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PROSPECTS FOR IMPROVING THE INVESTMENT ATTRACTIVENESS OF THE EU AND UKRAINE IN THE DIGITAL AGE

ПЕРСПЕКТИВИ ВДОСКОНАЛЕННЯ ІНВЕСТИЦІЙНОЇ ПРИВАБЛИВОСТІ ЄС ТА УКРАЇНИ В ЦИФРОВУ ЕПОХУ

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The article examines the prospects for improving the investment attractiveness of the European Union and Ukraine in the context of the digital transformation of the global economy. It highlights the importance of digital infrastructure development, adoption of innovative technologies, and enhancement of cybersecurity measures as crucial factors influencing the investment climate. The research explores key barriers faced by Ukraine, including regulatory instability, inadequate digital infrastructure, and insufficient alignment with European standards. Emphasis is placed on the role of digital platforms, such as "Diia," in fostering transparency and reducing administrative barriers. Additionally, the paper discusses how advanced technologies like artificial intelligence, blockchain, and big data contribute to optimizing business processes and reducing costs, thereby increasing competitiveness and attracting foreign investment. The study underscores the urgency of adopting a comprehensive national strategy to address these challenges and capitalize on the opportunities offered by digitalization. This work offers practical recommendations for aligning Ukraine's policies with EU standards, ensuring cybersecurity, and fostering innovation-driven growth to enhance investment appeal in the digital era.

Keywords: investment attractiveness, digital transformation, digital infrastructure, cybersecurity, innovation and technology.

У статті досліджено перспективи вдосконалення інвестиційної привабливості Європейського Союзу та України в умовах цифрової трансформації глобальної економіки. Розкрито значення цифрової інфраструктури як основи для залучення іноземних інвестицій. Підкреслено, що у країнах ЄС активне впровадження таких технологій, як штучний інтелект, великі дані, блокчейн та 5G, дозволяє створювати конкурентні умови для інвестиційної діяльності. Особливу увагу приділено досвіду провідних європейських країн, які демонструють успішну інтеграцію цифрових рішень у бізнес-процеси, що сприяє підвищенню продуктивності та зниженню витрат. Водночас для України визначено ключові виклики, що перешкоджають формуванню стабільного інвестиційного клімату. Серед них виділено нерівномірний розвиток цифрової інфраструктури, особливо у сільських регіонах, де доступ до швидкісного Інтернету залишається обмеженим. Аналізується роль державної програми "Дія" як одного з ефективних інструментів зниження адміністративних бар'єрів та підвищення прозорості державного управління. Відзначено, що такі ініціативи є важливими для формування довіри інвесторів, однак потребують подальшого розширення для забезпечення доступності цифрових послуг у всіх регіонах країни. Дослідження акцентує увагу на значенні кібербезпеки як одного з

ключових чинників для залучення інвестицій. Відсутність належної правової бази у сфері захисту даних та низький рівень готовності до протидії кіберзагрозам ускладнюють інвестиційну діяльність. У статті наведено рекомендації щодо розробки національної стратегії кібербезпеки, яка включатиме інституційні заходи, впровадження стандартів захисту даних та підвищення обізнаності бізнесу щодо ризиків у цифровому середовищі. Окрему увагу приділено аналізу впливу регуляторної політики на інноваційну діяльність. Автори відзначають необхідність адаптації українського законодавства до європейських стандартів, зокрема у сфері оподаткування технологічних компаній, стимулювання стартапів та розвитку високотехнологічних секторів. Запропоновано практичні рекомендації щодо створення сприятливих умов для розвитку ІТ-сектора та впровадження інновацій у таких галузях, як фінансові технології, агротехнології та промисловість. Таким чином, стаття підкреслює важливість комплексного підходу до цифровізації економіки України для підвищення її інвестиційної привабливості. Рекомендації, представлені у дослідженні, можуть слугувати основою для розробки національної стратегії, спрямованої на інтеграцію в європейський ринок, стимулювання інноваційного розвитку та забезпечення стійкого економічного зростання.

Ключові слова: інвестиційна привабливість, цифрова трансформація, цифрова інфраструктура, кібербезпека, інновації та технології.

