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Main areas of development of the digital economy in the Republic of Azerbaijan

■ **Abstract.** The development of the digital economy in Azerbaijan contributes to the country's modernisation and competitiveness in the global economic landscape, which is why research on this topic is relevant. The purpose of the research was to study, provide an objective assessment and organize the fundamental elements related to the advancement of the digital economy in Azerbaijan. The methods used included analytical method, statistical method, functional method, system analysis, deduction, synthesis, and comparison. The study analysed the existing condition of digital infrastructure in Azerbaijan, including an assessment of broadband Internet access, mobile coverage, and digital literacy. The main industries and sectors that have a major impact on the country's digital development were also analysed. A research investigation delved into the influence of digital development on society and residents of the country, analysing

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its impact on the labour market, education, healthcare, public administration, consumer habits, and other aspects. One of the key aspects of the research is an in-depth study of the sources of funding and investment for digital projects in the country. In addition, a comparative analysis of various digital and economic indicators of Azerbaijan with similar data from other highly developed countries was carried out. The practical significance of the obtained results lies in their use for solving modern problems related to the advancement of the main spheres of the digital economy in Azerbaijan. The findings offer valuable insights for policymakers and stakeholders, aiding in addressing contemporary challenges within Azerbaijan's digital economy

■ INTRODUCTION

Given the rapid technological progress and global changes in the economy, the development of the digital economy is becoming an important priority for wealthy countries. In this era of information revolutions and digital transformation, the Republic of Azerbaijan does not remain aside from exciting changes, actively directing efforts to create an innovative and technologically advanced economy. In the modern world, digital technologies are intertwined with every sphere of life, penetrating into business processes, education, healthcare, public administration, and many other aspects of public activity. The transformation of traditional methods and approaches by digital innovations opens up new opportunities to increase efficiency, elevating service quality, and cutting costs. In this regard, the strategic advancement of the digital economy becomes essential to maintain competitiveness and address the requirements of contemporary society. This approach expresses Azerbaijan's aspirations in the field of innovation and digitalization. Moving forward in this area has the potential to benefit both economically and socially. From building digital infrastructure to creating educational programmes aimed at training personnel for the digital age, every step in this direction opens up new horizons for growth and development.

All developed countries have been diversifying their national economies and improving their structure. Sustainable measures are being implemented in this area to increase the competitiveness of transport, construction, industry, and agriculture. The transition of the economies of developing countries to a new phase of digital advancement is marked by its significance. Digitalization of sectors of the national economy plays a crucial role in fostering economic development. In the agricultural sector, digital transformation involves the use of various information and communication technologies, statistical data forecasting and the application of artificial intelligence, as noted by E. Cozac (2021) and O. Radchenko *et al.* (2023). As highlighted by J.S. Tukhtabaev *et al.* (2023), digitalization of the agricultural sector can significantly contribute to enhancing export opportunities of entrepreneurs working in this field.

In conformity with a study conducted by K. Abdullayev *et al.* (2022), the swift advancement of the digital economy within the nation may prove to be a critical factor in accelerating economic growth and diversity, opening up prospects for sustainable development. In today's dynamic reality, where information technology penetrates all spheres of life, the country should strive not only to reach a new level of technological development, but also to effectively apply digital innovations to update and improve existing systems. A.S. Nechaev *et al.* (2022) claim that the digital economy possesses the capability to serve as not just a domestic driver of economic development, but also a powerful bridge for strengthening international partnerships. In the era of globalization and rapid technological progress, the importance of cooperation in the international arena is becoming extremely relevant.

According to M. Korsunska *et al.* (2022), it is pointed out that digital progress leads to significant social changes that should be carefully considered during the shift to the digital economy. Digital technologies also optimize production processes, enhance product and service quality, and minimize time and financial expenditures. This allows for more effective resource utilization, contributing to heightened competitiveness of the company and the country as a whole. According to B. Miethlich *et al.* (2020), active investment in start-ups and support for young innovators are critical factors determining the success and dynamics of the digital economy. Start-ups, as engines of innovation and technological breakthroughs, have enormous potential to transform the economic landscape. In their paper, P. Yang *et al.* (2022) discuss the need for a deep renewal of the educational system, which should actively respond to the challenges of the new era. The researchers emphasize that in the context of rapid technological changes, it implies a deliberate enrichment of curricula and methods so that they reflect current trends and needs of the digital economy.

