

STAGES AND PROSPECTS OF DEVELOPMENT OF THE DIGITAL ECONOMY IN UZBEKISTAN

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Abstract

This article analyzes the concept of the digital economy, its formation factors and its role in the modern economic system. Using the example of world and Uzbek experience, the impact of digital technologies on economic processes, their contribution to production efficiency, and changes in the labor market are studied. The advantages of an economic model based on digital infrastructure, e-government, digital financial services, and artificial intelligence are also highlighted. The article recommends priority areas for the development of the digital economy based on the theoretical views of foreign and domestic scientists. Based on the results of the research, proposals and conclusions have been developed to accelerate the transition to a digital economy in Uzbekistan.

Keywords: Digital economy, software, digital technologies, cloud technology, IT (information technology), digital transformation, IT parks, online platforms.

Introduction

In recent years, a new stage of economic development has been taking shape worldwide - the digital economy. The introduction of digital technologies into the production, trade, finance and service sectors is significantly increasing economic efficiency. Uzbekistan is not left behind in this global trend, implementing comprehensive reforms to develop digital infrastructure and digitize the economy. This process plays an important role not only in increasing labor productivity, but also in reducing the level of bureaucracy, increasing tax revenues and reducing the shadow economy. The digital economy also creates new

opportunities for ensuring youth employment and increasing the export of services. Therefore, the development of the digital economy has become an urgent need today.

In this regard, the Decree of the President of the Republic of Uzbekistan DP-6079 dated October 5, 2020 “On approval of the “Digital Uzbekistan — 2030” strategy and measures for its effective implementation [1]” and the Resolution of the President of the Republic of Uzbekistan RP-4699 dated April 28, 2020 “On measures for the widespread introduction of the digital economy and e-government [2]” were adopted. Based on these regulatory documents, a number of tasks were set for the active development of the digital economy in our country, the implementation of comprehensive measures for the widespread introduction of modern information and communication technologies in all sectors and areas, primarily in public administration, education, healthcare and agriculture. In particular, the improvement of the e-government system, further development of the local market of software products and information technologies, the establishment of IT parks in all regions of the republic, as well as the training of qualified personnel in the field. The implementation of more than 220 priority projects aimed at providing with. In addition, the "Digital Tashkent" complex program is being implemented, which involves the launch of a geoportal integrated with more than 40 information systems, the creation of an information system for managing public transport and municipal infrastructure, the digitization of the social sphere and the subsequent introduction of this experience in other regions.

Review of Relevant Literature

Canadian scientist Don Tapscott believes that “the digital economy is not just a technological change, but a fundamental transformation of the economic system, in which knowledge, networks and innovation become the main factors of production [3]”.

According to American professor Eric Brynjolfsson, digital technologies will become a force that multiplies human intelligence. He noted that achievements in the digital economy will have a profound impact, especially on the labor market, productivity and income inequality [4].

In their scientific research, American economists Carl Shapiro and Hal Varian noted that the economy of information products is different from the economy of traditional goods. They also noted that in the digital economy, in many cases, the first winner is the winner, because the network effect plays a strong role [5].

German professor Klaus Schwab has stated in his research papers that the digital economy is a central element of the fourth industrial revolution, which will fundamentally change industry, society, and labor relations through digitization, artificial intelligence, the Internet, and automation [6].

Uzbek scientist O.S. Abdusalomov’s research emphasizes that the digital economy is a new economic model based on information technologies, which serves to increase efficiency through the digitization of production, distribution, exchange, and consumption processes [7].

Economist Y.M. Murodov’s scientific research notes that “Automation and digitization of business processes through digital technologies increases the competitiveness of small and medium-sized businesses and reduces the share of the shadow economy [8].”

Research Methodology

To study the problem in the article, the methods of systematic analysis, scientific observation, analysis and synthesis, induction and deduction were used.

Discussion of Analysis and Results

In recent years, the rapid development of digital technologies has made the digitalization of the economy a global trend. This process is characterized by increasing production efficiency, optimizing the financial system, and ensuring transparency in public administration. The table analyzes the impact of the digital economy on economic and social areas using the example of Uzbekistan based on numbers. It reflects the significant changes that have occurred in the period 2018–2023 and their results. Specific examples and statistical indicators are given for each area, highlighting the real manifestation of digital growth. This data more clearly shows the place of the digital economy in national development.

