



DEVELOPMENT OF THE DIGITAL ECONOMY IN THE CONTEXT OF GLOBAL TRANSFORMATION

Abdullaeva Iroda Mahmudjanovna

PhD in Economics, Professor of the Department of
Finance and Digital Economy, Tashkent State University of Economics

i.abdullayeva74@gmail.com

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Abstract

The article examines key aspects of the formation and development of the digital economy in the context of global socio-economic transformation. Theoretical approaches to defining the digital economy, methods for its assessment, as well as the impact of digital technologies on economic growth, productivity, and market structure are analyzed. Based on a comparative analysis of digital development indicators of various countries, the main trends and problems of digitalization are identified. The results obtained make it possible to determine the directions of state policy in the field of the digital economy.

Keywords: digital economy, digitalization, information technologies, innovations, economic growth.

Introduction

At the beginning of the 21st century, the digital economy became one of the key factors of socio-economic development of states. The rapid spread of information and communication technologies (ICT), the growth of data volumes, the development of artificial intelligence, and platform-based business models fundamentally change traditional economic processes.

The digital economy affects not only production relations but also the labor market, public administration systems, and the social sphere.

The term “digital economy” first became widely used in the works of D. Tapscott, who viewed it as an economy based on the use of digital technologies and network communications. Subsequently, this concept evolved and came to include a wide range of processes—from e-commerce to digital platforms and ecosystems.

The relevance of the study is determined by the need for a comprehensive analysis of the digital economy as a systemic phenomenon, as well as an assessment of its impact on the economic development of countries. Despite a significant number of scientific publications, there remains a need for a structured study based on comparable indicators and empirical data.

The purpose of the article is to analyze the current state of the digital economy and identify the main trends in its development.

To achieve this goal, the following objectives were set:

- to consider theoretical approaches to defining the digital economy;
- to determine methods for assessing the level of digitalization;
- to analyze key indicators of digital development;
- to identify problems and prospects for the development of the digital economy.

Research Methods

The methodological basis of the study consists of general scientific and special methods of cognition of economic processes. The following methods were used in the research:

- analysis and synthesis — to generalize theoretical approaches to the concept of the digital economy;
- comparative analysis — to compare the level of digital development of different countries;
- statistical analysis — to process quantitative indicators;
- systems approach — to consider the digital economy as an integral socio-economic system.

The information base of the study includes data from international organizations (World Bank, OECD), national statistical agencies, as well as the results of scientific research by domestic and foreign authors.

To assess the level of digitalization of the economy, the following indicators were used:

- share of the digital sector in GDP;
- internet penetration rate;
- digital competitiveness index;
- volume of e-commerce.

Table 1 presents the main indicators of digital development in selected countries.

The data presented in Table 1 reflect a significant differentiation in the level of digital development among Central Asian countries. Kazakhstan holds a leading position in the region, due to a more developed digital infrastructure, active government policy in the field of digitalization, and a relatively high level of digital competencies of the population. Uzbekistan demonstrates stable positive dynamics of digital development associated with the implementation of state programs for digital transformation of the economy.

Table

1

Key Indicators of Digital Economy Development in Central Asian Countries

Indicator	Kazakhstan	Uzbekistan	Kirgizstan	Tajikistan	Turkmenistan
Share of digital economy in GDP, %	6.5	4.1	3.2	2.8	2.5
Internet penetration rate, %	90	84	65	45	40
Digital competitiveness index	68	60	48	42	40
Share of e-commerce in retail trade, %	10	7	5	3	2

At the same time, Kyrgyzstan, Tajikistan, and Turkmenistan are characterized by lower values of key digital economy indicators. The main limiting factors are insufficient development of telecommunications infrastructure, limited investment resources, and a relatively low level of internet penetration. The low share of e-commerce in retail trade indicates weak development of digital platforms and online business in these countries.

Research Results

The conducted analysis showed that the digital economy is becoming one of the key drivers of economic growth. Countries with a higher level of digitalization demonstrate stable GDP growth rates, higher labor productivity, and a developed innovation infrastructure.



The results of the study indicate that the following sectors make the greatest contribution to the digital economy:

- information technologies and software;
- e-commerce;
- digital financial services;
- platform-based business models.

An important result is the identification of a relationship between the level of digital infrastructure and a country’s economic competitiveness. The higher the level of access to digital technologies, the more favorable conditions are created for business development and innovation.

Table 2 reflects the impact of digitalization on key macroeconomic indicators.

Table 2

Impact of Digitalization on Economic Development

Indicator	Low level of digitalization	High level of digitalization
Average annual GDP growth, %	2.1	4.3
Labor productivity	Low	High
Innovation activity	Limited	Intensive
Employment in the ICT sector, %	3–4	8–10

The obtained data confirm the positive impact of the digital economy on economic development and social sustainability.

The research results are consistent with the conclusions of a number of domestic and foreign authors who argue that digitalization is a key factor in increasing economic competitiveness. At the same time, the development of the digital economy is accompanied by a number of problems, including digital inequality, a shortage of qualified personnel, and information security threats.

Special attention should be paid to the role of the state in shaping the digital economy. Public policy should focus on developing digital infrastructure, supporting innovation, and creating a favorable regulatory environment. An important area is also the development of digital skills of the population and the education system.

It should be noted that digital transformation has an ambiguous impact on the labor market. On the one hand, new jobs are created in high-tech sectors; on the other hand, the risk of displacement of workers in traditional professions increases. This requires the development of mechanisms for adaptation and retraining of personnel.

Conclusion

The study found that the digital economy is a crucial element of modern economic development. Its formation contributes to increasing production efficiency, fostering innovation, and improving the quality of life of the population. At the same time, successful development of the digital economy is possible only with a comprehensive approach that includes state support, infrastructure development, and human capital development.

The obtained results can be used in the development of digital development strategies and in further scientific research



References:

1. Tapscott, D. The Digital Economy. Moscow: Alpina Publisher, 2019.
2. Schwab, K. The Fourth Industrial Revolution. Moscow: Eksmo, 2020.
3. OECD. Digital Economy Outlook. Paris, 2022.
4. World Bank. World Development Report: Digital Dividends. Washington: World Bank, 2016.
5. OECD. Digital Transformation in Developing Countries. Paris: OECD Publishing, 2020.
6. UN ESCAP. Digital Economy Report for Central Asia. Bangkok: United Nations, 2021

