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DIGITAL INEQUALITY AS A PREREQUISITE OF SOCIO-ECONOMIC DIFFERENTIATION OF SOCIETY

Abstract. The aim of the article is to study the current state of digital inequality, factors of influence and trends in its transformation as a component of socio-economic differentiation of the population in the world and in Ukraine in order to to make optimal management decisions. The theoretical significance of the article is that it was generalized and systematized a prerequisite of socio-economic inequality — digitalization. Socio-economic factors of digital inequality are highlighted. The contradictory nature of digital wealth is shown. The interrelation between economic growth and key indicators of digital inequality is revealed. Based on statistical indicators, the problems of digital inequality and the degree of its relevance for Ukraine are highlighted. In the article digital inequality is seen as a dynamic threat that simultaneously extends to all spheres of society, broad sections of the population and has quantitative and qualitative characteristics.

It is proved that the processes of digitalization, on which serious hopes were placed, do not lead to the equalization of economic potential and social structure, but are able to intensify the level of digital inequality. There are various direct and inverse interactions between digital inequality and the level of the socio-economic development in society. Not only the spread of information and communication technologies and socio-economic restrictions on access to them affect the economy and the labor market. In turn, the level of information and digital inequality affects all spheres of society and economic development of the country. The results of the study reveal the relationship between economic growth, key indicators and factors of digital inequality, allow for constant monitoring of the level of digital differentiation of Ukrainian society in order to identify and eliminate bottlenecks at different levels of governance.

Keywords: information society, information, digital inequality, digital divide, digital inequality factors, information poverty, information wealth.

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ІНФОРМАЦІЙНА НЕРІВНІСТЬ ЯК ПЕРЕДУМОВА СОЦІАЛЬНО-ЕКОНОМІЧНОЇ ДИФЕРЕНЦІАЦІЇ СУСПІЛЬСТВА

Анотація. Метою статті є дослідження стану інформаційної нерівності, чинників впливу та тенденцій її трансформації як складової соціально-економічної диференціації населення у світі та Україні для ухвалення оптимальних управлінських рішень. Теоретичне значення статті полягає в тому, що в ній узагальнено і систематизовано новий вид соціально-економічної нерівності — інформаційної. Визначено соціально-економічні фактори інформаційної нерівності. Показано суперечливий характер інформаційного багатства. Розкрито взаємозв'язок між економічним зростанням країн і ключовими показниками інформаційної нерівності. На основі статистичних показників висвітлено проблеми інформаційної нерівності та ступінь її актуальності для України. Цифрова нерівність розглядається як динамічна загроза, що одночасно поширюється на всі сфери суспільства, широкі прошарки населення і має кількісні й якісні характеристики.

Доведено, що процеси інформатизації, на які покладалися серйозні надії, не приводять до вирівнювання економічного потенціалу та соціальної структури, а спроможні інтенсифікувати поширення цифрової нерівності. Адже між інформаційною нерівністю і станом соціально-економічної сфери суспільства існують різноманітні прямі та зворотні взаємовпливи. Не тільки поширення нових інформаційно-комунікаційних технологій і соціально-економічні обмеження доступу до них впливають на економіку і ринок праці. У свою чергу, рівень інформаційно-цифрової нерівності впливає на всі сфери суспільства та економічний розвиток країни. Результати дослідження розкривають взаємозв'язок між економічним зростанням країн і ключовими показниками, чинниками інформаційної нерівності, дозволяють вести постійний моніторинг рівня інформаційної диференціації українського суспільства з метою виявлення й усунення вузьких місць на різних рівнях державного управління.

Ключові слова: інформаційне суспільство, інформаційна нерівність, цифровий розрив, чинники інформаційної нерівності, інформаційна бідність, інформаційне багатство.

