Научная статья
УДК 338.26
doi: 10.17586/2713-1874-2024-3-30-37

# ИССЛЕДОВАНИЕ ТЕКУЩЕГО СОСТОЯНИЯ ЦИФРОВОЙ ЭКОНОМИКИ В КОРОЛЕВСТВЕ САУДОВСКАЯ АРАВИЯ

***Елена Николаевна Кан[1], Хазима МХД Вael[2]✉***

[1,2]Университет ИТМО, Санкт-Петербург, Россия
[1]2494433@mail.ru, https://orcid.org/0009-0009-5446-1893
[2]wael.hazima@gmail.com✉, https://orcid.org/0009-0001-2695-0173
Язык статьи – русский

**Аннотация:** Статья посвящена изучению текущего состояния цифровой экономики в Саудовской Аравии, крупнейшей стране региона Персидского залива. Исследование цифровой экономики Королевства включает оценку ее уровня на основе различных глобальных цифровых показателей, которые были выбраны и определены в соответствии с принципами политики цифровой экономики Королевства. Изучено положение Саудовской Аравии и ее рейтинг по сравнению с другими странами, в частности, странами «Большой двадцатки». Проанализирована национальная стратегия, а также вклад цифровой экономики в национальную экономику. Проведен взвешенный SWOT-анализ, который позволил определить уровень текущего состояния цифровой экономики Саудовской Аравии, а также определить ее сильные и слабые стороны, возможности и угрозы. В результате исследования авторами была выявлена необходимость в реализации обширных инициатив по повышению цифровой грамотности и продвижению сотрудничества между образованием и частным сектором, а также целевых программ технического образования, развития местной электронной промышленности и разработки схем антикризисного управления. Предложенные рекомендации могут быть использованы для планирования и реализации мероприятий по поддержке и ускорению процесса цифровизации экономики в Королевстве.

**Ключевые слова:** возможности, вызовы, инфраструктура, рекомендации, Саудовская Аравия, стратегия, цифровая экономика

**Ссылка для цитирования:** Кан Е. Н., Хазима МХД Вael. Исследование текущего состояния цифровой экономики в Королевстве Саудовская Аравия // Экономика. Право. Инновации. 2024. № 3. С. 30–37. (На английском языке). http://dx.doi.org/10.17586/2713-1874-2024-3-30-37.

# EXAMINING THE CURRENT STATE OF THE DIGITAL ECONOMY IN THE KINGDOM OF SAUDI ARABIA

***Elena N. Kan[1], Hazima MHD Wael[2]✉***

[1,2]ITMO University, Saint Petersburg, Russia
[1]2494433@mail.ru, https://orcid.org/0009-0009-5446-1893
[2]wael.hazima@gmail.com✉, https://orcid.org/0009-0001-2695-0173
Article in Russian

**Abstract:** The article aims to examine the current state of the digital economy in Saudi Arabia, the largest country in the Gulf region. The examination of the Kingdom's digital economy involved assessing its level based on various global digital indicators, which been picked and determined in accordance with the digital economy policy principles of the Kingdom. The position of Saudi Arabia and its ranking compared to other countries, particularly the G20 nations, was studied. The national strategy aimed at enhancing economic digitalization was analyzed, along with the contribution of the digital economy to the national economy. A weighted SWOT analysis was carried out, which made it possible to determine the level of the current state of the digital economy of Saudi Arabia, as well as to determine its strengths and weaknesses, opportunities and threats. As a result of the study, the authors identified the need for extensive initiatives to improve digital literacy and promote collaboration between education and the private sector, as well as targeted technical education programs, development of the local electronics industry and the development of crisis management schemes. The proposed recommendations can be used to plan and implement measures to support and accelerate the process of digitalization of the economy in the Kingdom.

**Keywords:** challenges, digital economy, infrastructure, opportunities, recommendations, Saudi Arabia, strategy

**For citation:** Kan E. N., Hazima MHD Wael. Examining the Current State of the Digital Economy in the Kingdom of Saudi Arabia. *Ekonomika. Pravo. Innovacii*. 2024. No. 3. pp. 30–37. http://dx.doi.org/10.17586/2713-1874-2024-3-30-37.

**Introduction.** Digital economy is an expression of the internet-based economy, dealing with digital information, digital customers, digital companies, technology, and digital products. It involves building an information society by harnessing information and communication technology to achieve various developmental goals [1]. In this context, reference can be made to the proposed definition by the Organization for Economic Cooperation and Development (OECD) represents all economic activities that rely on the use of digital inputs, including digital technologies, digital infrastructure, digital services, data, or those facilitated and significantly enhanced by the use of digital inputs, involving all producers and consumers, including the government [2].