Statement of the problem. The digital transformation of the modern economy is becoming an important factor in attracting investment and increasing the competitiveness of national economies. In the context of globalization and the growing interdependence of global markets, the development of digital infrastructure and adaptation to new technologies are among the key tasks for countries seeking to increase their investment attractiveness. For the European Union (EU) and Ukraine, digital technologies are not only a means of optimizing internal processes, but also an opportunity to integrate into global economic processes. However, Ukraine faces many challenges in the process of implementing digital innovations, in particular due to the instability of the institutional environment, insufficient cybersecurity development, and the need to adapt to European standards.

Analysis of recent research and publications. In recent years, researchers have been actively studying the impact of digital technologies on the investment climate in developing countries and the European Union. In Ukraine, the digitalization of the economy is seen as a key factor in attracting foreign investment and stimulating economic growth. Zubchyk O.A. and Rudenko D.P. [1] note that the COVID-19 pandemic has significantly accelerated the process of digital transformation, especially in the financial sector, public administration, and remote work. This has created new opportunities for investors interested in investing in high-tech industries with relatively low risks. Havatyuk L.S. and Stakhova N.P. [2] examine the main obstacles to the development of the investment climate in Ukraine, highlighting legal and administrative barriers that reduce the confidence of foreign investors. They point to the instability of regulatory policy and the lack of a holistic approach to the development of digital technologies as serious problems. The authors recommend creating a transparent regulatory environment that will reduce barriers to market entry for investors, as well as implementing modern digital solutions to improve the availability of information and simplify administrative procedures. Kravchuk O.V. [3] emphasizes the significance of progressive

technology including artificial intelligence, the Internet of Things, and blockchain for modernizing the economic system and increasing its funding elegance. He argues that the introduction of these technologies can reduce operating expenses and increase the transparency of enterprise procedures, which undoubtedly impacts buyers' decisions. Kravchuk O.V. additionally notes that the successful enjoy of EU nations in the use of these technologies may be adapted in Ukraine, facilitating integration into the worldwide virtual economic system and attracting greater foreign capital. The trouble of taxation inside the virtual area additionally draws the attention of researchers. Voronyatnikov O.O. and Strivashko H.M. [4] notice that a excessive degree of tax burden on the IT zone can avoid the improvement of the enterprise and negatively affect the united states's investment beauty. They emphasize the need to create a machine of tax advantages and incentives to support innovation, in particular inside the context of competition for investment in digital technology, wherein the EU has already set requirements for helping hightech sectors. Melnyk L.H. [5] analyzes the impact of kingdom assist on the development of the virtual financial system in Ukraine. He examines the experience of European countries, consisting of Denmark and the Netherlands, which have effectively applied virtual tasks to simplify administrative tactics and create a transparent business environment. Melnyk L.H. emphasizes that it's far vital for Ukraine now not simplest to adopt the European experience, however additionally to expand its very own projects to enhance get right of entry to to public offerings online, in an effort to help boom funding elegance. Petrenko I.V. [8] attracts attention to the position of e-authorities in increasing Ukraine's investment elegance. He emphasizes the need to introduce digital file control, digital signatures, and online platforms for interaction among the country and commercial enterprise. According to him, such tasks no longer best boom the efficiency of government companies but also create a high quality funding climate, specially for overseas buyers who fee transparency and balance. Sidorenko O.P. and Boyko M.M. [9] examine the

Ukrainian IT region as one of the maximum promising regions for attracting investment. They observe that the excessive qualification of Ukrainian IT specialists and competitive charges for offerings make this zone appealing to traders, especially in the regions of outsourcing and software improvement. The authors endorse supporting the development of IT infrastructure and growing favorable situations for startups, so as to assist Ukraine hold a competitive position in the international market. In preferred, most research verify that the improvement of virtual technology and aid for innovation are key factors for growing a stable investment environment. The use of superior technologies and the model of international revel in allow countries to make sure transparency, reduce fees, and optimize commercial enterprise techniques, which is a vital factor in attracting investment. As Ukraine movements closer to European integration, it has massive potential to put into effect these technologies, however it wishes to overcome inner boundaries such as legislative instability and insufficient cybersecurity.