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Introduction. Scientists recognize various manifestations of social inequality and poverty as the leading problem of modern world. Today at the forefront is digital inequality, which is a consequence of economic inequality and social stratification. Currently it is present in all countries, at all social levels and in the global level. Business institutions, government agencies, and cultural and educational institutions provide most of their services over the Internet. An indicator of the level of development of the country and one of the main accelerators of its development is such an indicator as public access to information and communication technologies (ICT) and the Internet. The UN Human Rights Council has attributed Internet access to fundamental human rights. However, the use of Internet technology remains inaccessible to billions of people around the world. This leads to the existence of digital inequality, which in the scientific context is revealed through the concept of information poverty, digital inequality or digital divide. There is an interdependence between the rate of economic growth, living standards and the extent to which they use information technologies. For Ukraine, this problem is quite relevant, because its socio-economic structure is characterized by significant polarization. According to the level of inequality determined by income, Ukraine is significantly ahead of most countries and has a poverty rate exceeding 51% [1]. This leads to a slowdown in economic development and growing social tensions. A better understanding of the importance of the phenomenon of information poverty in Ukraine will ensure a better management policy in the field of informatization and equalization of social stratification of society.

Analysis of research and problem statement. Studies of digital inequality have become relevant simultaniously with the development of the information society. From the 1960s and 1970s, the authors largely relied on the futurological ideas of an idealized post-industrial society and believed that the free dissemination of information should lead to social equality. Thus, Professor of Management at the University of Toronto D.Tapscott noted that the development of information society through ICT in the future will be more homogeneous, because in a world where most workers work in intellectual sphere, the process of deep democratization of corporate property will begin [2]. If researchers acknowledged the existence of information inequality, it was mostly about inequality between generations and much less about the socio-economic origins of inequality. B. Frankel called such theorists as D. Bell, J. Masudi, O. Tofler — post-industrial utopians [3].

In the beginning of the XXI century scientific forecasts have become more realistic. Issues of information inequality were studied by J. K. Witte, S. E. Mannon [4], K. Schwab, who argues that economic development in the information age goes hand in hand with social stratification [5]. M. Castells points to the active process of social stratification of the «network» society, the growth of injustice in the distribution of goods as an inseparable companion of economic transformation [6, p. 505]. The tendencies in digital inequality is studied in the works of O. Volchenko [7], T. Sharifyanova, D. Gainanova [8]. In the works of E. Libanova [1], T. Myskevych [9] through statistical data are analyzed socio-economic factors and trends of information poverty in Ukraine. Metods of estimation of the degree of socio-economic inequality, methods of its calculation in different sources differ significantly. The scientific discourse of social differentiation of the information type has not yet received adequate coverage in the domestic literature, in contrast to foreign. However, the study of factors and the interaction between economic processes and digital inequality will contribute to the development of optimal management decisions in the socio-economic sphere.

The aim of the article is to study the current state and factors of digital inequality as a component of socio-economic differentiation of the population in the world and in Ukraine in order to make optimal management decisions.

The research methodology is based on the application of general and specific scientific methods of economic research of social processes and phenomena. The principle of systematization and structural-functional analysis allowed to consider digital inequality in relation to macroeconomics as a whole and the level of socio-economic development. Factor analysis was used to identify factors of information poverty. Methods of statistical analysis and monitoring were used to determine the state of digital inequality and the dynamics of its indicators. Statistical methods

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were used to establish the dependence of economic growth rates on quantitative and qualitative characteristics of human and physical capital.

Research results. The problem of information inequality was first revealed in the United Nations Development Program (1997). This concept was used to denote the gap between those who have access to modern information resources, information and communication technologies (ICT), and those who do not have (or have limited) access. This was a manifestation of the differentiation of information as the main resource of modern society, which exacerbates socio-economic and cultural inequalities and affects the dynamics of economic development. To explain the mechanism of occurrence and action of information inequality, economists use different paradigms, in particular, the concept of diffusion of innovation (E. Rogers); technology acceptance model; theory of reasoned action and theory of planned behavior; hypothesis about inequality in knowledge (knowledge gap hypothesis, J. Tichenor, etc.); P. Bourdieu's theory of capital, etc. [7]. We share the view that information inequality works on the principle of a feedback loop. According to this, people with a low level of education use the Internet less, which limits their educational growth, and this reduces the opportunities to use the Internet. Conversely, people with a high level of education more often use the Internet, which increases their level of awareness and promotes active use of the Internet [7, p. 180]. Thus digital inequality reproduces itself.