In general, the rapid advancement of the digital economy can become a key catalyst for accelerated economic growth and diversification, while active investment in innovation will create a springboard for new technological ideas and products. The objective of this research was to pinpoint optimal strategies and provide recommendations for the efficient advancement of the digital economy. These efforts aim to enhance Azerbaijan's global competitiveness and foster the nation's sustainable development in the digital era.

■ MATERIALS AND METHODS

Official documents and reports were used to investigate the topic, namely the reports of the State Statistics Committee of the Republic of Azerbaijan and the official website of the United Nations. Scientific research on the digital economy was carried out using scientific methods that reveal the content of the object. The analytical method helped to explore various aspects of the digital economy, such as the current state of digital infrastructure and investments in technology projects. This method allowed understanding the strengths and weaknesses of digital development and identifying key areas for improvement. Using the statistical method, it was possible to collect data on the growth rates of the digital economy, the accessibility of the of modern

technologies to the population, and changes in economic indicators, which helped to assess the dynamics and effectiveness of digital transformation.

The functional method identified the essential factors of the digital economy and indicated which specific sectors and areas of the economy can benefit most from digital development. This will help identify priority areas for investment and development. The system analysis helped to consider the digital economy as a complex system, including the interrelationships between various elements and factors. This method helped to identify possible effects and influences in various fields, such as economics, education, and healthcare. Using the deduction, it was possible to extract general principles and patterns based on the analysis of specific cases and data. Drawing upon an examination of the experiences of other nations, we've discerned successful practices and approaches that can be adapted to the advancement of Azerbaijan's digital economy. Utilizing a synthesis approach, authors amalgamated diverse data and research into a cohesive understanding of the present status and future possibilities within the digital economy digital economy. This synthesis facilitated the identification of common trends, opportunities, and challenges. Using the comparison, it was possible to compare the situation in Azerbaijan with the experience of other countries, which helped to determine the strengths and weaknesses of digital development and identify best practices that can be adapted to achieve success in the country.

The study was conducted with the disclosure of some aspects, including theoretical and practical components. The theoretical aspect analyses and systemizes existing theoretical approaches, concepts, and trends related to the advancement of the digital economy. This includes a review of the definitions and main features of the digital economy, as well as its impact on economic growth and social change. Another aspect of the study is the analysis of specific practical measures and initiatives implemented in Azerbaijan and other countries towards the development of the digital economy. This includes investigating the structure of digital infrastructure, the level of digital literacy of the population, investments in technology projects, and the degree of digital technology adoption in various industries. The conclusions of the study provide a basis for specific recommendations on how to highlight the problems in the digital economy, contributing to solving these problems and enhancing the development of its key areas. As a result, these actions were applied to consider the feasibility of increasing the level of digitalization, for the successful advancement of the economy and the overall country.

∎ RESULTS

The digital economy encompasses a series of economic and social processes where digital technologies assume a pivotal role in generating, disseminating, and consuming both economic and social value. It combines information and communication technologies, data, networks and digital platforms, penetrating into various aspects of life, including business, public administration, education, healthcare, and public relations. Within the business, the digital economy brings new opportunities for the creation and provision of products and services (Pan *et al.*, 2022). Digital platforms, e-commerce, and online services accelerate

and simplify trade, facilitate customer interaction, and allow companies to adapt to changing market demands. In public administration, digital technologies help make public services more accessible and efficient, including e-government, electronic public registries and online filing (Li *et al.*, 2020). In the education sector, the digital economy promotes the development of online learning, the creation of e-learning platforms and the introduction of distance learning formats. In the healthcare sector, digital technologies facilitate the advancement of telemedicine, the introduction of electronic medical records and health monitoring systems. Public relations are also influenced by the digital economy, through social networks, online information exchange platforms, and virtual communities (Xun *et al.*, 2020).

Digital technologies are changing the ways of employment and work. Simultaneously with the emergence of new digital jobs, old professions may become obsolete. Specialists must have digital literacy and adapt to changes in the labour market. Flexibility and the possibility of remote work are becoming key features of the modern labour market (Zaki, 2019). The digital economy is closely tied to innovation and continuous technological development, resulting in the rapid emergence of new digital solutions and tools. It is also reshaping the way authors work and interact. This approach provides global connectivity and access to resources and markets for both large corporations and small businesses, allowing them to compete on the global stage (McQuire, 2021). A consumer-focused sphere can support the provision of personalized services, where digital technologies enable the creation of customized solutions and deeper interaction with customers.

