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THE ROLE OF INNOVATION IN ECONOMIC GROWTH

Associate Professor
Samarkand Institute of Economics and Service
Urunbayeva Yulduz Pirnazarovna
ulduzurunbayeva75@gmail.com
Student, Samarkand Institute of Economics and Service
Safarov Ahmad Alisher ugli
safarovahmad286@gmail.com

Abstract: This article provides a scientific analysis of the role and significance of innovation in the economic growth of the Republic of Uzbekistan amid the transition to a digital economy. It also examines the development of digital transformation processes in the country, the introduction of innovative technologies across economic sectors, and the impact of artificial intelligence, e-commerce, financial technologies, and IT services exports on economic growth. Particular attention is paid to the importance of innovation in improving production efficiency and labor productivity, creating new jobs, and strengthening the competitiveness of the national economy.

Keywords: digital economy, innovation, economic growth, digital transformation, innovative technologies, artificial intelligence, e-commerce, financial technologies, IT services.

Introduction. In the context of today's globalization and the rapid digital transformation of the global economy, innovation is becoming one of the key factors in countries' economic development, improved competitiveness, and sustainable economic growth. The widespread adoption of modern information and communication technologies, artificial intelligence, automated management systems, e-commerce, and digital financial services is creating new opportunities to improve production processes across economic sectors, use resources efficiently, and increase labor productivity. Therefore, the development of innovation during the transition to a digital economy is emerging not merely as a process of technological renewal, but also as a strategic direction for ensuring the long-term growth of the national economy.

In recent years, the Republic of Uzbekistan has also paid particular attention to building a digital economy, supporting innovation, and introducing modern technologies across economic sectors. In particular, Presidential Decree No. PF-6079 of 5 October 2020, "On Approval of the Digital Uzbekistan — 2030 Strategy and Measures for Its Effective Implementation," is one of the important legal foundations for accelerating digital transformation in the country. The strategy approved by this Decree identifies the digital development of economic sectors, the social sphere, and the public administration system; improvement of electronic public services; expansion of digital infrastructure; and training of qualified personnel in information technology as priority tasks.

In addition, the Law of the Republic of Uzbekistan No. O'RQ-630 of 24 July 2020, "On Innovation Activity," plays an important role in strengthening the legal foundations of innovative development. This Law is aimed at regulating relations in the field of innovation, creating and implementing new developments, supporting innovative projects, and establishing the necessary organizational and economic conditions for entities engaged in innovation. The Law defines innovation as a new development that ensures the achievement

of significant socio-economic benefits. This also establishes, from a legal perspective, the role of innovation in the country's economic development.

Furthermore, Presidential Decree No. PF-6198 of 1 April 2021, "On Improving the Public Administration System for the Development of Scientific and Innovative Activities," is another regulatory legal act aimed at developing scientific research and innovation, applying scientific results in economic sectors, and improving the management system for innovative projects.

Within the framework of these legal and regulatory foundations, measures are being implemented to develop digital infrastructure, expand the activities of IT Park, improve electronic public services, and promote electronic payment systems and e-commerce. In particular, the use of digital technologies in industry, agriculture, banking and finance, trade, and services helps increase the speed and efficiency of economic processes. At the same time, the introduction of innovative technologies into production creates opportunities for enterprises to reduce costs, improve product quality, enter new markets, and expand export potential.

Nevertheless, certain challenges remain in Uzbekistan's digital economy and innovative development. These include disparities in the level of digital infrastructure development across regions, the ability of small businesses to access modern technologies, demand for qualified IT specialists, commercialization of scientific developments, and financing of innovative projects. Addressing these challenges requires further development of the innovation-related drivers of economic growth.

Literature Review. The study of the role of innovation in economic growth amid the transition to a digital economy is one of the topical research areas in economics. This issue has been examined by foreign and domestic scholars using various theoretical and practical approaches. In particular, the interrelationship between innovation, technological progress, digital transformation, and economic efficiency is recognized as an important factor in economic development.

One of the scholars who provided a scientific foundation for the role of innovation in economic development was the Austrian economist Joseph Schumpeter. In his 1934 work, "The Theory of Economic Development," innovation is interpreted as the principal driving force of economic development. According to the scholar, the production of new goods, improvement of production methods, development of new markets, and introduction of new organizational forms directly affect economic progress. Schumpeter's theory of "creative destruction" also explains how innovation replaces obsolete technologies with new ones and brings about structural changes in the economy. This theoretical approach serves as an important foundation for studying the impact of innovative technologies on economic growth in the digital economy.

In the theory of economic growth developed by the American economist Robert Solow, technological progress is regarded as an important factor in long-term economic growth. According to his approach, although increases in capital and labor resources affect economic growth, technological progress has particular importance for long-term development. Today, this theory helps explain the role of digital technologies, automation, and innovative management systems in improving production efficiency.

Among scholars who have examined the theoretical foundations of the digital economy, particular attention should be paid to Don Tapscott's 1995 work, "The Digital Economy: Promise and Peril in the Age of Networked Intelligence." The author substantiated how digital technologies, internet networks, and information exchange give rise to new forms of economic relations. According to his views, the digital environment expands opportunities

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for organizing business activities, developing relationships with consumers, and creating new business models.