Factors influencing digital inequality at the global, regional and local levels can be divided into social in a broad sense and economic ones. Social factors have the following features: 1) socio-economic situation, income level; 2) geospatial-territorial and geographical restrictions — for example between people living in cities and rural or mountainous areas; 3) socio-demographic stratification (adaptation of people of different ages, genders, physical abilities to ICT technologies); for example, in the United States, 49% of people over the age of 65 do not use the Internet [10]; about 48% of women use the Internet in comparasion with 58% of men who constantly use the Internet; the largest gap between the number of women and men who have access to the network is in Africa, the Arab countries and the Asia-Pacific region, and this gender gap is widening [11]); 4) level of education and skills (regarding the use of ICT); 5) ethnical, cultural and national pequliarities (minorities, migrants), race, language barriers; 6) personal, socio-psychological characteristics (motivation, needs, abilities, health, fears, etc.). It can be argued that interpersonal digital inequality can deepen other forms of inequality.

The main economic factors of digital inequality include: 1) low income of a large ammount of the population; 2) financial issures (lack of funds to purchase a computer, mobile phone, etc.); 3) technical (infrastructure, Internet access, including high-speed Internet, etc.); 4) changes in the labor market (disappearance of a number of professions, increase in unemployment, changes in working conditions, etc.); 5) low level of professional education and skills of people, as a restriction of access to decent work; 6) gender differences (both the consequences of economic and educational inequality; for example, in less developed countries, men own mobile phones twice as often as women [11]); 7) poor health and disability; 8) the level of education that do not meet requirements of the labor market, lack of digital skills; 9) the gap between economically developed and less developed countries and territories.

The leading economic factor of digital inequality are changes in the labor market, in particular, the disappearance of a number of professions, jobs, the emergence of new ones, unemployment, changes in the nature of labor etc. The ability to use a computer is becoming a common requirement of employers. World Bank research has shown that the introduction of ICT leads to the replacement of routine labor operations and falling demand for middle-skilled workers. The demand for highly and low-skilled workers is growing [15]. Thus, the labor market is polarized. The economic pattern is confirmed: the loss of jobs coused by the introduction of new technologies is always greater than the number of new jobs created. There are changes in the nature and working conditions. There is full and partial home employment, contract work. This legally and socially distances the employer from the worker, makes him/her socially defenseless, intensifies work. The employer is not interested in investing in such an employee. If he/she is ill or the task requires new skills, it is more likely to hire new, healthy and prepared one. Such relationships

relieve responsibility for the working conditions of workers. Now the employee at his own expense arranges a workplace, improves skills, provides treatment, recreation etc. Although working with information has become easier, there are no fewer problems [16]. Those who fail to constantly improve their skills lose their competitiveness in the labor market.

Social and economic factors are closely intertwined, have a high level of interdependence. Based on this, it is worth talking more about the socio-economic factors, the main of which are discussed in the article. In the first place among the factors influencing the digital inequality of the population are the level of income and education. U.S. researchers point out that people with higher education are 10 times more likely to use the full potential of computers and the Internet in everyday life than people without higher education. People with high incomes (over $ 75,000 per year) are 20 times more likely to access the Internet than people with low incomes (less than $ 30,000). Wealthy families are 10 times more likely to have computers and high-speed Internet at home than low-income households. According to 2019 data, in the United States, 29% of adults with household incomes below 30,000 do not own a smartphone, 44% do not have home broadband services or a computer (46%) [13]. Meanwhile, high-income Americans usually have several devices to access the Internet. Children who master digital skills have an advantage over those who are unfamiliar with these technologies. Poverty is reproduced in new generations and becomes hereditary.

Digital inequality is especially seen on the global level, overlapping with the existing gap in the level of socio-economic development of countries. According to the UN, 4.1 billion people in the world are connected to the Internet, another 3.6 billion (46.4%) do not have access, although the digital divide is shrinking by 5% annually. The highest percentage of Internet users is is in Europe (82.5% of total population), the lowest is in Africa (28.2%) [11]. In this case, information inequality is determined not only by access to the Internet, but its quality. Computers with low performance and technical support increase the information gap. Not only the analysis of the level of access to the Internet, but also the ways, quality and cost of its use becomes relevant. A certain obstacle in overcoming the digital inequality of countries is the monopolization of leading developments in the IT field, when their use is determined by manufacturers. Thus American and Anglo-Saxon views of the world, language, values, etc. are imposed throughout the world. This preserves the digital divide when rich countries become richer and poor remain stagnant or degrade in poverty.