The digital economy also generates huge amounts of data that can be analysed to gain valuable insights. This analytical approach allows companies and governments to make informed decisions. Technology also helps automate routine tasks and optimize business processes, which increases efficiency and directs resources to more strategic tasks. Social networks and information exchange platforms play an essential role in the modern digital economy, creating new mechanisms for interaction and exchange of experience (Sturgeon, 2021). And, ultimately, the digital economy implies the integration of various technologies and platforms to create a single ecosystem, facilitating more effective collaboration and data exchange between participants in this dynamic environment. An assessment of the current state of digital infrastructure in Azerbaijan, including Internet access and mobile communications, is a significant step in determining the country's readiness to move to a digital economy. This analysis not only helps to determine achievements, but also identifies challenges and reveals the potential for digital development in the country. It is worth noting that Azerbaijan has already taken essential steps in developing access to the Internet, which demonstrates its recognition of the importance of digital progress. At the moment, broadband Internet access covers a significant part of the population, including both urban and rural areas. However, there may have been additional efforts to expand coverage and provide high internet speeds in remote areas. Mobile communications also play a key role in the digital infrastructure. Mobile communications are widely available in Azerbaijan, and the majority of the population

has access to mobile phones (Guarda *et al.*, 2021). The development of mobile communications includes not only providing wide signal coverage, but also providing a variety of services such as mobile Internet, mobile applications.

Azerbaijan has the potential to further improve its digital infrastructure. The development of next-generation networks, such as 5G, can create new opportunities for faster data transfer and support for the Internet of Things. However, there are some challenges facing the digital infrastructure in the country. This may include the need to

improve the quality of communications in remote areas, ensuring the reliability of networks, as well as cybersecurity and data protection issues. It is important to constantly monitor and update the digital infrastructure so that it meets the rapidly changing requirements of the digital economy. Continuous investment in infrastructure, staff training, and the development of the technological ecosystem create a favourable foundation for the digital advancement of the Republic of Azerbaijan. The results of the digital economy development in the country can be found in Table 1.

Table 1. Indicators of the development of the digital economy in Azerbaijan

Indicator	2015	2016	2017	2018	2019	2020	2021	2022
Number of Internet users for every 100 people in the population	77	78	79	80	80	81	82	82
Number of broadband Internet users for every 100 people in the population	72	72	73	75	76	79	80	80
Volume of international Internet bandwidth per capita, kbit/s	54	68	79	83	89	102	111	120
ICT Development Index	6.23	6.25	6.2	6.33	-	-	-	-
E-Government Index	0.55	-	-	0.66	-	0.71	-	0.69

Source: developed by the authors based on The State Statistical Committee of the Republic of Azerbaijan (2023)

The ICT Development Index serves as a comprehensive measure to evaluate the advancement of information and communication technologies across diverse nations. Calculated until 2018, top performers included Iceland (8.98),

South Korea (8.85), and Switzerland (8.74). Azerbaijan held the 65th position in the global ranking as per the UN in 2022. Table 2 provides a breakdown of countries based on the E-Government Index.

Table 2. Ranking of countries by E-Government Index

	Country	Value
1	Denmark	0.972
2	Finland	0.953
3	South Korea	0.953
4	New Zealand	0.943
5	Iceland	0.941
6	Sweden	0.941
7	Australia	0.94
8	Estonia	0.939
9	Netherlands	0.938
10	USA	0.915
...	...	...
83	Azerbaijan	0.694

Source: developed by the authors based on United Nations (2022)

The E-Government Index characterizes the degree to which government agencies utilize information and communication technologies for efficient engagement with citizens and businesses. E-government strives to improve access to public services, simplify procedures, increase transparency and citizen participation in decision-making processes. The following factors are the evidence of the advancement of the digital economy in Azerbaijan: the establishment of the Azerbaijan Service and Assessment Network (ASAN), which ensures the coordination and unified execution of public services; the adoption of a State Programme to expand digital payments in the Republic of Azerbaijan for 2018-2020; the establishment of a sustainable and operational social security network (DOST), which provides services for the appointment of pensions, benefits employment and resolving issues within the competence of the Ministry of Labour; the introduction of laws and

regulations related to the establishment of e-government; the implementation of digital transformation of the functions of state institutions. Digitalization permeates every facet of economic operations, with significant strides observed in the advancement of e-government in the nation. New electronic portals are emerging, and there is a notable growth in e-commerce, e-tourism, and the establishment of e-universities (Matthess & Kunkel, 2020).