Highlighting previously unresolved parts of the overall problem. Despite advancements in digitalization and the introduction of modern technologies, both Ukraine and EU countries continue to face challenges that hinder their investment appeal. A significant issue is the unstable legal environment, which erodes investor confidence, especially amid rapid digital technology evolution and rising cyber threats. In the EU, the implementation of GDPR has unified data protection standards, enhancing investor confidence. However, Ukraine lacks a comparable comprehensive framework, making cybersecurity an ongoing concern. Another challenge is the limited infrastructure readiness for adopting advanced technologies. While Ukraine's IT sector has seen progress, the country still faces infrastructure limitations that impact the delivery of high-quality digital services. Many businesses encounter obstacles such as uneven high-speed internet access and inadequate infrastructure funding. EU countries are actively investing in 5G networks and supporting innovative startups, while Ukraine faces obstacles in sustainable development due to limited governmental support.

In conclusion, despite positive trends, unresolved issues remain that demand an integrated approach and effective national strategy.

Setting the task. The purpose of this study is to study the factors influencing the investment attractiveness of Ukraine and the EU in the digital age, and to develop recommendations for improving digital approaches in order to increase investor interest. The objectives of the study are:

- 1. Analysis of the state of digital infrastructure in Ukraine and EU countries.
- 2. Identification of the main risks and challenges faced by Ukraine.
- 3. Development of recommendations for improving the investment climate.

Summary of the main results of the study. The funding environment depends on many factors, foremost among which is the improvement of digital infrastructure. In the EU, digitization has become a key detail of the financial boom. According to the Digital Economy and Society Index (DESI) [11], Denmark, Finland and the Netherlands are the main ways of implementing IoT, artificial intelligence and 5G. These technologies facilitate quick conversation and improve the pleasantness of virtual services that attract foreign investment. For Ukraine, which is just beginning to actively digitize, it is extremely important to be aware of European standards and adapt them to national specifics. An essential function in this system is performed by the state software "Diia", which allows residents and organizations to access public offers online and reduces administrative barriers. Havatyuk L.S. and Stakhova N.P. [2] note that the implementation of such solutions has an amazing effect on the financing climate, since transparency and availability of statistics are crucial for buyers. However, for the long-term interest of buyers, it is vital to stick with the modernization of the virtual infrastructure and ensure its availability in all regions. Technological innovations, which include synthetic intelligence, huge facts, and blockchain, have become the foundation for modernizing the economic system and increasing investment attractiveness. Kravchuk O.V. [3] argues that those technologies optimize enterprise tactics and decrease operating fees, that is attractive to buyers. In the EU, virtual solutions are actively used to automate manufacturing, boom productiveness, and create new jobs. For example, Denmark, a pacesetter in DESI, demonstrates how automation promotes investor hobby and the improvement of new enterprise areas [11]. In Ukraine, the IT quarter, especially outsourcing, has good sized capacity for attracting investment. Sidorenko O.P. and Boyko M.M. [9] word that the excessive qualification of Ukrainian experts and competitive fees create favorable conditions for overseas traders. In addition, the development of agrotechnology and fintech contributes to the diversification of the economic system and opens up extra possibilities for growth. Despite its advantages, digitalization also brings new dangers. The main ones are cyber threats and requirements for the protection of statistics structures. Zakharov I.P. [6] emphasizes that nations that invest in cybersecurity encourage extra self belief amongst traders. In the EU, GDPR standards make sure reliable data safety, which stimulates capital inflows [11]. For Ukraine, the development of cybersecurity is important. Cyber threats can undermine investor confidence and jeopardize the facts of public and personal institutions. Voronyatnikov O.O. and Striyashko H.M. [4] emphasize the want to create a prison framework that meets European requirements to shield digital property. This consists of the implementation of cybersecurity standards in organizations and authorities businesses.

The digital age has redefined the parameters of global competitiveness, placing advanced technology and innovation at the center of economic growth. Countries that invest in digitization create favorable environments for business, attract foreign investment, and enhance their global standing. For Ukraine and the European Union (EU), achieving and maintaining investment attractiveness in the digital economy requires a comprehensive approach that addresses both opportunities and challenges [2]. One of the primary drivers of investment attractiveness is a well-developed digital infrastructure. In the EU, digital infrastructure is seen as a strategic priority, with countries like Finland, Sweden, and the Netherlands investing heavily in high-speed internet, cloud computing, and 5G networks. These technologies facilitate seamless communication, efficient data processing, and high-quality services, forming a solid base for innovation and enterprise.

