



DIGITAL ECONOMY

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Annotation: This article analyzes the essence of the digital economy, its role and importance in the modern economic system, as well as the opinions and views of scholars on the subject. It highlights the opportunities for automating economic processes, increasing efficiency, and ensuring global competitiveness through digital technologies. In addition, the article examines the reforms carried out and the laws and decisions adopted in the Republic of Uzbekistan to develop the digital economy. The advantages, disadvantages, and future development directions of the digital economy are also discussed.

Keywords: digital economy, technology, innovation, infrastructure, digitization, efficiency, reform, economic development.

Introduction

“The development of the digital economy is the future of Uzbekistan and one of the most important paths to building a competitive national economy.”

Shavkat Miromonovich Mirziyoyev

With the election of President Shavkat Miromonovich Mirziyoyev as the head of Uzbekistan in 2016, the country’s economy underwent profound changes. The economy became open, dynamic, and innovation-oriented. However, it must be acknowledged that in the context of globalization of the world economy and rapid technological progress, it is difficult to imagine Uzbekistan’s further economic development without advancing the digital economy. To create additional conditions for the development of the digital economy, and in accordance with the goals of the Action Strategy for the Five Priority Areas of Development of the Republic of Uzbekistan for 2017–2021, the following legal acts were adopted:

- Presidential Decree No. PQ-3832 of July 3, 2018, “On measures for the development of the digital economy in the Republic of Uzbekistan.”

- Presidential Decree No. PQ-4022 of November 21, 2018, “On measures for further modernization of digital infrastructure to develop the digital economy.”

- Presidential Decree No. PQ-3832 of March 7, 2018, “On measures for the development of the digital economy in the Republic of Uzbekistan,” which also focuses on training qualified specialists capable of applying modern information and communication technologies, including blockchain development and implementation skills.

- It became evident that achieving success in transforming the traditional economy into a digital one would be impossible without training qualified personnel. Therefore, on the initiative of the President of the Republic of Uzbekistan, based on the Decree No. PQ-3832 of July 3, 2018, a Faculty of Digital Economy was established at the Tashkent State University of Economics to train bachelor students. Moreover, at Samarkand State University, a Master’s program in digital economy was launched within the Faculty of Economics and Business to prepare highly qualified specialists in this field. [8]

Review of Literature on the Topic: A number of definitions have been given for the concept of the digital economy. Professor V. Ivanov defines it as “a virtual environment that complements our reality.” According to Professor D. Kungurov, there are two main approaches to understanding the term “digital economy” — the classical and the traditional ones. [7]

Klaus Schwab, founder of the World Economic Forum, describes the digital economy as “the heart of the Fourth Industrial Revolution, which is transforming the global economy through artificial intelligence, robotics, and networked systems.” Schwab views the digital economy as a transformative force that fundamentally changes human life and production processes

Erik Brynjolfsson, an MIT professor and author of “The Second Machine Age,” states that “digital technologies accelerate economic growth, but they also bring new challenges — such as labor market imbalances and income inequality.” He emphasizes that the digital economy not only brings benefits but also requires social responsibility.

Don Tapscott, a Canadian scholar and author of “Digital Economy,” argues that “the digital economy is not just about technology; it is a new mindset that changes the way society, business, and government operate.” Tapscott considers the digital economy to be an evolution in human thinking and management culture.

Joseph Stiglitz, Nobel Prize laureate, notes that “the digital economy increases efficiency, but governments must develop strong political and social strategies to adapt to these changes.” Stiglitz believes that the success of the digital economy depends on maintaining a balanced and effective state policy.

Research Methods: In the course of the research, the following methods were used: the study of scientific works by scholars in the field, abstract logical thinking, analytical method, empirical method, systematic approach, and economic analysis methods.

Analysis and Results: The digital economy is not an entirely new type of economy that needs to be created from scratch. Rather, it is the transformation of the existing economy into a new system through the creation and integration of new technologies, platforms, and business models into everyday life. The digital economy is a system that enables economic, social, and cultural relations to be carried out through the use of digital technologies. It is sometimes referred to as the Internet economy, new economy, or web economy. [9]

The term “digital economy” is associated with two scholars — the Canadian economist Don Tapscott and the American IT specialist Nicholas Negroponte. In 1995, Nicholas Negroponte used the term “digital economy” in his book “Being Digital.” In this scientific work, he proposed a convergence model based on the intersection of three media networks — mass media, communication tools, and computers — which gave rise to a new (digital) media. In the same year, Canadian economist Don Tapscott published his book “The Digital Economy.” [2,3,4] In it, Tapscott analyzed the evolutionary trends of societies in developed countries and identified 12 key features that transform the information environment into a new economy — the digital economy. These include: 1. Knowledge. 2. Digitization. 3. Virtualization. 4. Dynamism. 5. Integration. 6. Disintermediation. 7. Convergence. 8. Innovation. 9. Changing producer–consumer relations. 10. Efficiency. 11. Globalization. 12. Conflic

According to various sources, the digital economy is a model of the economy that is already functioning to some extent in practice. [6] It represents a virtual environment of

production that creates goods and services aimed at providing convenience for people, using digital technologies within the framework of the economic production system. [5

Based on the Global Digitalization Index (DiGiX) and other sources, the top five countries with the most developed digital economies (according to their high levels of digital infrastructure, services, innovation, and digitalization) are presented in Table 1.

Top 5 Countries with the Most Developed Digital Economies.

