

Type of economic activity	Structure of gross value added		Number of legal entities, units		The use of information and communication technologies in enterprises, %			
	2018	2019	2018	2019	had access to the Internet, %		bought cloud computing services, %	
					2018	2019	2018	2019
Processing industry	13,6	12,6	63309	67078	90,0	89,5	9,3	10,0
Agriculture, forestry and fisheries	12,0	10,4	65185	67906	86,3	84,4	8,6	8,9
Supply electricity, gas, steam and conditioned air	3,7	3,7	4015	5318	93,2	92,3	9,7	11,6
Wholesale and retail trade; repair motor transport. vehicles and motorcycles	15,6	15,4	210534	242334	88,1	86,1	11,3	11,5
Transport, warehouse household, postal and courier activity	7,5	7,7	26604	29099	87,8	87,9	7,5	8,1
Information and telecommunications	4,6	5,3	25468	28185	90,0	89,2	15,4	17,5
Professional, scientific and technical activities	3,8	4,1	57875	62833	88,4	87,2	13,1	13,6

Source: authors' own development based on [1].

It should be noted that in comparison with the corresponding indicators of the economy of developed countries, the sectoral structure of the national economy of Ukraine has significant differences. The share of agriculture in the gross value added of Ukraine in 2018 was 10.1%, while in developed countries this figure is up to 2-3%, and the share of services remains insufficiently high. The share of industry in the structure of the domestic economy is slightly higher than in developed countries. Thus, such shifts in the sectoral structure of the Ukrainian economy are in line with global trends and are typical of countries with economies in transition. However, the process of approximation of the sectoral structure of the domestic economy to the indicators inherent in competitive developed countries is quite slow, due to a number of negative external factors and increasing internal

threats [8]. To meet the performance of competitive countries, Ukrainian enterprises need to be included in production chains with a significant share of value added, rather than with raw materials that are typical of Ukraine's economy [4].

One of the ways to increase the productivity, efficiency and competitiveness of Ukrainian enterprises as equal participants in international cooperation in order to integrate Ukraine into the world community is the development of the digital economy. The focus on digitalization as a basis for the development of technological processes, digital infrastructure, investment in innovative projects, transformation of the Ukrainian economy in the third industrial revolution is noted in the report of experts of the World Economic Forum in Davos «Readiness for future production» [3].

A number have been approved for the development of the digital economy in Ukraine legislative acts, including the Law of Ukraine «On electronic commerce», «On telecommunications», «On electronic digital signature», «On payment systems and funds transfer in Ukraine», «On financial services and state regulation of markets financial services», approved «Development Strategy information society in Ukraine», «Development concept digital economy and society of Ukraine for 2018-2020», in which indicates the basic principles of digitization, directions digital development, an action plan for its implementation is defined. Given that integration into the European Union [19] for Ukraine is one of the opportunities to overcome technological backwardness, attracting foreign investment and the latest technologies in the modernization of the manufacturing sector, in this the concepts are determined by the directions of harmonization with digital initiatives, a digital order for Europe (Digital Agenda for Europe) and the Digital Single Market, and exactly:

1) interoperability and electronic services (eServices), which provides for Ukraine's accession to the EU Program Interoperability Solutions for European Public Administrations 2, e-CODEX projects, e-Invoicing, as well as initiatives Single Digital Gateway;

2) electronic identification (eID), which is the main prerequisite for the introduction of electronic services, e-commerce and electronic interaction of participants in economic relations;

3) development of open data on the way of integration of the state web portal of open data of Ukraine data.gov.ua into the central European portal of open data europeandataportal.eu and data.europa.eu, which sets uniform requirements for policy, standards of development of open data.