Generally, the digital economy aims to enhance national security. Therefore, the Kingdom of Saudi Arabia seeks to enhance its national economy by transitioning to the digital economy, following a policy approach of digital economy, and adopting technologies in all fields. During its presidency of the G20 in 2020 (Global Solutions Initiative website), Saudi Arabia focused its efforts on overcoming obstacles and addressing challenges to expand private sector participation in the digital economy. The kingdom is racing with the rest of the world to provide maximum support for national economic development, justifying the importance of conducting a study on the digital economy in Saudi Arabia.

**Research Problem.** What is the current status of the digital economy in the Kingdom of Saudi Arabia as one of the largest countries in the Gulf region, after years of digitalizing the economy process, with multiple entities playing significant roles? What the impact of current strengths, weaknesses, threats, and opportunities of digital economy on its level and what measures are needed to empower this economy?

The problem is the difficulty of determining the current status of the digital economy in Saudi Arabia due to the numerous initiatives and plans aimed at diversifying and digitalizing the economy. Therefore, it is essential to analyze this situation using various digital indicators and compare it with the G20 countries to identify the measures that can further develop the digital economy.

This level of awareness is deemed necessary at present, to ensure that the correct trajectory towards the realization of the Kingdom's Vision 2030, particularly with regard to the National Transformation Program designed for its attainment [3]. In addition to the World Bank's cooperation with the Saudi government to develop its digital economy and achieve its goals of diversifying economic activity, inclusion, quality of life, sustainability, and excellence in government services [4].

Thus, this article aims to analyze the current status of the digital economy in Saudi Arabia, compare it with G20 countries to identify effective digitalization tools, and draw attention to the main weak points that will be found during the analysis process.

**Literature Review.** The digital economy encompasses various dimensions, prominently marked by the widespread adoption of the internet, transforming business models fundamentally. Wargin and Dobiéy (2001) emphasize this shift, highlighting the imperative for businesses to adapt to new technologies and customer expectations to remain competitive [5]. Cadden and Lueder (2012) further delineate the digital economy into E-Business and E-Commerce, providing insights into managing modern business challenges effectively [6].

Digital Economy Policy Principles in the Kingdom of Saudi Arabia are: Access, Technology Adoption and Use, innovation, human capital, social prosperity and inclusion, trust in the digital ecosystem, and open markets. The Ministry of Communications and Information Technology has specified this policy to be its objective is to drive growth of the digital economy by informing the public sector, private enterprises, and the international community of the Kingdom of Saudi Arabia's stated position on matters related to the digital economy. The policy sets out guiding principles for government agencies to leverage the digital economy through their respective mandates to drive diversification and sustainability across the economy, and create a more competitive advantage for the Kingdom [7].

Alawadhi and Morris (2009) delve into the factors influencing e-government adoption in Kuwait, leveraging the Unified Theory of Acceptance and Use of Technology (UTAUT) model. Their study offers valuable insights into the complexities surrounding e-government adoption, shedding light on the role of

usefulness, ease of use, bureaucratic reforms, cultural influences, and awareness levels [8].

Eid R., Badewi A., Selim H., El-Gohary H. (2019) investigate the entrepreneurial intention (EI) of senior university students, focusing on Emirati nationals and expatriates in the city, by integrating the theory of planned behavior (TPB) with the entrepreneurial event model (EEM) and extending the combined model to include personality characteristics of entrepreneurs. By adopting a positivist research approach with a quantitative survey strategy, including structural equation modeling, the authors provide valuable insights into the cognitive and psychological factors influencing entrepreneurial perceptions and intentions. This research contributes significantly to the field by offering a comprehensive framework that considers not only entrepreneurs' perceptions but also their underlying cognitive and psychological characteristics, thereby enhancing our understanding of the mechanisms driving entrepreneurial intention among university students [9].

El-Sofany et al. (2012) provide a comprehensive analysis of e-government in Saudi Arabia, identifying barriers, challenges, and opportunities for development. The paper culminates in a quantitative analysis of survey responses obtained from citizens and employees in the public sector, providing empirical insights into the state of e-government in KSA. Their study underscores the significance of ICT investment in driving economic growth and offers recommendations for enhancing e-government performance [10].