While transitioning into the era of digital transformation, it is crucial to focus extensively on fostering the business sector for the establishment of a competitive economy. Beyond their pivotal contribution to economic advancement, small and medium-sized enterprises (SMEs) exert a considerable influence on job creation and poverty reduction (Abdullayev *et al.*, 2023). Table 3 provides an overview of key metrics related to the adoption of information and communication technologies within enterprises.

Table 3. Key indicators the adoption of information
and communication technologies within the operational domain of enterprises, %

Indicator	2015	2016	2017	2018	2019	2020	2021	2022
Share of enterprises using computers	63.1	65.3	66.9	67.2	62.8	63.9	65.2	66.1
Share of employees using computers	28	29.6	30.7	33.4	33.9	35.1	35.8	36.2
Share of enterprises using the Internet	48	51.6	52.5	52.9	51.5	52.5	54.2	57.1
Share of employees using the Internet	20.4	21.9	23.1	25.3	25.8	26.9	28.1	31
Share of enterprises with an Internet presence (web page, website)	11.9	11.9	12.2	12.36	9.8	9.9	10.2	11.4

Source: developed by the authors based on The State Statistical Committee of the Republic of Azerbaijan (2023)

An assessment of key indicators related to the ease of starting and running a business in Azerbaijan confirms that the country's business environment is conducive to the ease of starting a business. The integration of innovative technologies and the introduction of digital transformation is one of the ways to increase business competitiveness, which contributes to overall economic progress. It is important to note that the COVID-19 pandemic has played a significant role in the advancement of the digital economy in Azerbaijan. This has contributed to the intensive expansion of electronic services. Since the beginning of 2020, there has been a significant increase in online commerce and online orders for goods and services. As of the beginning of January 2022, the number of Internet users in the country was 8.32 million, which is a substantial percentage of the total population of 10.26 million at that time. Over the period from 2020 to 2022, the number of Internet users in the country increased by 267,000 people, which is a 3.3% increase. The Internet penetration rate in January 2022 was 81.1%. In comparison with neighbouring countries, such indicators are also available: Georgia – 68.9%, Armenia – 68.2%, Iran – 70%, Turkey – 77.7% (Kemp, 2022).

Investments in Azerbaijan's digital economy play a crucial role in stimulating the advancement of information and communication technologies, fostering innovation, and enhancing the country's competitive standing globally. In recent years, attention to investment in the digital economy has increased significantly, and steps have been taken in the country to attract both domestic and foreign investors to this sector. The Republic of Azerbaijan is developing and implementing various measures to support digital development. This may include financing innovative projects, the creation of technology parks and incubators for start-ups, and tax incentives for companies in the IT sector, which helps attract investment. An example of government support is the creation of the National Agency for the Development of the Digital Economy (DIA). The agency works to coordinate and support projects in the field of digital technologies, innovations and start-ups, including providing financial assistance and advice. Azerbaijan is developing a start-up ecosystem to support young entrepreneurs and innovators.

Establishing incubators, accelerators, and technology parks facilitates the growth and commercialization of novel concepts within the realm of digital technologies. One example of the development of the start-up ecosystem in Azerbaijan is the creation of the Technopark of the Azerbaijan State Oil and Industry University. Digitalization has a significant impact on transport services, bringing innovation and optimization to this area. Digital technologies allow creating intelligent traffic management systems, optimizing the movement of vehicles and improving the mobility of citizens. Online booking platforms and mobile applications allow passengers to book taxis, rent cars, buy public transport tickets, and monitor traffic conditions in real time. The integration of digital technologies is contributing to the development of electric vehicles, reducing emissions, and improving the environment. Details of the country ranking by logistics indicators are shown in Table 4. By optimizing the movement of goods and ensuring more efficient supply chain management, digital transformation is also having a significant impact on the logistics sector.