The International Organization for Economic Cooperation and Development (OECD) identifies only three key components of the digital economy: infrastructure (hardware and software, telecommunications, networks, etc.); e-

commerce (distribution of goods via the Internet); e-business (doing business and any other business processes via computer networks) [16]. According to e-commerce, it is worth emphasizing its growing pace in all countries. Thus, in 2019, the number of e-commerce users increased to 2.8 billion people. If we compare the indicators of e-commerce with GDP per capita, we should note the example of China, where consumers of goods and services spent on the Internet about 7% of this figure, which is almost 2 times more than the same indicator of the United States (3,3%).

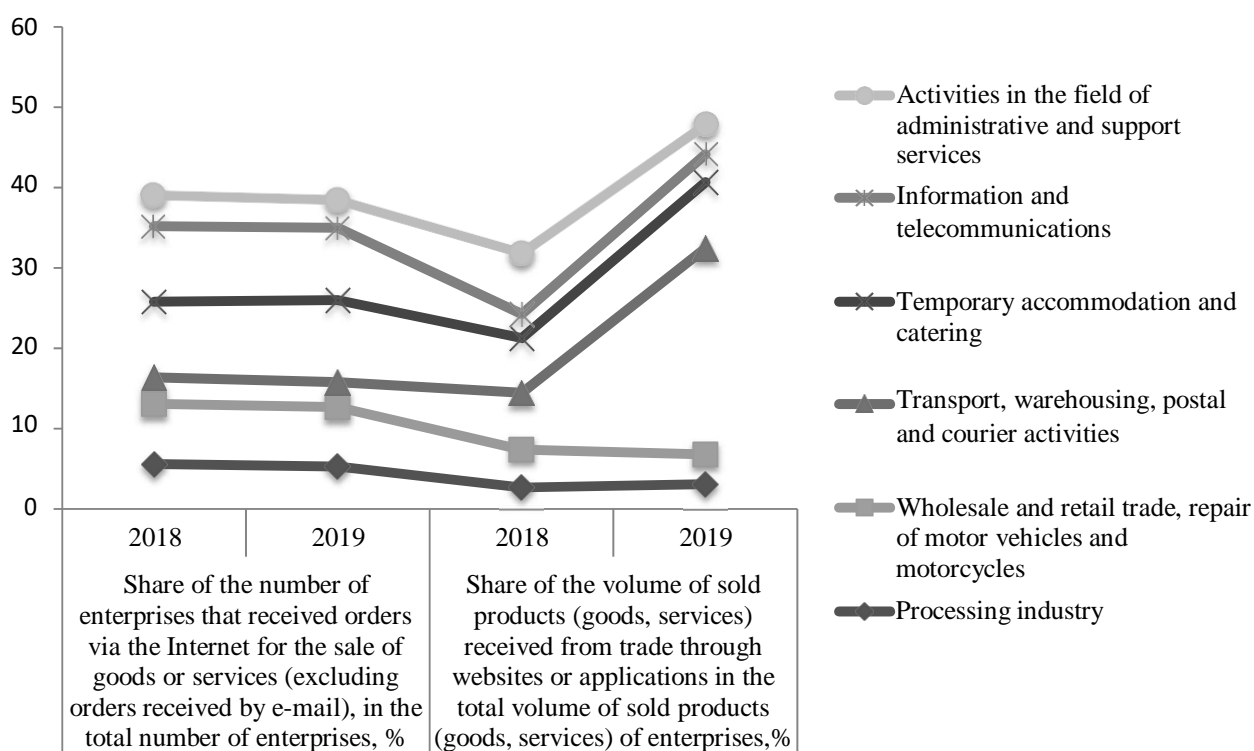


Fig. 36. Dynamics of the volume of sold products (goods, services) obtained through e-commerce in the economy of Ukraine

Source: authors' own development based on [1].

Ukraine has also joined the process of implementing the digital economy system, which is evidenced, in particular, by the adoption of the Law of Ukraine «On E-Commerce». Thus, the term "e-commerce" is understood as "a relationship aimed at making a profit arising from transactions for the acquisition, modification or termination of civil rights and obligations, carried out remotely using information and telecommunications systems, resulting in the participants of such relations arising rights and obligations of a property nature» [20]. At the same time, electronic information services include services for the dissemination of advertising, transmission and storage of information, placement of information at the request of another person, transmission of information at the request of a

person or sending commercial electronic messages, other actions in the field of e-commerce.