Access to ICT is an important, but not the only component of digital inequality. Inequality in digital skills, which is called digital literacy, is becoming increasingly important. It does not yet have a general definition. We agree with the authors, who consider this concept as complex, including computer, information, social and network literacy [11]. Digital literacy includes a set of knowledge and skills on the use of Internet resources, search, critical evaluation and use of information to solve professional, personal problems, knowledge, etc. In our opinion, such an element as critical evaluation of information is crusial. We identify it as the ability to find and critically evaluate information in terms of reliability and completeness, the ability to create the own information product, to prevent manipulation etc.

The low educational and cultural level of the population allows to manipulate its consciousness, to fill the network with «information garbage», which entertains, distracts, contains a lot of gossip and little valuable information. In this case, uncritical perception of information leads to the primitivization of the population. Business institutions, international corporations, political structures that invest in information technology and make profits, support and use the unpretentiousness of Internet users, because it deprives them of access to power and wealth that come through the necessary information. Let us illustrate the above through the research of P. Kennedy and A. Pratt. Based on an analysis of news consumption in 18 developed countries, they proved that low-income and low-educated people use fewer sources of information. The average number of sources referred to increases with increasing of income and level of education of respondents. News from sources that serve low-income audiences have a greater «media power» and commercial character. People who watch news from government sources are, on average, wealthier and more educated. This creates a vicious circle in which information poverty, caused by

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low incomes and education, generates unpretentious media enthusiasm, thus protecting the economic and political interests of elites and maintaining income inequality, which in turn increases digital inequality [14]. Thus, people with low levels of education and income use ICT mainly for entertainment, contacts. More educated and wealthy people are more likely to use the Internet for production or educational purposes, as well as to participate in social and political processes. Their interests are more diversed.

In addition to the level of income and education, access to ICT is influenced by such social characteristics of the population as living in rural areas, belonging to vulnerable groups, national minorities, etc. They often lack the motivation to master Internet technologies, which, in particular, is influenced by the lack of topical content clear to them, online service in their native language, belief in the benefits of technology for business, education, leisure. T. Sharifyanov and D. Gainanov proposed an integrated model of digital inequality, which includes the following blocks: 1) motivation (lack of interest in ICT products, unwillingness to learn new technologies, the need for cultural constructions, social relations); 2) infrastructure (affordability, broadband technologies; 3) competencies (skills, abilities) [8, p. 10]. Thus, with the advancement of the digital economy, digital inequality is modified, rethought and supplemented by its new types.

The analysis of digital inequality, digital poverty should be supplemented by consideration of information wealth. Wealth has always depended to some extent on knowledge. In the post-industrial economy, knowledge has replaced the traditional triad of land, labor, and capital and has become the most important basis for productive systems. However, the phenomenon of information wealth does not fall into the field of view of researchers and its boundaries are quite conditional. Obviously, the information-rich layers have a significant gradation in the middle, which may more or less coincide with the socio-economic one. The information-rich people mostly have a higher socio-economic and educational status, better access to technology, are more technologically prepared and know how to work with information than the information-poor ones. This group of people include those who control the flow of information, the world's media and will receive super-profits from the appropriation of such common goods as scientific knowledge, access to information, the achievement of technological progress. The largest assets in the world, which are growing the fastest, are ICT companies: Google, Amazon, Facebook, Apple, Microsoft.

The main question is: is the digital divide widening? J. Soros believes that informatization and globalization are increasingly widening the gap between rich and poor both within and between countries, «the benefits outweigh all the costs, in other words, the increase in wealth is not just enough to compensate for inequality and other negative effects of globalization, it is higher than all costs» [17, p. 96—97]. Contrary to popular belief that free access to information will help overcome inequality, M. Castells and P. Himani note that for those who are disconnected from information exchange, the prospects are catastrophically deteriorating. The information economy connects to its network those who represent value to it (thereby giving them additional value), but disconnects those who have no value to it (thereby further reducing their chances of finding some value) [18]. Thus, digital inequality is deepening on new grounds.