Table 1

No	Countries	Main Reasons for Development
1	United States of America	Large investments in ICT infrastructure, presence of major tech companies, innovation, and global technological leadership.
2	Singapore	Highly developed digital services and e-government; extensive digitalization of the business environment.
3	Sweden	Advanced technologies, high internet penetration, strong human capital, and an innovative ecosystem.
4	Finland	Widespread use of digital services and technologies, strong infrastructure, and high level of individual digital competence.
5	Denmark	Excellent internet connectivity, fast and stable networks, and a highly digitally literate population.

There are three models for the development of the digital economy.

1. The model that includes the leaders of the digital economy: The first model includes developed countries: the United States and the European Union countries. According to scientific literature, recently the process of convergence of digital economy formation models has begun in the United States and the European Union countries. Thus, the similarity between these countries is related to several reasons: changing the structure of production and employment in favor of the service sector and scientifically intensive production; accelerating production based on productivity growth; ensuring the independence of these economies from external conditions through internal sources of investment and savings aimed at progressive and self-sufficient development; and rapidly deepening the interdependence between these two regions against the background of progressive isolation from the rest of the world. Most of these similar elements are associated with equally developed trends of scientific and technological progress in the United States and the European Union countries.

2. The “catching-up development” model: The second model is formed by newly industrialized countries. Recently, Singapore and Taiwan have been of great importance in the development of the digital economy, even surpassing Japan in some respects. These countries are considered to be in the second leading group in the development of the digital economy. However, in terms of living standards and the level of development of social capital, these countries are lagging behind.

3. The model that includes external means of information processing: The third model, which includes the external forms of the development of the information economy, is characterized by a very low level of education and, in general, a low standard of living, as well as the absence or insignificant development of digital infrastructure. In addition, this model is



characterized, to some extent, by the weakness of business process management both at the firm level and at the state level. The countries belonging to this group include African countries and some Asian countries. Their specialization is the supply of raw materials to international markets. In these countries, it is necessary to carry out fundamental reforms in economic development and make large-scale investments aimed at improving the level of education and the standard of living of the population. [1]

“Advantages and Disadvantages of the Digital Economy.”

Table 2

No	Advantages	Disadvantages
1	Efficiency and speed – production, payments, and services are carried out quickly.	Risk of technical failures – if the system crashes, the entire process may stop.
2	Cost reduction – automation eliminates unnecessary expenses.	Expensive software and technical infrastructure – requires large initial investments.
3	Financial inclusion – everyone can use online banking and payment systems.	Digital illiteracy – some people lack the skills to use technology.
4	Transparency and control – digital systems reduce corruption and simplify monitoring.	Cybersecurity issues – risk of data theft or corruption.
5	Data-driven decisions – effective management is achieved through Big Data analysis.	Violation of personal data privacy – users’ personal data may remain unprotected.
6	New job opportunities – new jobs emerge in IT, artificial intelligence, and digital marketing.	Loss of certain professions – automation reduces traditional job positions.
7	Sustainable development – resources are saved, and environmental damage decreases.	Overdependence on technology – if the system fails, economic activities may be disrupted.

Conclusion and Analysis: The digital economy today is considered one of the most important components of the global economic system. It enables increased efficiency, cost reduction, and the easing of human involvement in sectors such as production, services, education, healthcare, and management. In the context of Uzbekistan, the development of the digital economy creates wide opportunities to accelerate economic growth, reduce corruption, and provide public services in a transparent and convenient manner. The recently adopted “Digital Uzbekistan – 2030” strategy has defined the main directions of reforms in this area. Along with the advantages of the digital economy, there are also certain challenges — such as uneven infrastructure development, insufficient digital literacy, and cybersecurity issues. Therefore, it is of great importance to further develop digital infrastructure, train qualified specialists, and strengthen information security. Overall, the digital economy is one of the key factors that will lead Uzbekistan to a new stage of innovative and sustainable economic growth.

Today, the digital economy significantly affects the economic growth rates of every country. Analyses show that the widespread implementation of digital technologies leads to automation



of production processes, reduction of costs, and more efficient use of resources. In Uzbekistan, within the framework of the “Digital Uzbekistan – 2030” strategy, several sectors have been fully digitalized in recent years. In particular, electronic platforms have been widely introduced in public services, the banking system, education, and healthcare, creating convenience for the population. Furthermore, through projects such as IT Park and “Digital City,” thousands of young people have gained new jobs in the IT field. The expansion of the digital economy also contributes to improving Uzbekistan’s position in international rankings and increasing the flow of investments. However, analysis shows that there are still unresolved issues in the development of the digital economy — namely, weak internet infrastructure in certain regions, low levels of digital literacy, and cybersecurity threats. Therefore, strengthening digital infrastructure and enhancing technological knowledge among the population and entrepreneurs remain key priorities in state policy.

The digital economy plays an important role in Uzbekistan’s sustainable economic development. It not only increases production efficiency but also simplifies public administration, ensures transparency in social sectors, and fosters innovative thinking. In general, the development of the digital economy serves to elevate the country to a new stage and strengthen its position in global competition.

Recommendations:

1. Develop digital infrastructure equally across all regions;
2. Strengthen cybersecurity systems and align them with international standards;
3. Introduce digital skills more broadly into the education system;
4. Expand tax incentives and grants to support digitalization in the private sector;

Develop management systems based on artificial intelligence and data analysis.

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