According to statistics, in recent years there has been a general increase in e-commerce [1]. Thus, if in 2012 the penetration of e-commerce in the economy of Ukraine was 0.6%, then five years later this figure increased almost 6 times and reached in 2017 - 3.9%, in 2018 - 3.5% , In 2019 - 4.5%. The largest share of sales (goods, services) received through e-commerce is observed in such activities as transport, warehousing, postal and courier activities; temporary accommodation and catering; wholesale and retail trade (Fig. 36).

In European countries, to assess the level of digital development of society, an index of the digital economy and society is determined, which includes indicators of Internet access, communications, human capital, integration of digital technologies and digital public services. [2]. Among the countries that are most successful in the field of digital development should be noted Finland, Sweden, the Netherlands, Denmark, Luxembourg, Germany, Austria, Belgium, Spain. Ukraine is also intensifying the processes of building the information society, development of information and communication technologies and their use in all spheres of economic activity and social life of the country. However, the dynamics of global indices of digital economy development in Ukraine is not unambiguous and indicates a deterioration of the country's position, which, in particular, due to low coverage of digital infrastructure, weak government support for innovation, increased tariffs for mobile communications, etc. [1].

Thus, in 2018, according to the Global Competitiveness Index (WEF), Ukraine ranked 83rd among 139 countries, according to the Global Innovation Index (Global Innovation Index (INSEAD, WIPO)) the country significantly improved its performance and took 43rd position. Therefore, the defining task for Ukraine is to find effective incentives to ensure the digitalization of the economy, social and social spheres, development of digital infrastructures, acquisition of digital competencies by citizens, which in general will contribute to higher use and consumption of digital technologies. positions of business competitiveness.

Therefore, taking into account all the above, it is necessary to emphasize the need to form a model of digital economy development as one of the effective factors of penetration of innovations and technologies into competitive sectors of Ukraine's economy. In addition, the definition and further implementation of strategic directions of support and development of the digital economy will contribute to achieving Ukraine's European integration goals, increase its investment attractiveness, increase competitiveness, sustainable economic growth in the context of globalization of economic processes (Fig. 37).