Table 4. Ranking of countries according to the Logistics Performance Index (LPI)

	Country	Value
1	Singapore	4.3
2	Finland	4.2
3	Denmark	4.1
4	Switzerland	4.1
5	Germany	4.1
6	Netherlands	4.1
7	Canada	4
8	Sweden	4
9	Belgium	4
10	China	4
…	…	…
122	Azerbaijan	2.5

Source: developed by the authors based on United Nations (2022)

Azerbaijan feels certain challenges in the field of logistics efficiency, which is reflected in its position in the world rankings. Despite the efforts made to develop its transport infrastructure, the country remains low in the global logistics rankings. The introduction of digital innovations, such as cargo tracking, warehouse, and traffic management systems, can improve the transparency and manageability of logistics processes. Regulation of the digital economy is an essential aspect of ensuring sustainable development and a balance between dynamic progress and protecting the interests of society. In the regulatory context, laws and regulations play a crucial role. They create a legal framework defining the responsibilities and rights of participants in the digital economy (Banalieva & Dhanaraj, 2019). This includes data protection, intellectual property, e-commerce, and cybersecurity. Competition and antitrust regulation ensure fair play in digital markets and prevent possible abuse of the dominant position of companies. Cybersecurity is becoming increasingly important in the face of constant threats of cyber-attacks and data leaks. Regulation in this area includes the development of standards and practices that help ensure reliable protection of digital infrastructure and personal data (Kerber, 2016).

The level of cybersecurity in a country can be assessed using the Global Cybersecurity Index (GCI). This index helps to determine how countries are protected from cyber threats and how effectively they can ensure the security of their digital infrastructure. The assessment includes an analysis of various aspects, such as national cybersecurity strategies, legal frameworks, the structure of government agencies in the field of cybersecurity, interaction with other countries and international organizations, as well as the population's level of education and awareness regarding cybersecurity. The ranking of countries by cybersecurity is presented in Table 5.

Table 5. Ranking of countries according to the GCI indicator

	Country	Value
1	USA	100
2	United Kingdom	99.54
3	Saudi Arabia	99.54
4	Estonia	99.48
5	South Korea	98.52
6	Singapore	98.52
7	Spain	98.52
8	Russia	98.06
9	UAE	98.06
10	Malaysia	98.06
...	...	...
40	Azerbaijan	89.31

Source: developed by the authors using information from United Nations (2022)

In Azerbaijan, effective regulation of the digital economy is crucial for fostering sustainable and innovative development in the country. Government authorities have adopted a wide range of measures and policies to establish a conducive environment, promoting the advancement of digital technologies, strengthening digital infrastructure, and stimulating digital innovation (Horoshko *et al.*, 2021). For example, the State Computer Emergency Response Team (CERT) has been established to monitor, prevent, and respond to cyber threats, while also coordinating efforts to safeguard information. To develop e-commerce in Azerbaijan, norms and standards have been introduced to regulate online trading and consumer protection. The Law of the Republic of Azerbaijan No. 908-IIQ "On Electronic Commerce" (2005) defines the rules and requirements for electronic trading platforms, helping to protect the interests of consumers during online purchases. Additionally, there is an e-government portal that provides access to a variety of government services, from paperwork to paying taxes and fees.
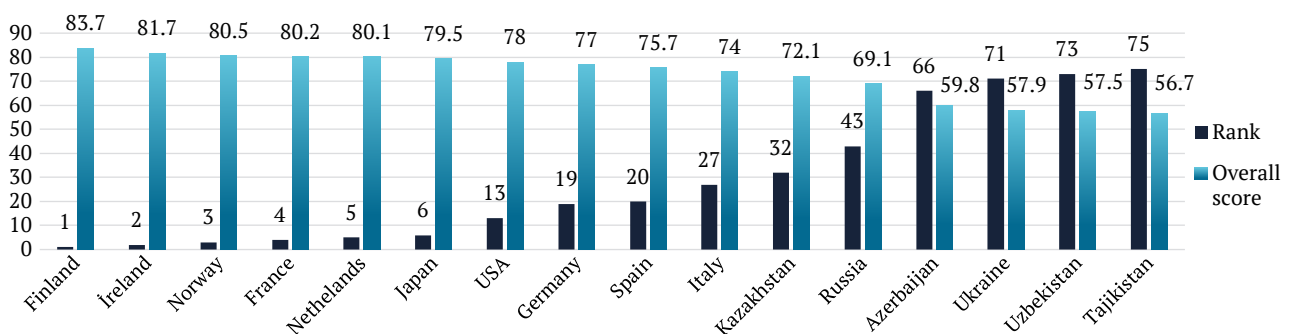