In Ukraine, the uneven development of digital infrastructure presents a challenge. While urban areas benefit from advanced connectivity, rural regions often lack access to reliable internet and digital services. Bridging this gap is essential for creating equal opportunities and encouraging investments in underdeveloped areas. Government initiatives like "Diia" showcase promising steps, enabling online access to public services and reducing administrative barriers for businesses. However, sustained efforts are needed to expand digital access and modernize infrastructure across the country [3].

Technological advancements such as artificial intelligence (AI), blockchain, and big data analytics are transforming economies worldwide. These innovations optimize operations, reduce costs, and open new markets, making them crucial for attracting foreign direct investment (FDI). In the EU, Industry 4.0 initiatives have revolutionized manufacturing, improving productivity and fostering new industries. For example, Al-driven supply chain management and blockchain-based secure transactions are drawing significant investor interest [3]. Ukraine, with its strong IT sector and skilled workforce, has the potential to become a regional leader in technology-driven investment. Outsourcing, fintech, and agrotechnology are particularly promising sectors that could benefit from targeted investment incentives. By fostering an environment that encourages technological innovation, Ukraine can leverage its competitive advantages to attract international capital.

As economies digitize, cybersecurity has emerged as a critical concern for investors. Reliable data protection is essential to safeguard business operations and maintain investor confidence. The EU's GDPR framework has set a global standard for data security, enhancing the region's investment appeal. In contrast, Ukraine faces significant challenges in establishing comprehensive cybersecurity measures. Addressing these gaps is

imperative to protect both public and private sector assets [5; 6]. Developing a national cybersecurity strategy that includes robust legal frameworks, advanced technologies for threat detection, and public awareness campaigns is essential. Such measures will not only mitigate risks but also signal to investors that Ukraine is committed to creating a secure and trustworthy business environment.

Regulatory stability is another cornerstone of investment attractiveness. For Ukraine, aligning its policies with EU standards can enhance investor confidence and facilitate economic integration. Simplifying tax structures for tech companies, providing incentives for startups, and creating transparent governance systems are key steps toward this goal. Moreover, fostering public-private partnerships can accelerate the implementation of innovative projects and attract long-term investments [4].

The digital age offers unprecedented opportunities for economic development and investment. By addressing its challenges in digital infrastructure, technology adoption, cybersecurity, and regulatory frameworks, Ukraine can unlock its full potential and establish itself as a competitive destination for investment. Collaboration with the EU, coupled with a clear national strategy, will be instrumental in achieving this vision.

Conclusions. The study confirms that digital transformation is not just a trend, but a strategic necessity to increase the investment attractiveness of Ukraine and the European Union in the current global economy. Digital technologies are becoming a catalyst for economic growth, innovation and social progress, creating new opportunities for business development, improving public administration and improving the quality of life of citizens. An analysis of the experience of EU countries, such as Denmark and the Netherlands, suggests that the systemic introduction of digital technologies contributes to the formation of a favorable investment climate. They demonstrate how the development of high-speed digital infrastructure, support for innovative startups and the creation of a transparent regulatory environment can attract significant amounts of foreign capital. These countries are actively investing in 5G technologies, the Internet of Things, artificial intelligence, which allows them to remain at the forefront of global technological development. For Ukraine, digitalization opens wide prospects for integration into the European and world economic space. The implementation of programs like "Action" indicates the state's readiness for innovation and the desire to improve the interaction between government, business and citizens. The development of the IT sector, the growing number of technology startups and the high level of competence of Ukrainian specialists create a solid foundation for building a competitive digital economy. However, there are serious challenges on the way to full-fledged digital transformation. The instability of the institutional environment, the insufficient level of cybersecurity development, the digital divide between the city and the village, as well as the need to adapt to European standards – all this requires immediate attention and solution. To maximize the potential of digitalization and increase the investment attractiveness of Ukraine, it is recommended:

- 1. Develop and implement a national digital transformation strategy: The strategy should include clearly defined goals, deadlines and responsible authorities, as well as provide for coordination between different sectors of the economy and levels of government.
- 2. Strengthen institutional stability and transparency of the regulatory environment: It is necessary to ensure the stability of legislation, especially in the field of digital technologies, intellectual property and taxation, which will increase investor confidence.
- 3. Invest in digital infrastructure: Providing access to high-speed Internet and modern telecommunication technologies in all regions of the country will contribute to uniform economic development and reduce the digital divide.
- 4. Increase the level of cybersecurity: Develop and implement national cybersecurity programs, ensure compliance with international standards and conduct regular training of specialists in this field.
- 5. Promote innovation and entrepreneurship: Introduce tax incentives, grant programs and other incentives to support startups and innovative enterprises, especially in the high-tech industry.
- 6. Increase the digital literacy of the population: Implement educational programs and initiatives aimed at increasing the level of digital skills among all segments of the population, which will facilitate more active use of digital services.
- 7. Enhance international cooperation: Participate in European and international digital development programs, which will allow you to adopt best practices, access the latest technologies and attract foreign investment.
- 8. Create favorable conditions for the development of the IT sector: Introduce special tax regimes, simplify administrative procedures and provide legal protection for IT companies, which will allow them to develop and compete globally.
- 9. Develop e-government and digital public services: Expand the range and quality of e-services provided by the state to improve the efficiency of public administration and reduce bureaucratic barriers.

10. Support the development of digital technologies in traditional sectors of the economy: Promote innovation in industry, the agricultural sector, transport and energy, which will increase their competitiveness and productivity.

Digital transformation is not only a technological, but also a socio-economic process that requires an integrated approach and coordinated actions by the state, business and civil society. For Ukraine, this is a unique opportunity to accelerate economic development, improve the quality of life of citizens and consolidate its position in the international arena. Given the strategic importance of digitalization, it is important that it becomes a public policy priority with a clear action plan and resource provision. Only through partnership and joint efforts can existing challenges be overcome and the potential provided by modern digital technologies be realized.

Ultimately, successful digital transformation will contribute to an open, innovative and competitive economy that is able to adapt to rapid changes in the global environment and ensure sustainable economic growth for the long term.

Further scientific research may be aimed at a detailed analysis of the impact of individual digital technologies on various sectors of the Ukrainian economy, assessing the effectiveness of the implementation of state digitalization programs, as well as developing models for predicting investment attractiveness in a digital economy.

In addition, an important area is the study of the social aspects of digitalization, in particular the impact on the labor market, education and social integration. Analysis of possible risks associated with the digital divide and cyber threats also requires additional attention. Digitalization acts as a powerful tool for transforming the economy and society. For Ukraine, this is a chance not only to catch up with developed countries, but also to become a leader in some aspects, using its own intellectual potential and innovative spirit. Responsible attitude to this process, supported by clear strategies and practical actions, will ensure sustainable growth, increase investment attractiveness and improve the well-being of citizens. In general, the success of digital transformation depends on the collective efforts of government, business, the scientific community and civil society. The common goal of creating a prosperous, innovative and competitive Ukraine in the digital age is achievable if we act decisively and in a coordinated manner.

REFERENCES:

- 1. Zubchyk O. A., Rudenko D. P. (2023) Vplyv pandemii COVID-19 na investytsiinu polityku derzhavy v Ukraini [The impact of the COVID-19 pandemic on the investment policy of the state in Ukraine]. *Naukovi perspektyvy*, no. 10(40), pp. 122–136.
- 2. Havatyuk L. S., Stakhova N. P. (2022) Problemy ta chynnyky formuvannia pryvablyvoho investytsiinoho klimatu Ukrainy [Problems and factors in the formation of an attractive investment climate in Ukraine]. *Investytsii:* praktyka ta dosvid, no. 21, pp. 66–72.