Similarly, Saeed and Al-Maliki (2013) assess ICT investment in Saudi Arabia, emphasizing its role in economic diversification. By analyzing the impact of ICT investment and the government's role through successive five-year plans. Their study evaluates government strategies, highlighting areas needing attention such as ICT infrastructure, skilled personnel, education integration, financial market development, and public awareness, to maximize ICT's benefits for Saudi Arabia's prosperity [11].

Overall, these studies contribute to understanding of the digital economy landscape and policy implications.

**Research Methods and Materials.** The descriptive approach was used to collect information for the theoretical framework from local and global digital economy websites, as well as data from digital economy programs in the kingdom, international and local reports, government platforms for the digital economy, and data from relevant local authorities and ministries (Table 1). In addition to a systematic review of the literature and data sources to identify relevant information for the SWOT analysis. The information gathered was then analyzed and synthesized to identify key strengths, weaknesses, opportunities, and threats for the digital economy in the Kingdom of Saudi Arabia.

Table 1

**Sources Used for Research (Non-Exhaustive List)**

| | |
|---|---|
| International organizations' websites | The World Bank; European Center for Digital Competitiveness; International Telecommunication Union; United Nations; World Economic Forum; International Labour Organization; World Wide Web Foundation; UNESCO; UNCTAD; WIPO. |
| Government websites | Unified National Platform; Digital Government Authority; General Authority for statistics; Ministry of Communications and Information Technology; Ministry of Investment; Saudi Data & AI Authority; Ministry of Education; Saudi Electronic University. |
| Other websites | S&P Global; Institute for Management Development; Arthur D. Little; Digital Marketing Community. |

**Research Results.** The Kingdom of Saudi Arabia's National Strategy for Digital Transformation, spanning from 2006 to 2030, has evolved through several action plans. These plans have aimed to enhance access to government services, build a sustainable workforce, improve citizens' experiences, foster a culture of collaboration and innovation, establish a «Smart Government», and align with the United Nations Sustainable Development Goals and Saudi Vision 2030. Notable initiatives include the implementation of the Electronic Services Agency, known as «Yesser», and the establishment of the Digital Government Authority.

To achieve the goal of this article, it was necessary to identify the role of the digital economy in the overall economy of the Kingdom. Saudi Arabia has shown full commitment to developing the digital economy, with one of the main objectives being to unleash the potential of non-oil sectors and assist in the growth and diversification of the Saudi economy. The contribution of the telecommunications, transport, and storage sector to the Kingdom's GDP in 2020 reached approximately 146.910 billion Saudi riyals. With increased telecommunications capabilities and digital advancement, Saudi companies have the opportunity to increase revenues to around 200 billion Saudi riyals. In 2021, Saudi Arabia ranked sixteenth among the G20 countries in terms of per capita GDP, reaching $19,698 USD. This calculation is usually based on the contribution of the telecommunications and information technology sector to the GDP. According to the statistics of the General Authority for Statistics in Saudi Arabia in the first quarter of 2021, this sector contributed approximately 5.48% to the total GDP.

To analyze Saudi Arabia's digital economy, its strengths, weaknesses, threats, and opportunities, it was compared globally using digital economic indicators from 2020. This year was chosen due to the availability of comprehensive global statistics (Table 2). These digital indicators align with many of the Kingdom’s digital economy policy principles.

Table 2

**The global ranking of the Kingdom of Saudi Arabia in digital economy indicators in 2020**

*Source: Created by the Authors*

| Global Rank | Digital Economy Indicator |
|---|---|
| 1 out of 15 | Average speed of 5G with more than 12,000 5G towers [12] |
| 62 out of 190 | Worldwide in the Ease of Doing Business Index according to the latest World Bank annual ratings [13] |
| 1 out of 20 | Digital competitiveness in the G20 Digital Riser Report 2020 from European Center for Digital Competitiveness [14] |
| 1 out of 193 | Digital Giving Initiative Award under the category 15 [15] |
| 2 out of 63 | In cybersecurity for companies in the annual Global Competitiveness Report by the global competitiveness center |
| 7 out of 193 | Average mobile internet speed according the annual report 2020 by Ministry of Communications and Information Technology |
| 7 out of 63 | Technical development funding in the annual Global Competitiveness Report by the global competitiveness center |
| 8 out of 20 | Digital infrastructure index in the Digital Government Development Index |
| 9 out of 140 | Digital skills in the Global Competitiveness Report (GCR) for 2020 issued by the World Economic Forum |
| 14 out of 63 | In the digital transformation index for companies in the global competitiveness statistical yearbook by Institute for Management Development (IMD) according to the semi-annual report on national digital transformation |
| 43 out of 193 | Worldwide in the United Nations E-Government Development Index |

Some indicators of the digital economy were studied in more detail and the Kingdom's position was compared with the countries of the G20, which include the strongest economies around the world.