Figure 2. Comparative dynamics of changes in the food security index as a result of the development of the digital economy in some countries of the world (2022)
Source: developed by the authors based on the Global Food Security Index (2022)

In recent times, enhancing food security by bolstering the agricultural sector has emerged as a pivotal focus for ensuring the economic resilience of nations globally. The extensive digitization of the national agricultural sector assumes a crucial role in guaranteeing robust food security. The assurance of regional food security stands out as a fundamental prerequisite for supplying the country's populace with dependable food and agricultural products (Shahini *et al.*, 2023). Studies indicate that fortifying economic resilience significantly hinges on securing food security through the advancement of the agricultural sector.

The Global Food Security Index (GFSI), introduced by The Economist Intelligence Unit, stands as a noteworthy instrument for gauging the level of food security across countries worldwide. This index assesses the food security rankings of countries based on diverse parameters. The digital transformation spanning various sectors of the national economy, particularly the agricultural sector, contributes directly to enhancing food security. Disparate rankings in the GFSI among countries underscore the varying degrees of digital innovation in the agricultural sector and its consequential impact on food security (Khakhula *et al.*, 2024).

For example, in the field of food safety in 2022, Finland took 1st place with 83.7 points. Ireland took 2nd place with 81.7 points, and Norway took 3rd place with 80.5 points. USA took 13th place with 78 points, Germany – 19th place with 77 points, and Italy – 27th place with 74 points. Among the post-Soviet countries, this indicator amounted to 69.1 points in Russia, taking 43rd place, and in Kazakhstan – 72.1 points, taking 32nd place. In Azerbaijan, this indicator amounted to 59.8 points, taking 66th place. In addition, Ukraine took 71st place, Uzbekistan – 73rd, Tajikistan – 75th. The analysis shows that digitalization of the agricultural sector also has a positive impact on the development of this sector.

Azerbaijan has taken substantial strides in advancing its digital economy. Reforms, the adoption of e-government practices, encouragement for innovative start-ups, and investments in digital initiatives have collectively fostered a conducive environment for digital technology development. Positive trends are evident in the growing user base of the Internet users and the rise of the ICT development index. However, despite these accomplishments, challenges persist. Issues such as incomplete access to high-speed Internet, inadequate digital literacy in certain population segments, and the imperative to enhance cybersecurity demand attention and effective solutions.

In order to promote further progress in the digital economy of Azerbaijan, it is necessary to focus efforts on several key areas. Continued investment in expanding broadband Internet and mobile communications, especially in remote and rural areas, will be fundamental to ensuring equal access to digital services for all residents. It is also necessary to introduce educational programmes aimed at raising the level of digital literacy of all age groups, which will allow every citizen to successfully adapt to the changing digital reality. Continuing to support innovative ideas and start-ups through financing, accelerators and incubators will stimulate the development of advanced technological solutions. Digital solutions must also be combined with active steps in the field of cybersecurity, including the development of strategies and the application of measures to ensure the protection of digital

infrastructure, data, and personal information of citizens. Cooperation in the international arena, participation in international initiatives and the exchange of experience with other countries seeking to develop the digital economy are also of great importance. Such co-operation will enrich knowledge and enable learning from best practices in digital transformation. Through the implementation of these principles, Azerbaijan will persist in evolving into a contemporary digital society, attaining sustainable growth, and enhancing the quality of life for its residents.

■ DISCUSSION

Within the strategic framework of the digital economy, this study contributes to a more profound understanding of the imperative need for digital technology development in Azerbaijan. Countries should recognize the pivotal impact of digital transformation and innovation in achieving sustainable economic growth and enhancing the citizens' quality of life. A strategic avenue for advancing the digital economy in Azerbaijan involves implementing a contemporary digital infrastructure, encompassing high-speed broadband Internet and mobile networks. Initiatives focusing on nationwide Internet accessibility aim to bridge regional digital disparities and facilitate the integration of digital services across all sectors of the economy. Another crucial domain is the advancement of e-government. Leveraging modern technology streamlines citizen-state interactions, enhances the quality of public services, and augments transparency and trust in the government. Investments in startups and support for emerging innovators also play a pivotal role in digital economy development. Creating an enabling environment for startups and providing financial backing aid in identifying and nurturing talented entrepreneurs while stimulating innovative solutions. This study demonstrates that the process of developing the digital economy may face numerous challenges and problems that require special attention and measures to successfully realize the potential of digital transformation.