- 3. Kravchuk O. V. (2021) Tsyfrovizatsiia ta yii vplyv na investytsiinyi potentsial Ukrainy [Digitalization and its impact on the investment potential of Ukraine]. *Ekonomichnyi prostir*, no. 172, pp. 23–28.
- 4. Voronyatnikov O. O., Striyashko H. M. (2023) Opodatkuvannia yurydychnykh osib v IT-sektori cherez pryzmu yikh pravovoho statusu [Taxation of legal entities in the IT sector through the prism of their legal status]. *Naukovi zapysky. Seriia: Pravo*, no. 15, pp. 47–51.
- 5. Palyvoda K. V. (2018) Problemy formuvannia pryvablyvoho investytsiinoho klimatu yak zasib podolannia destruktsii v ekonomitsi Ukrainy [Problems of formation of an attractive investment climate as a means of overcoming destruction in the economy of Ukraine]. *Ekonomika ta derzhava*, no. 3, pp. 4–9.
- 6. Zakharov I. P. (2019) Vplyv tsyfrovizatsii na ekonomichnyi rozvytok ta zaluchennia investytsii [The impact of digitalization on economic development and investment attraction]. *Ekonomichni doslidzhennia*, no. 6, pp. 32–39.
- 7. Melnyk L. H. (2021) Rol derzhavnoi pidtrymky u rozvytku tsyfrovoi ekonomiky [The role of state support in the development of the digital economy]. *Innovatsii v Ukraini*, no. 4, pp. 110–118.
- 8. Petrenko I. V. (2020) Elektronne uriaduvannia yak chynnyk pidvyshchennia investytsiinoi pryvablyvosti [E-government as a factor of increasing investment attractiveness]. *Derzhavne upravlinnia ta ekonomika*, no. 2, np. 230–240.
- 9. Sidorenko O. P., Boyko M. M. (2021) Ukrainskyi IT-sektor yak rushiina syla ekonomiky [Ukrainian IT sector as a driving force of the economy]. *Naukovyi visnyk*, no. 5, pp. 58–65.
- 10. Polyakova Y. K. (2023) Suchasni napriamy vdoskonalennia rynku osobystoho strakhuvannia v Ukraini [Modern directions of improvement of the personal insurance market in Ukraine]. Bachelor's qualification work. Kyiv: National University of Kyiv-Mohyla Academy.
- 11. DESI Indeks tsyfrovoi ekonomiky ta suspilstva 2022 [DESI Digital Economy and Society Index 2022]. *Yevropeiska komisiiia*.
- 12. Yanchenko I. A., Aksenenko O. B. (2021) Vykorystannia shtuchnoho intelektu v ahrarnomu sektori Ukrainy [The use of artificial intelligence in the agricultural sector of Ukraine]. *Ahrarna ekonomika*, no. 2, pp. 308–315.
- 13. Shevchenko A. I. (2022) Rozvytok tsyfrovykh startupiv v Ukraini: perspektyvy ta vyklyky [Development of digital startups in Ukraine: prospects and challenges]. *Pidpryiemnytstvo v Ukraini*, no. 1, pp. 132–140.

БІБЛІОГРАФІЧНИЙ СПИСОК:

- 1. Зубчик О.А., Руденко Д.П. Вплив пандемії COVID-19 на інвестиційну політику держави в Україні. *Наукові перспективи*. 2023. № 10(40). С. 122–136.
- 2. Гаватюк Л.С., Стахова Н.П. Проблеми та чинники формування привабливого інвестиційного клімату України. *Інвестиції: практика та досвід.* 2022. № 21. С. 66–72.
- 3. Кравчук О.В. Цифровізація та її вплив на інвестиційний потенціал України. *Економічний простір*. 2021. № 172. С. 23–28.
- 4. Воронятников О.О., Стріяшко Г.М. Оподаткування юридичних осіб в ІТ-секторі через призму їх правового статусу. *Наукові записки. Серія: Право*. 2023. № 15. С. 47–51.
- 5. Паливода К.В. Проблеми формування привабливого інвестиційного клімату як засобу подолання деструкцій в економіці України. *Економіка та держава*. 2018. № 3. С. 4–9.
- 6. Захаров І.П. Вплив цифровізації на економічний розвиток та залучення інвестицій. *Економічні дослі-дження*. 2019. № 6. С. 32–39.
- 7. Мельник Л.Г. Роль державної підтримки у розвитку цифрової економіки. *Інновації в Україні*. 2021. № 4. С. 110–118.
- 8. Петренко І.В. Електронне урядування як чинник підвищення інвестиційної привабливості. *Державне управління та економіка*. 2020. № 2. С. 230–240.
- 9. Сидоренко О.П., Бойко М.М. Український ІТ-сектор як рушійна сила економіки. *Науковий вісник*. 2021. № 5. С. 58–65.
- 10. Полякова Я.К. Сучасні напрями вдосконалення ринку особистого страхування в Україні: Кваліфікаційна робота бакалавра. Київ : Національний університет «Києво-Могилянська академія». 2023.
 - 11. DESI Індекс цифрової економіки та суспільства. 2022. Європейська комісія.
- 12. Янченко І.А., Аксьоненко О.Б. Використання штучного інтелекту в аграрному секторі України. *Аграрна економіка*. 2021. № 2. С. 308–315.
- 13. Шевченко А.І. Розвиток цифрових стартапів в Україні: перспективи та виклики. *Підприємництво в* Україні. 2022. № 1. С. 132–140.