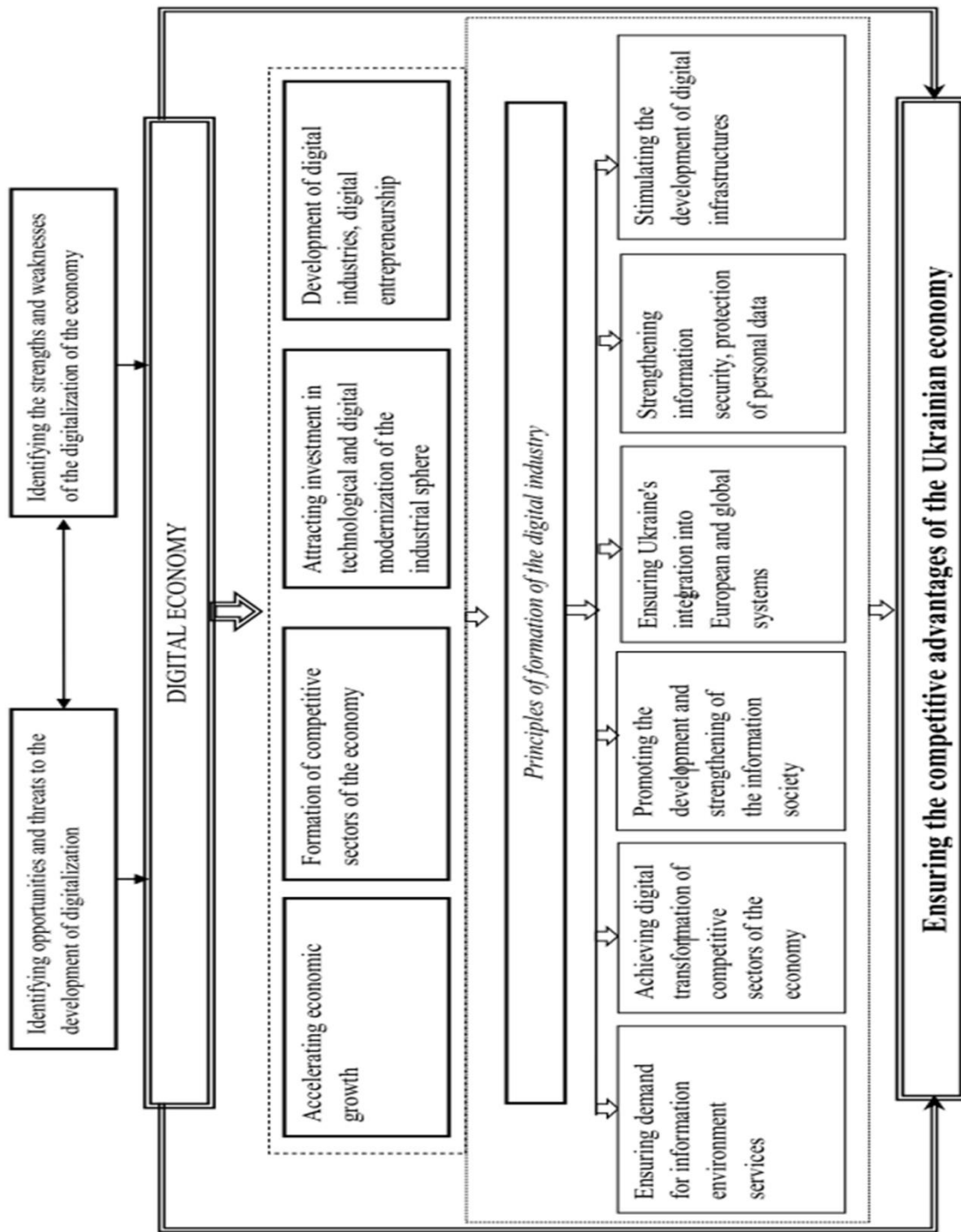


Fig. 37. Conceptual model of digital economy development as a factor of ensuring competitive advantages of Ukraine 's economy
Source: authors' own development based on [12,13, 15].