One of the main challenges is ensuring cybersecurity in an increasingly dependent environment on digital technologies. In the modern digital environment, vulnerability to cyber-attacks and hacker attacks is becoming especially relevant. It is important to develop and implement effective measures to protect digital infrastructure, company data and personal information of citizens. A proactive cybersecurity strategy, including employee training, the use of modern security technologies, and regular security monitoring and auditing, can significantly reduce risks and provide reliable protection against threats. The protection of data and personal information is another key aspect. With the increasing volume of digital data and its personalization, it is important to ensure reliable storage and transmission of information. Strict encryption standards, access control and compliance with data protection legislation can ensure the confidentiality and integrity of digital resources.

R. De' *et al.* (2020) described the impact of digital technologies and artificial intelligence on economic relations. They are changing the ways in which companies, states, and individuals interact, defining new business models and requiring society to adapt to the new digital reality. In connection with the fight against the COVID-19 pandemic, the transition to remote operation has become one of the

factors enhancing the digitalization of society. The acute debatable problems of the global digital divide of society are noted. This implies a division between those who actively use and master digital technologies and those who lag behind. It is also necessary to provide specific recommendations on how to eliminate problems related to the advancement of the digital economy in the country. This may include strengthening cybersecurity, improving the educational level of the population, and improving access to technology in remote areas.

S. Ding *et al.* (2022) highlight the main aspects of the evolution of the digital economy, focusing on the creation of favourable conditions for high-performance technologies and platforms, as well as related industries and markets where suppliers and consumers of high-tech, including financial, services actively interact. In this context, the digital economy functions as a dynamic catalyst, fostering the advancement of high-tech industries and promoting convergence between suppliers and consumers. Global expertise significantly contributes to adapting and refining the phases of digital economy development. This analysis allows assessing the importance of the harmonious advancement of the digital economy in the context of current economic conditions. However, it is also necessary to consider the social aspects of digital transformation. The growth of the digital economy may lead to changes in the demand for labour and skills, which will require staff to be retrained and improve their skills in line with new requirements.

L.D. Williams (2021) underscores crucial facets concerning the governmental regulation of business endeavours, the interplay between private and public interests, the legal system's role in advancing digital infrastructure, and significant considerations pertaining to the legal governance of international economic activities. In the modern world, where technological progress is changing the way people interact and influencing economic processes, understanding how legal norms can regulate and support digital infrastructure is important. The analysis of the relationship between the digital economy and law provides an in-depth look at the challenges and opportunities that exist in this area. This paper is a valuable resource for researchers, practitioners, and specialists dealing with the legal aspects of economic relations. But it is worth considering that in a rapidly changing economic environment and technological development, some aspects of legal regulation may turn out to be outdated or insufficiently flexible to adapt to new challenges.

N. Deng & S. Chelliah (2022) analysed the main trends in the digital economy, which provides an opportunity to identify key areas of informatization that are becoming the main engines of growth in modern conditions. This includes the advancement of artificial intelligence technologies, the expansion of Internet infrastructure, strengthening cybersecurity, and the creation of new business models based on digital platforms and services. The analysis of these trends allows anticipating future development directions and effectively adapting strategies in accordance with market needs. Of particular importance is the identification of the growth potential that can be implemented within the framework of the digital economy. Studying the methods of integrating digital technologies into various sectors of the economy helps to identify areas where digitalization

can lead to the greatest positive results. It is crucial to note that the findings of this research have significant practical implications. They are an important information foundation for strategic decision-making at various levels, from commercial enterprises to government agencies. Analysing trends in the development of the digital economy allows formulating development strategies that maximize the use of existing potential and ensure competitiveness in the global economic environment.