1) Internet and Access. Free access to the internet in the Kingdom is among the highest rates in the world compared to several countries such as the United Kingdom and China, where 93% of the population has internet access. Saudi Arabia ranks fourth in internet access among individuals among the G20 countries (According to International Telecommunication Union – 2019).

2) Companies and startups. Saudi companies face the imperative to not just adapt but also lead this transformation to remain competitive. With software spending at 0.4% of GDP (eighth among G20 nations) and a ratio of technicians to

the workforce ranking 11th, Saudi firms are actively embracing digitalization (According to HIS Markit before merging with S&P Global, International Labour Organization, 2020, respectively). Saudi Arabia ranks 13th in startup-friendliness among G20 countries, with a focus on replicating rather than innovating international business models. Additionally, less than 15% of startups are deeply technology-driven, posing limitations on long-term innovation prospects (According to Arthur D. Little commissioned by the Ministry of Communications and Information Technology, 2021).

3) Government. The Saudi government spearheads digital transformation efforts, utilizing digital technologies to engage citizens and advance information and communication technology across society. Notably, initiatives like the 'Absher' e-government program have propelled Saudi Arabia to a leading position globally, ranking 36th out of 193 countries in e-government transactions (According to the United Nations e-Government Survey, 2018). Moreover, the Kingdom leads (1st rank) among G20 nations in both the adoption of information and communication technology and government efficiency (According to Executive Opinion Survey, World Economic Forum, 2020).

4) Infrastructure. The Saudi government works alongside the private sector to upgrade the information and communication technology infrastructure, and the Kingdom has made significant progress in communications, as noted in key indicators (According to Ministry of Investment, 2022). As part of its national broadband plan, Saudi Arabia invests in fixed broadband networks. As of December 2020, nearly 60% of households are covered by fiber optic (compared to 23% in 2016), with an average fixed broadband speed of 79.6 megabits per second as of the fourth quarter of 2020 (compared to 21.5 megabits per second in 2016). Regarding mobile coverage, 94% of the population is covered by 4G technology as of the fourth quarter of 2020 (compared to 77.3% in 2016), and Saudi Arabia was one of the first countries to launch commercial services for 5G networks.

5) Data. Data plays a crucial role in the digital economy, driving advancements like artificial intelligence. Traditionally, Saudi Arabia lags behind its regional peers such as the UAE and Bahrain in international indices such as data readiness, execution, and impact (According to World Wide Web Foundation, 2017). However, Saudi Arabia recently launched several projects to address this issue. In 2019, the Saudi Data and Artificial Intelligence Authority (SDAIA) was established to identify national data and strategic artificial intelligence and achieve impact through coordinated data policies, data analytics, and AI innovation.

6) Content and Services. Including software, applications, and emerging technologies like 3D printing and robotics, are vital for maximizing the benefits of the digital economy. In Saudi Arabia, investments in cutting-edge technologies such as cognitive AI, AR/VR, and big data analytics have been increasing yearly, reaching 1,150 million Saudi riyals by 2020 (According to Digital Marketing Community). The country ranks eighth in providing local online content and ninth in adopting new technologies among G20 nations, showcasing its commitment to digital advancement (According to Executive Opinion Survey, World Economic Forum, 2017).

7) Digital Skills. The Saudi government prioritizes digital skills development, notably through initiatives like transitioning to digital education by the Ministry of Education (MoE). Digital institutions like the Saudi Electronic University (SEU) have been established, offering online bachelor's and postgraduate degrees with multiple options since 2020. The number of enrolled students has reached 25,000 (According to UNESCO), so the percentage of youth and adults with ICT skills in the Kingdom is 31.43%, not far from leading digital economies like France and South Korea. However, there seems to be insufficient coordination between educational institutions and employers according to the Communications and Information Technology Commission, where 47% of the organizations surveyed in Saudi Arabia considered that recently appointed graduate employees were equipped with the necessary skills to fulfill their job responsibilities. Additionally, only 29% of Saudi employers provide training courses or training to compensate for this skills gap.