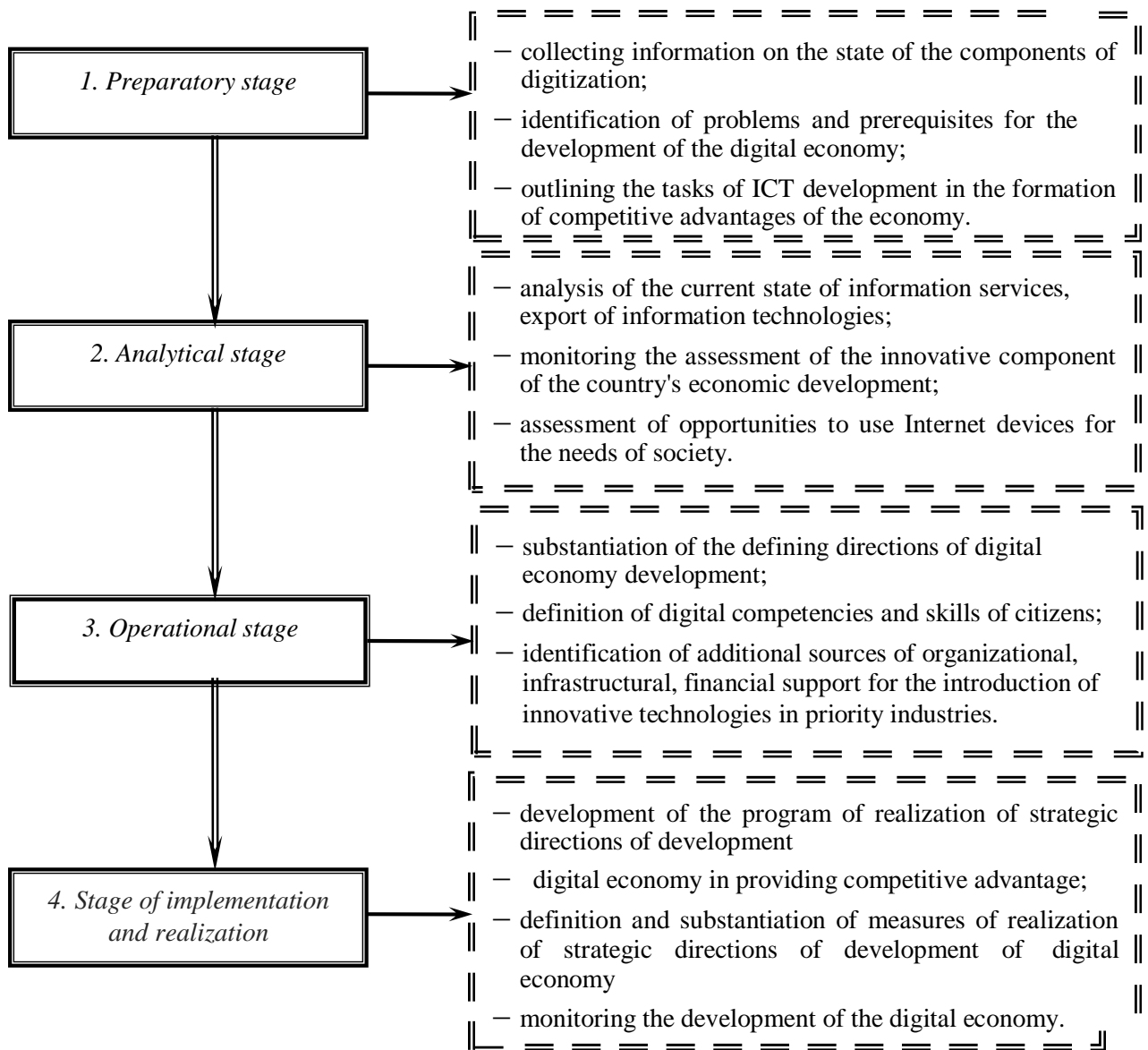


Fig. 38. Generalized scheme of the process of formation and implementation of strategic directions of digital economy development

Source: authors' own development

The formation of a model of digital economy development, as one of the effective factors of penetration of innovations and technologies into competitive branches of economy, requires development of the corresponding Concept which should contain methodological and constructive provisions, define its basic purpose and purposes, priority directions, functions and implementation mechanisms. Thus, among the main principles of formation of such a model should be noted the following: the principle of ensuring the demand for information

services and strengthening the information society; the principle of achieving digital transformation of industries by increasing their competitiveness; the principle of strengthening information security, protection of personal data; the principle of ensuring Ukraine's integration into European and global systems; the principle of stimulating the development of digital infrastructures. It should be noted that the formation and implementation of strategic directions of digital economy development should be based on the implementation of four generalized stages, which will provide information to identify trends in information and communication technologies, assess indicators of digital economy, develop and justify its strategic directions, etc. (Fig. 38).