S. Bresciani *et al.* (2021) consider modern transformational processes in the socio-economic sphere, which are an integral part of the development of modern society. In the process of analysing the stages of development of the digital economy, it becomes clear that this process represents a gradual transition from traditional forms of doing business and organizing society to more integrated and efficient models based on digital technologies. Examples of successful digitalization strategies across different nations underscore the significance of formulating innovative approaches, stimulating investment in infrastructure, developing digital literacy and fostering collaboration among governmental bodies, business, and scientific institutions. In addition, it is important to pay attention to the role and importance of the country in the processes of digital transformation. An analysis of the current and future prospects of digitalization allows to assess the strengths and difficulties faced by the country. This helps to develop more effective and adapted strategies to accelerate digital development.

In general, the digital economy is not only changing the way business and government interact, but also has a significant impact on lifestyle, work, education, and even healthcare. All this requires comprehensive approaches and active training, both in technical and legal aspects. The digital economy already requires careful and harmonious development. Implementing strategic plans, investing in technological innovations, and ensuring cybersecurity will be key success factors in this dynamic and rapidly developing field.

■ CONCLUSIONS

This research highlights the essence of the digital economy, its impact on the progress of nations and the primary directions of this process. The current state of digital infrastructure in Azerbaijan was analysed, and the main indicators of digitalization were compared with the leading countries. Azerbaijan is actively developing the digital economy, realizing its potential as a driving force for innovative development. Strategic areas, such as improving digital infrastructure, expanding Internet access, and developing innovative projects, allow the country to actively integrate into the global digital community. Attracting investments in the development of the digital economy is an important factor for ensuring sustainable growth. The government of Azerbaijan actively supports start-ups, innovative projects, and the creation of technology parks, which helps to stimulate new ideas and technological progress. Azerbaijan's government agencies are also taking a number of measures and policies to create a favourable environment that promotes the development of digital technologies, strengthens digital infrastructure, and stimulates digital innovation. With the increasing dependence of society on digital technologies, cybersecurity issues are becoming critically

important. The need to ensure the protection of data and personal information of citizens requires the active development of cybersecurity. The following recommendations were highlighted for the successful development of the digital economy in Azerbaijan: continued investment in the expansion of broadband Internet and mobile communications; the introduction of educational programmes; support for innovative ideas and start-ups; cooperation in the international arena.

The examination of the primary domains of digital economy advancement in the Republic of Azerbaijan shows that the country is actively moving forward, taking significant steps in the field of innovation and technological development. Future analyses can help assess the effectiveness of investments in the digital economy and identify successful practices and areas that require additional funding. Furthermore, studying the experience of other countries in developing the digital economy and analysing international cooperation can serve as a basis for identifying optimal policies and effective strategies for further development.

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◼ CONFLICT OF INTEREST
None.

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Основні напрямки розвитку цифрової економіки в Азербайджанській Республіці

■ **Анотація.** Розвиток цифрової економіки в Азербайджані сприяє модернізації та конкурентоздатності країни в глобальному економічному ландшафті, тому дослідження цієї теми на часі. Метою дослідження було вивчення, об'єктивна оцінка та систематизація основних елементів, пов'язаних із просуванням цифрової економіки в Азербайджані. Використані методи включали аналітичний метод, статистичний метод, функціональний метод, системний аналіз, дедукцію, синтез і порівняння. У дослідженні проаналізовано існуючий стан цифрової інфраструктури в Азербайджані, зокрема надано оцінку широкосмуговому доступу до інтернету, мобільному покриттю та цифровій грамотності. Також було проаналізовано основні галузі та сектори, які мають значний вплив на цифровий розвиток країни. Дослідження заглибилося у вплив цифрового розвитку на суспільство та мешканців країни, проаналізувавши його вплив на ринок праці, освіту, охорону здоров'я, державне управління, споживчі звички та інші аспекти. Одним із ключових аспектів дослідження є поглиблене вивчення джерел фінансування та інвестицій у цифрові проекти в країні. Крім того, було проведено порівняльний аналіз різних цифрових та економічних показників Азербайджану з аналогічними даними інших високорозвинених країн. Практичне значення отриманих результатів полягає в їх використанні для вирішення сучасних проблем, пов'язаних з просуванням основних сфер цифрової економіки в Азербайджані. Результати дослідження пропонують цінну інформацію для політиків і зацікавлених сторін, допомагаючи вирішувати сучасні виклики в цифровій економіці Азербайджану

■ **Ключові слова:** технологічний прогрес; глобальна інтеграція; інвестиції; кібербезпека; регулювання