Inequality in the distribution of capital demonstrates the distribution of economic power, and consumer resources inequality in quality of life. There is a process of rejection of the upper strata of the population from the widespread use of ICT, which involves the general population. In developed European countries, the use of tablets, phones, Wi-Fi is limited in primary school. Children under the age of six are restricted from accessing screens and gadgets. Distance learning after the pandemic received a negative assessment. In the upper strata, dependence on ICT and gadgets becomes non-status. The pattern is confirmed: what becomes mass-loses its appeal to the elite. Direct contact with living professionals is most appreciated, as opposed to virtual teachers, coaches, artists, doctors, consultants, etc. The latter is imposed on other, poorer sections of the world's population.

Similar processes are taking place in Ukrainian society, there is a deep digital inequality and a digital divide. The main reasons are the low socio-economic and technical level. An indicator of this is the limitation of telecommunications infrastructure in the regions, problems with access to

broadband Internet. According to official data, in Ukraine the level of penetration of the latter is 11.8 subscribers per 100 population (in Slovakia — 23.3; Hungary — 27.4; in Belarus — 31.4) [8, p. 92], 53% of schools, 99% of medical institutions in 2018 did not have this access [19]. According to objective data, the percentage of households with Internet access at home is mainly correlated with the level of development of the region. In 2019, the Ministry of Digital Transformation of Ukraine for the first time determined the percentage of digital literacy of the population, according to the methodology of the European Commission. According to these data, 37.9% of Ukrainians have digital skills below average, 15.1% do not have them at all [20]. In terms of Internet speed, Ukraine was in 81st place, losing 23 positions compared to 2018 [9, p. 92]. Thus, in terms of digital inequality and literacy, Ukraine remains an underdeveloped country. Meanwhile, according to the World Economic Forum, each 10% increase in broadband penetration can lead to an increase in GDP per capita by 1.2% in countries with economies in transition [9, p. 95].

Conclusions. Digital inequality deepens socio-economic inequality and contributes to the emergence of new manifestations. The main factors that couse such inequality are the socio-economic and socio-demographic status of a person, level of education, place of residence, origin, state policy, international status. With the development of ICT, the risk of exclusion from the active economic life of certain segments of the population and regions increases. Information inequality affects not only access to and use of ICT, but also digital literacy. Local content, e-applications are relevant for a particular region, type of employment, level of education, etc. In Ukraine, to bridge the information gap, it is important to fully ensure access to modern Internet technologies in educational institutions, health care, culture, services, public authorities and local governments, the creation of educational programs, networks in educational and cultural institutions, etc. The information gap in the world deepens economic inequality between countries and increases instability. Through global networks, new forms of cultural and ideological expansion are spreading, virtual needs are imposed on the population in the interests of multinational companies, and the threat of certain communities losing their identity remains. The very concept of digital inequality is constantly changing and rethinking, supplemented by new types of barriers and challenges, which can not lead to equalization of economic potential of countries and social structure of the population, but on the contrary, deepens digital inequality. This slows down economic growth, particularly in Ukraine. There are various direct and inverse interactions between digital inequality and the level of socio-economic development.