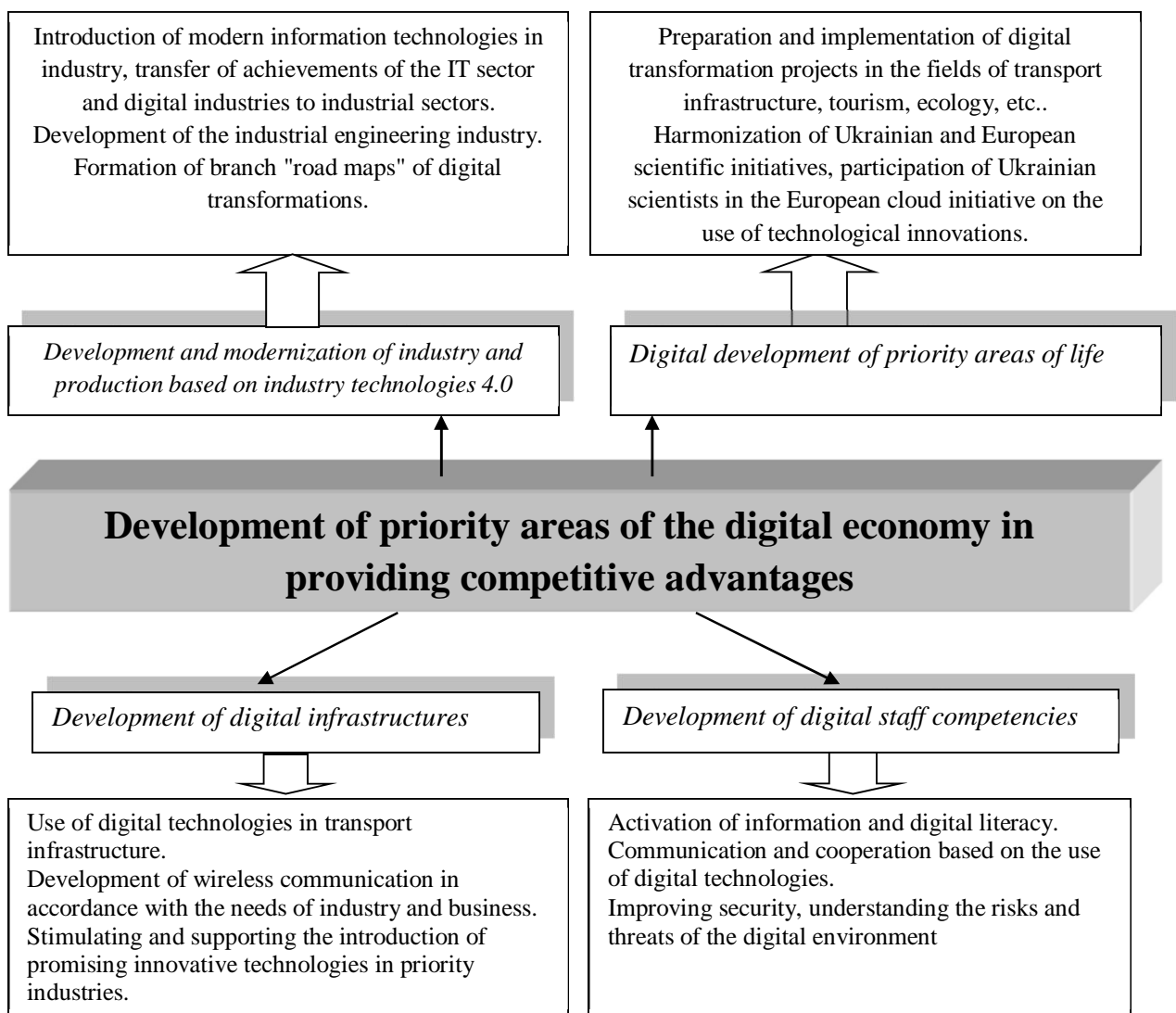


Fig. 39. Development of priority areas of the digital economy in ensuring the competitive advantages of Ukraine's economy

Source: authors' own development based on [12,13, 15,20].

In particular, the successful implementation of the fourth stage of the process involves the development of a program for the implementation of strategic directions of digital economy in providing competitive advantages, which in the industrial sector of Ukraine should include increasing production, innovation, export activity and strengthening the leading sectors national economy in European and world markets.