Domestic researchers have also devoted particular attention to the digitalization and innovative development of Uzbekistan's economy. For example, in her 2024 research article entitled "Opportunities for Expanding the Digital Transformation of the National Economy," Feruzabonu Xuseynova examined prospects for expanding digitalization processes in Uzbekistan's national economy. The author analyzed the impact of digital transformation on economic growth, innovation, and national competitiveness, and highlighted opportunities for effectively using the potential of digital technologies in the country. This study is important in substantiating the need to develop digital infrastructure and apply international experience to the national economy.

Therefore, drawing on existing scholarly views, this study focuses on examining the role of innovation in Uzbekistan's economic growth amid the transition to a digital economy, the mechanisms through which innovation affects economic efficiency, and opportunities for accelerating innovative development.

Research Methodology. This study employed statistical analysis, comparative analysis, a systems approach, and scientific generalization to examine the impact of innovation on Uzbekistan's economic growth amid the transition to a digital economy. During the research, official statistical data and regulatory legal acts relating to the development of the digital economy, innovation, information and communication technologies, and IT services in Uzbekistan were examined. The impact of digital technologies on production efficiency, labor productivity, and economic growth was also analyzed. Comparative analysis was used to assess changes in economic indicators across different periods, while the systems approach identified the interrelationship between innovation and economic development. The findings were generalized to develop scientific conclusions and practical recommendations for advancing the digital economy and improving the effectiveness of innovation in Uzbekistan.

Analysis and Results. Amid the transition to a digital economy, innovation is emerging as one of the important factors of Uzbekistan's economic growth. In particular, the development of information and communication technologies, artificial intelligence, e-commerce, digital payment systems, and IT services is creating new opportunities across economic sectors. These processes contribute to higher production efficiency, expansion of the range of services, development of entrepreneurship, and strengthening of export potential.

When assessing the development of digital innovation in Uzbekistan's economy, it is first important to analyze changes in the information and communication technology sector. This is because the ICT sector forms the technological foundation of the digital economy. Its development also expands opportunities to use innovative technologies in other economic sectors.

Data from the National Statistics Committee of the Republic of Uzbekistan indicate that the information and communication technology sector is steadily expanding in the country. In particular, the volume of services in the information and communication sector amounted to UZS 15,861.1 billion in 2020, rising to UZS 39,734.2 billion in 2023, UZS 56,865.2 billion in 2024, and UZS 79,485.5 billion in 2025. This indicator demonstrates growing demand for digital services and the increasing importance of this sector in the national economy.

Table 1.

Dynamic Analysis of the Development of Information and Communication Services in Uzbekistan

Year	Volume of services (UZS	Absolute increase (UZS	Growth rate (%)	Base growth (%)

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	billion)	billion)		
2020	15 861,1	–	–	100,0
2021	20 353,8	4 492,7	128,3	128,3
2022	27 938,0	7 584,2	137,3	176,1
2023	39 734,2	11 796,2	142,2	250,5
2024	56 865,2	17 131,0	143,1	358,5
2025	79 485,5	22 620,3	139,8	501,1

As the table shows, between 2020 and 2025, the volume of services in the information and communication sector increased by UZS 63,624.4 billion. The base growth rate reached 501.1 percent. In particular, the absolute increase in 2025 amounted to UZS 22,620.3 billion. This indicates the expansion of the digital services market.

Another important indicator of digital economy development is the gross value added generated in the ICT sector. According to the National Statistics Committee, this indicator amounted to UZS 3,581.7 billion in 2015, increased to UZS 10,216.5 billion in 2020, and reached UZS 35,837.9 billion in 2024. Thus, gross value added generated in the ICT sector increased almost tenfold between 2015 and 2024.

Table 2.

Dynamics of the Economic Performance of Uzbekistan's ICT Sector

Year	Gross value added (UZS billion)	Change compared with the previous year (UZS billion)	Growth rate (%)	Growth compared with 2015 (%)
2015	3 581,7	–	–	100,0
2020	10 216,5	–	–	285,3
2021	13 049,6	2 833,1	127,7	364,4
2022	18 200,5	5 150,9	139,5	508,1
2023	26 099,4	7 898,9	143,4	728,6
2024	35 837,9	9 738,5	137,3	1 000,2

Between 2015 and 2024, gross value added generated in the ICT sector increased almost tenfold. This demonstrates the growing importance of information technology in economic activity. The annual growth rate was 143.4 percent in 2023 and 137.3 percent in 2024.

Conclusion and Recommendations. Based on the above statistical data and economic indicators, the following key results of the development of the digital economy and innovation in Uzbekistan can be identified:

First, the nearly fivefold increase in the volume of information and communication services between 2020 and 2025 indicates the expansion of the digital services market. This demonstrates the growing importance of the digital economy within the structure of the national economy.

Second, the almost tenfold increase in gross value added generated in the ICT sector between 2015 and 2024 confirms that this sector's capacity to create economic value is expanding.

Third, the growth in the volume of research and development activities indicates that a foundation is being established for developing the country's scientific and technological potential. However, the effectiveness of introducing scientific developments into production and commercializing them needs to be further improved.

Fourth, the export of services by IT Park participants increased more than 2.6 times between 2022 and 2025, demonstrating the economic opportunities available to innovative services in international markets.

Fifth, the introduction of digital innovation across economic sectors creates opportunities to automate production processes, reduce management costs, improve service quality, and establish new areas of economic activity.

Overall, the analyses show positive trends in the development of the digital economy and innovation in Uzbekistan. At the same time, the statistical indicators presented do not fully prove a direct causal impact of innovation on economic growth; rather, they demonstrate development trends between these areas. Additional econometric research is required to assess the precise impact of innovation on GDP and labor productivity.

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