Література

1. Лібанова Е. Інтерв'ю з демографом: Україна — 2050. *Ліга.* 2021. 21 січня. URL : https://biz.liga.net/pervye-litsa/all/interview/akademik-ella-libanova-karantin-i-distantsionnoe-obuchenie-usilivayut-neravenstvo (дата звернення 20.02.21).
2. Tapscott D. Growing Up Digital. The Rise of the Net Generation. New York : McGraw Hill, 1998. URL : www.growingupdigital.com.
3. Франкел Б. Постіндустріальні утопісти. Київ : Ніка-Центр, 2005. 304 с.
4. Witte C., Mannon S. E. The Internet and Social Inequalities. New York : Routledge, 2010.
5. Шваб К. Четвертая промышленная революция. Москва : Эксмо, 2018.
6. Кастельс М. Информационная эпоха: экономика, общество и культура. Москва : ГУ ВШЭ, 2000. 608 с.
7. Волченко О. В. Динамика цифрового неравенства в России. *Мониторинг общественного мнения: Экономические и социальные перемены*. 2016. № 5. С. 163—182.
8. Гайнанов Д., Шарифьянов Т. Эволюция цифрового неравенства и инструментарий нейтрализации его последствий. *Региональная экономика: теория и практика*. 2014. Вып. 22. С. 8—12.
9. Миськевич Т. Цифрова нерівність у сучасному суспільстві: український вимір світових тенденцій. *Український журнал з бібліотекознавства та інформаційних наук*. 2019. Вип. 3. С. 87—107.
10. Caumont A. Who's not online? 5 factors tied to the digital divide. *Pew Research Center*. 2013. URL : https://www.pewresearch.org/fact-tank/2013/11/08/whos-not-online-5-factors-tied-to-the-digital-divide.
11. The digital gender gap is growing fast in developing countries. 2020. URL : https://itu.foleon.com/itu/measuring-digital-development/gender-gap.
12. Steele C. What is the Digital Divide? 2019. URL : http://www.digitaldividecouncil.com/what-is-the-digital-divide.
13. Anderson M., Kumar V. Digital divide persists even as lower-income Americans make gains in tech adoption. *Pew Research Center*. 2019. May 7. URL : https://www.pewresearch.org/fact-tank/2019/05/07/digital-divide-persists-even-as-lower-income-americans-make-gains-in-tech-adoption.
14. Kennedy P., Prat A. Information inequality. 2017. November 25. URL : https://voxeu.org/article/information-inequality.
15. Цифровые дивиденды: Обзор. Вашингтон : Международный банк реконструкции и развития, 2016. № 58. URL : https://documents1.worldbank.org/curated/en/224721467988878739/pdf/102724-WDR-WDR2016Overview-RUSSIAN-WebRes-Box-394840B-OUO-9.pdf.

ISSN 2306-4994 (print); ISSN 2310-8770 (online)

16. Мей К. Інформаційне суспільство. Скептичний погляд / пер. з англ. М. Войцицька. Київ : К.І.С., 2004. 220 с.
17. Сорос Дж. Мыльный пузырь американского превосходства. 2-е изд. Москва : Юнайдет Пресс, 2010. 192 с.
18. Хімані П., Кастелс М. Інформаційне суспільство і держава добробуту. Фінська модель = The Information Society and Welfare State: The Finnish Model. Київ : Логос, 2002. 224 с.
19. Мацегора К. У країні стартує цифрова трансформація економіки. *Урядовий кур`єр*. 2018. 18 січня. URL : https://ukurier.gov.ua/uk/articles/u-krayini-startuye-cifrovatransformaciya-ekonomik.
20. Дослідження цифрової грамотності населення. *MediaSapiens*. 2019. 24 грудня. URL : https://ms.detector.media/print/23983.
21. Malykhina Y. A., Borodiyenko O. V., Radkevych O. P., Radkevych V. O. Experience of human capital development in ukrainian communication companies: scientific and pedagogical approaches. *Financial and Credit Activity: Problems of Theory and Practice.* 2020. № 1 (32). P. 494—506.