For the use of the latest technologies, innovative management methods, accelerated development knowledge-intensive industries need to be in constant finding, selecting and processing the highest priority directions of development of digital economy in providing competitive advantages of the Ukrainian economy. In our opinion, on today the following are relevant for the Ukrainian economy directions of development and use of digital technologies, as (Fig. 39):

- development and modernization of industry and production on the basis of Industrial technologies 4.0;
- development of digital infrastructures;
- development of digital staff competencies;
- digital development of priority areas of life.

It is important to note that one of the prerequisites for the use of information technology in all spheres of economy and public life is to ensure equal, complete, sufficient access to telecommunications and digital technologies. It is the use of a complex of blockchain infrastructure technologies, electronic payments and transactions, e-commerce and online interaction of business entities, industrial digital infrastructures that will contribute to qualitative changes in Ukraine's national competitive advantages in the global economic environment.

Conclusions. In the conditions of rapid changes in technological systems, strengthening of integration processes and priorities of economic development of Ukraine, the issues of digitalization on the way of using strategic resources of competitive branches of the domestic economy need special attention. Ukraine has prioritized the European vector of economic integration, due to geopolitical, socio-political, economic, historical and cultural reforms. In the difficult transformational conditions of the national economy, integration into the European Union for Ukraine is one of the opportunities to overcome technological backwardness, attract foreign investment and new technologies in the modernization of production, increase the use of its own potential. Therefore, the use of digitalization, as an important component of creating an open information space, should promote integration into the European and global space, subject to compliance with appropriate standards for the possibility of comparing information and improving the processes of transmission, perception and generalization of information. These features of the spread of information technology indicate the

need to develop the digital economy as a determining factor in the use of technologies Industry 4.0, industry "roadmaps" of digital transformations, growth of industrial engineering industry, adaptation and strengthening of Ukraine's competitive advantages in European and global markets.

REFERENCES

1. Derzhavna sluzhba statystyky Ukrainy [State Statistics Service of Ukraine]. Retrieved from: <http://www.ukrstat.gov.ua/> (Last accessed: 09.01.2020)
2. Digital Economy and Society Index 2019. Retrieved from: <https://ec.europa.eu/digital-single-market/en/news/digital-economy-and-society-index-desi-2019> (Last accessed: 03.01.2020)
3. Digital Transformation Initiative. Retrieved from: <https://www.weforum.org/whitepapers/digital-transformation-initiative> (Last accessed: 03.01.2020)
4. Filipishyna L., Hryshyna L. & Zhuvahina I. (2020). Model Scenarios of Sustainable Development Strategy in the Formulation of Mechanisms for Enterprise Support Resources. *Intellectual Economics* 14 (1), 31-44. DOI: <https://doi.org/10.13165/IE-20-14-1-02>
5. G20 Programma po razvitiyu i sotrudnichestvu v sfere cifrovoj ekonomiki (Itogovyj dokument — 2016) [G20 Program for Development and Cooperation in the Digital Economy (Final Document - 2016)] Retrieved from: <https://cutt.ly/9kqSPkA> (Last accessed: 10.01.2020)
6. Global Manufacturing Competitiveness Index. Deloitte and US Council on Competitiveness. Retrieved from: <https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Manufacturing/gx-global-mfg-competitiveness-index-2016.pdf> (Last accessed: 09.01.2020).
7. Guseva O., Legominova S. (2018) Didzhitalizatsiia – yak instrument udoskonalennia biznes-protseviv, yikh optymizatsiia [Digitalization - as an tool for improvement of business processes, their optimization]. *Economy. Management. Business*, 1 (23), 33-39.
8. Irtysheva I. O., Senkevych O. F. Tsyfrova transformatsiia rehioniv Ukrainy: obiektyvna neobkhidnist, pryntsyipy tsyfrovoho rozvytku ta osoblyvosti rehuliuвання [Digital transformation of Ukrainian regions: objective need, digital development principles and regulation features]. *Regional Economy* 2020, 1, 14-21. DOI: <https://doi.org/10.36818/1562-0905-2020-1-2 I>.
9. Kolomiets G. M., Melentsova O. V., Kalinichenko Ju. D. (2017) Aktualni chynnyky rozvytku natsionalnykh konkurentnykh perevah [The Topical Factors of Development of the National Competitive Advantages]. *BUSINESSINFORM* 1, 8-14.