8) Trust and Security. Saudi Arabia ranks first regionally and 13th globally in cybersecurity. Despite this, trust conditions can be enhanced. E-commerce has surged, with online shopping penetration rising from 18% to 40% between 2014 and 2017. However, cash-on-

delivery remains prevalent due to security concerns, especially among key demographics like women and youth. While alternatives exist, including PayPal and Apple Pay, Hyperpay and STC Pay have gained traction. Increasing trust in digital payments is crucial for sustained e-commerce growth. The COVID-19 pandemic accelerated digital payments, reaching 75% of total transactions in 2020, with a notable -30% decrease in cash withdrawals compared to 2019, indicating growing comfort with digital transactions.

9) Regulations and Legislation. Regulatory frameworks in Saudi Arabia are advancing but may struggle to adapt to rapid technological changes. Therefore, some key areas, such as e-commerce regulation, still lag behind in maturity, for example the draft Consumer Protection Law, which has only been issued and entered into force and binding for about a year and a half, and also the Personal Data Protection Law, which is expected to enter into force in September 2024, after amendment and postponement. Saudi Arabia ranks last among G20 countries in e-commerce legislation due to its initial systems around consumer data, privacy, and protection (According to UNCTAD, 2020).

10) Innovation. Initiatives like Fintech Saudi, launched by the Saudi Central Bank in 2018, exemplify efforts to boost the fintech industry. While progress is evident, there's room for improvement, as indicated by rankings in patent applications in the field of ICT and innovation ecosystem development ($13^{th}$, $20^{th}$ respectively among G20) (According to WIPO, 2020).

The SWOT analysis points were derived from the information provided and credible sources, with weights assigned based on source reliability (Table 3). International organization reports were assigned a relative weight of 1, government reports 0.5, and research papers, articles, or websites 0.2. International reports received the highest weight due to their reliance on comprehensive data, while government reports were weighted lower due to potential bias. Research papers and articles were given the lowest weight due to verification challenges.

Table 3

**SWOT analysis of the digital economy of Saudi Arabia**

*Source: Created by the Authors*

| Strengths | | Weaknesses | |
|---|---|---|---|
| High internet penetration rates in Saudi Arabia have led to enhanced productivity and efficiency. | 0.5 | High short-term unemployment | 0.5 |
| | | Resistance to digital economy adoption and the desire to use traditional methods | 0.2 |
| Expanding the scope of the market and integrating everyone are facilitated by services accessible to all segments of society. | 1 | Limited private sector awareness | 0.5 |
| | | Increased cost in constructing infrastructure as a result of importing it from abroad | 0.2 |
| Efficient resource utilization. | 1 | | |
| Effective governance and oversight. | 1 | | |
| Economic development and investment enhancement. | 0.2 | Inadequate protection and security measures for systems | 1 |
| | **3.7** | | **2.4** |
| Opportunities | | Threats | |
| Adopt global digital systems | 1 | Weak competitiveness with more developed countries. | 0.5 |
| Expand digital economy applications | 1 | | |
| Easily integrate into the global economy | 1 | Negative impact on national company competitiveness | 0.5 |
| Entrepreneurship growth opportunities | 0.5 | | |
| Unlock investment prospects and employ qualified personnel | 0.5 | Limited access to global business tools | 0.5 |
| | | Increasing telecommunication costs | 0.2 |
| | | Weakness in electricity sector infrastructure | 0.2 |
| | | Vulnerability to unexpected external economic crises | 0.5 |
| | **4** | | **2.4** |

**Conclusions.** Based on the SWOT analysis weighting process, the sum of the strengths and opportunities of the current state of the digital economy in the Kingdom of Saudi Arabia is higher, indicating that the Saudi digital economy is moving in the right direction. However, it is crucial to address the weak points and mitigate threats to ensure continued progress. Two primary weak points are inadequate protection and security measures for systems and limited private sector awareness. To address these issues, several steps can be taken: enhanced security training and awareness programs to educate employees on recognizing and mitigating social engineering attacks, insider threats, and the importance of strong passwords and authentication methods; improving authentication protocols through multi-factor authentication and advanced encryption techniques; establishing strict Bring Your Own Device (BYOD) policies and providing secure access solutions for remote work to ensure that personal devices do not compromise the organization's security; launching awareness campaigns and workshops to educate the private sector about the benefits of digital transformation and the importance of cybersecurity; providing incentives such as tax breaks or grants for private sector companies that invest in digital technologies and cybersecurity measures; and fostering collaboration between the government, private sector, and educational institutions to share best practices and resources for digitalization and security. By addressing these key areas, Saudi Arabia can enhance its digital economy's resilience and ensure it continues to progress towards its Vision 2030 goals.