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References

1. Libanova, E. (2021, January 21). Interviu s demohrafom: Ukraina—2050 [Interview with a demographer: Ukraine — 2050]. *Liha — League.* Retrieved February 20, 2021, from https://biz.liga.net/pervye-litsa/all/interview/akademik-ella-libanova-karantin-i-distantsionnoe-obuchenie-usilivayut-neravenstvo [in Ukrainian].
2. Tapscott, D. (1998). Growing Up Digital. The Rise of the Net Generation. New York: McGraw Hill. Retrieved from www.growingupdigital.com.
3. Frankel, B. (2005). *Postindustrialni utopisty [Post-industrial utopians]*. Kyiv: Nika-Tsentr [in Ukrainian].
4. Witte, C., & Mannon, S. E. (2010). The Internet and Social Inequalities. New York: Routledge.
5. Shvab, K. (2018). *Chetvertaya promyshlennaya revolyuciya [Fourth industrial revolution]*. Moscow: Eksmo [in Russian].
6. Kastel's, M. (2000). *Informacionnaya epoha: ekonomika, obshchestvo i kul'tura [Information Age: Economy, Society and Culture]*. Moscow: GU VSHE [in Russian].
7. Volchenko, O. V. (2016). Dinamika cifrovogo neravenstva v Rossii. Monitoring obshchestvennogo mneniya [Dynamics of the digital divide in Russia. Public Opinion Monitoring]. *Ekonomicheskie i social'nye peremeny — Economic and Social Change, 5,* 163—182 [in Russian].
8. Gajnanov, D., & Sharif'yanov, T. (2014). Evolyuciya cifrovogo neravenstva i instrumentarij nejtralizacii ego posledstvij [Evolution of digital inequality and tools for neutralizing its consequences]. *Regional'naya ekonomika: teoriya i praktika — Regional economics: theory and practice, Vol. 22,* 8—12 [in Russian].
9. Myskevych, T. (2019). Tsyfrova nerivnist u suchasnomu suspilstvi: ukrainskyi vymir svitovykh tendentsii [Digital inequality in modern society: the Ukrainian dimension of world trends]. *Ukrainskyi zhurnal z bibliotekoznavstva ta informatsiinykh nauk — Ukrainian Journal of Library Science and Information Sciences, Vol. 3,* 87—107 [in Ukrainian].
10. Caumont, A. (2013). Who's not online? 5 factors tied to the digital divide. *Pew Research Center*. Retrieved from https://www.pewresearch.org/fact-tank/2013/11/08/whos-not-online-5-factors-tied-to-the-digital-divide.
11. The digital gender gap is growing fast in developing countries. (2020). Retrieved from https://itu.foleon.com/itu/measuring-digital-development/gender-gap.
12. Steele, C. (2019). What is the Digital Divide? Retrieved from http://www.digitaldividecouncil.com/what-is-the-digital-divide.
13. Anderson, M., & Kumar, V. (2019, May 7). Digital divide persists even as lower-income Americans make gains in tech adoption. *Pew Research Center*. Retrieved from https://www.pewresearch.org/fact-tank/2019/05/07/digital-divide-persists-even-as-lower-income-americans-make-gains-in-tech-adoption.
14. Kennedy, P., & Prat, A. (2017, November 25). Information inequality. Retrieved from https://voxeu.org/article/information-inequality.
15. *Cifrovye dividendy: Obzor [Digital Dividends: An Overview]*. (2016). Washington: Mezhdunarodnyj bank rekonstrukcii i razvitiya. Retrieved from https://documents1.worldbank.org/curated/en/224721467988878739/pdf/102724-WDR-WDR2016Overview-RUSSIAN-WebRes-Box-394840B-OUO-9.pdf [in Russian].
16. Mei, K. (2004). *Informatsiine suspilstvo. Skeptychnyi pohliad [Information society. A skeptical look]*. (M. Voitsytska, Trans.). Kyiv: K.I.S. [in Ukrainian].
17. Soros, J. (2010). *Myl'nyj puzyr' amerikanskogo prevoskhodstva [The bubble of American supremacy]*. Moscow: Yunajdet Press [in Russian].
18. Khimani, P., & Kastels, M. (2002). *Informatsiine suspilstvo i derzhava dobrobutu. Finska model [The Information Society and Welfare State: The Finnish Model]*. Kyiv: Lohos [in Ukrainian].
19. Matsehora, K. (2018, January 18). U kraini startuie tsyfrova transformatsiia ekonomiky [The country is starting a digital transformation of the economy]. *Uriadovyi kurier — Government courier.* Retrieved from https://ukurier.gov.ua/uk/articles/u-krayini-startuye-cifrovatransformaciya-ekonomik [in Ukrainian].
20. *Doslidzhennia tsyfrovoi hramotnosti naselennia [Research of digital literacy of the population]*. (2019, December 24). *MediaSapiens*. Retrieved from https://ms.detector.media/print/23983 [in Ukrainian].
21. Malykhina, Y. A., Borodiyenko, O. V., Radkevych, O. P., & Radkevych, V. O. (2020). Experience of human capital development in ukrainian communication companies: scientific and pedagogical approaches. *Financial and Credit Activity: Problems of Theory and Practice*, *1* (32), 494—506. https://doi.org/10.18371/fcaptp.v1i32.200663.

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