10. Ligonenko L.O., Hripko A.V., Domansky A.O. (2018) Zmist ta mekhanizm formuvannia stratehii didzhitalizatsii v biznes-orhanizatsiakh [Content and mechanism of digitalization strategy formation in business organizations]. *International scientific journal "Internauka"*, 2 (2), 20-32.

11. Lopushnyak G., Mylyanyk R.(2019) Vplyv tsyfrovyykh tekhnolohii na formuvannia kompetentsiiupravlynskoho personalu [The influence of digital technologies on the formation of competencies of management personnel] *Investments: Practice and Experience Magazine*, 24, 10-16. DOI: 10.32702/2306-6814.2019.24.10

12. Pro skhvalennia Kontseptsii rozvytku tsyfrovoy ekonomiky ta suspilstva Ukrainy na 2018—2020 roky ta zatverdzhennia planu zakhodiv shchodo yii realizatsii [On approval of the Concept of development of the digital economy and society of Ukraine for 2018-2020 and approval of the action plan for its implementation] *Order of the Cabinet of Ministers of 17.01.2018 № 67-r*. Retrieved from: <http://zakon.rada.gov.ua/laws/show/67-2018-%D1%80> (Last accessed: 08.01.2020)

13. Pro skhvalennia Stratehii rozvytku informatsiinoho suspilstva v Ukraini [On approval of the Information Society Development Strategy in Ukraine] Order of the Cabinet of Ministers of Ukraine of 15.05.2013 № 386-r. Retrieved from: <http://zakon1.rada.gov.ua//laws/show/386-2013-p>. (Last accessed: 07.01.2020)

14. Pugachevska K. Y., Pugachevska K. S. (2018) Tsyfrovizatsiia ekonomiky yak faktor pidvyshchennia konkurentospromozhnosti krainy [Digitizing of the economy as a factor of increasing competitiveness of the country]. *Market infrastructure*, 25, 39-45.

15. Teteriatnyk B. (2017) Pro skhvalennia Stratehii rozvytku informatsiinoho suspilstva v Ukraini [Trends of digitalization and virtualization as a vector of the contemporary development of the world economy] *Scientific Bulletin of the International Humanities University: Series "Jurisprudence"*, 29 (T 2), 21-23.

16. The Concept of a “Digital Economy”. Retrieved from: <https://www.alrc.gov.au/publication/copyright-and-the-digital-economy-dp-79/3-policy-context-of-the-inquiry/the-concept-of-the-digital-economy/>. (Last accessed: 05.01.2020)

17. The Global Competitiveness Index. Retrieved from: <http://reports.weforum.org>. (Last accessed: 05.01.2020)

18. The Global Competitiveness Report 2019. World Economic Forum. Retrieved from: http://www3.weforum.org/docs/WEF_TheGlobalCompetitivenessReport2019.pdf (Last accessed: 09.01.2020)

19. Uhoda pro asotsiatsiiu mizh Ukrainoiu, z odniiiei storony, ta Yevropeiskym Soiuzom, Yevropeiskym spivtovarystvom z atomnoi enerhii i yikhnimy derzhavamy-chlenamy, z inshoi storony [Association Agreement between Ukraine, of the one part, and the European Union, the European Atomic Energy Community and their Member States, of the other part]. Retrieved from: http://zakon2.rada.gov.ua/laws/show/984_011. (Last accessed: 04.01.2020)

20. Zakon Ukrainy «Pro elektronnu komertsiiu» vid 3.09.2015 № 675-VIII. Retrieved from: <https://zakon.rada.gov.ua/laws/show/675-19#Text> (Last accessed: 07.01.2020).