The authors' recommendations are focused on the need for extensive initiatives to improve digital literacy and promote collaboration between education and the private sector. To support and accelerate the digitalization of the economy in the Kingdom, the following measures should be implemented: comprehensive digital economy training, securing applications, emphasizing technical education, establishing local electronic industries, creating specialized digital economy financing institutions, developing crisis management plans, fostering private sector investment in technology, enhancing digital skills in education, launching adult training programs for digital inclusion, fostering collaboration between universities and the private sector, and updating regulations to support digital transformation in the Kingdom of Saudi Arabia. These measures have been identified in this study; however, they will be ranked in terms of priority and urgency in a subsequent study to provide a clearer roadmap for implementation.

**References**

1. Perspectives on the Digital Economy in the Arab Region. *United Nation ESCWA.* 2017. Available at: https://www.unescwa.org/sites/default/files/pubs/pdf/perspectives-digital-economy-arab-region-english_0.pdf

2. A Roadmap Toward a Common Framework for Measuring the Digital Economy. Report for the G20 Digital Economy Task Force Saudi Arabia. *OECD.* 2020. 123 p.

3. National Transformation Program. Kingdom of Saudi Arabia. *Vision 2030.* Available at: https://www.vision2030.gov.sa/en/vision-2030/vrp/national-transformation-program/

4. Melhem S., Graupp A., Alotaibi F. A People-Centric Approach to Digital Transformation in the Kingdom of Saudi Arabia. *World Bank.* 2023. Available at: https://blogs.worldbank.org/en/digital-development/people-centric-approach-digital-transformation-kingdom-saudi-arabia

5. Wargin J., Dobiéy D. E-business and Change – Managing the Change in the Digital Economy. *Journal of Change Management*. 2001. Vol. 2:1. pp 72–82. DOI: 10.1080/714042483.

6. Cadden D., Lueder S. L. Small Business Management in the 21st Century. *Saylor Foundation.* 2012. 873 p.

7. Digital Economy Policy in the Kingdom of Saudi Arabia. *Ministry of Communications and Information Technology*. 5 p.

8. Al Awadhi S., Morris A. Factors Influencing the Adoption of E-government Services. *Journal of Software.* 2009. No. 46. pp. 584–590.

9. Eid R., Badewi A., Selim H., El-Gohary H. Integrating and extending competing intention models to understand the entrepreneurial intention of senior university students. *Education+Training*. 2019. Vol. 61. No. 2. pp. 234–254. DOI: 10.1108/ET-02-2018-003010.

10. El-Sofany H. F., Tourki T. A., Howimel H. A., Sadoon A. A. E-government in Saudi Arabia: Barriers, Challenges and its Role of Development. *International Journal of Computer Applications.* 2012. Vol. 48. No. 5. DOI:10.5120/7344-0119.

11. Saeed Q., Al-Khalidi Al-Maliki. Information and Communication Technology (ICT) Investment in the Kingdom of Saudi Arabia: Assessing Strengths and

Weaknesses. *Journal of Organizational Knowledge Management*. 2013. Vol. 2013. 450838.
DOI: 10.5171/2013. 450838.
12. Fogg I. Benchmarking the Global 5G User Experience. 2020. Available at: https://www.opensignal.com/2020/10/13/benchmarking-the-global-5g-user-experience-october-update
13. Ease of Doing Business in Saudi Arabia. *Trading Economics*. Available at: https://tradingeconomics.com/saudi-arabia/ease-of-doing-business
14. Meissner P., Poensgen C., Schweinsberg K. Digital Riser Report 2020. *European Center for Digital Competitiveness by ESCP business school*. 2020. 52 p. Available at: https://digital-competitiveness.eu/wp-content/uploads/ESCP03_ Digital-Riser-Ranking_2020-09-14-1.pdf
15. World Summit on the Information Society Prizes 2020. *WSIS Prizes*. 2020. Available at: https://www.itu.int/net4/wsis/stocktaking/Prizes/2020/Winners

*Статья поступила в редакцию 04.03.2024; одобрена после рецензирования 29.05.2024; принята к публикации 08.06.2024.*
*The article was submitted 04.03.2024; approved after reviewing 29.05.2024; accepted for publication 08.06.2024.*