Table 1 The Role and Importance of the Digital Economy in Uzbekistan: Key Indicators and Impacts
[9]

Key Dimension	Global Impact of the Digital Economy	Concrete Evidence from Uzbekistan
Economic growth & productivity	Automation and data-driven processes cut costs and raise output per worker.	IT Park residents' service exports jumped from US \$16 mn in 2020 to US \$344 mn in 2023 – a 21-fold leap that illustrates digital-led value creation.
Financial inclusion & cash-free payments	Mobile wallets and instant-payment rails broaden access to banking and speed up commerce.	The new National Payment System helped non-cash transactions grow 35 % in 2023, while Payme alone processed US \$3.6 bn (+29 %) and lifted revenue 39 %.
Tax revenue & transparency	E-invoicing and online cash registers shrink the shadow economy and lift fiscal receipts.	After fiscalization, turnover recorded by online cash registers rose 1.6× (≈ 60 %) year-on-year in 2022, signalling hidden sales coming into the open.
Jobs & skills for the future	Digital sectors create high-skill positions and demand for coding, AI, cyber-security.	One Million Uzbek Coders has already enrolled 500 000+ learners, and IT Park has created 13 073 tech jobs by 2023.
Export diversification	Shifts economies away from raw commodities toward high-margin knowledge exports.	Government targets US \$1 bn in IT-service exports by 2025 (and US \$5 bn by 2030); 2023's US \$344 mn shows rapid progress.
Public-service efficiency	E-government cuts red tape, saves time for citizens and business.	By Q1 2024 the Unified Portal offered 595 online public services, with 700 planned by end-2024.

The digital economy in Uzbekistan has been developing steadily in recent years and is reflected in real economic indicators. For example, the IT-Park export volume increased from \$16 million in 2020 to \$344 million in 2023 - a 21-fold increase. In the financial sector, the Payme payment system carried out \$3.6 billion in transactions in 2023, which is 29% more than in 2022. In the tax sector, as a result of the introduction of online cashiers, trade turnover increased by 60% in 2022. In the labor market, more than 500,000 young people are receiving training in the IT sector through the “One Million Uzbek Coders” project. At the same time, 13,073 jobs were created in the IT-Park by the end of 2023. Regarding the export of digital services, the government aims to achieve \$1 billion in exports by 2025. These indicators show that digitalization is taking a central place in Uzbekistan's economic model. 595 public services will be provided online through e-government by the first quarter of 2024, which will help reduce bureaucracy. The digital economy is of strategic importance not only for economic growth, but also for creating a transparent, employment-oriented and innovative environment. Therefore, Uzbekistan has identified it as a priority area of its long-term development strategy.

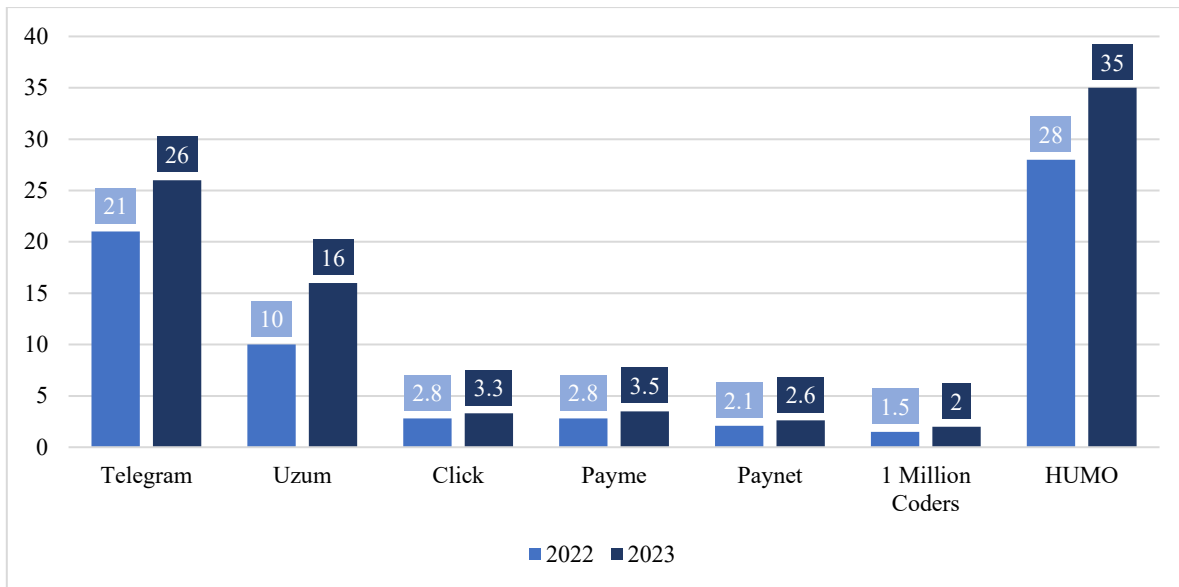


Fig. 1. Active Users on Major Digital Platforms in Uzbekistan (2022–2023) (million people) [10]

Telegram is the most used platform in Uzbekistan, reaching 26 million active users in 2023 from 21 million in 2022 — covering almost the entire internet user base. The Uzum ecosystem (Market, Bank, Tezkor, etc.) has also shown rapid growth: from 10 million in 2022 to 16 million in 2023, leading the digital commerce and payment market in the country. In addition, payment applications such as Click and Payme, with 3.3 million active users each, play a key role in daily financial transactions.

Paynet, with its 2.6 million active users, will also continue to provide traditional services not only digitally, but also through a network of agents. At the same time, 2 million people will acquire digital skills in 2023 through the 1 Million Uzbek Coders project — which will ensure a new influx of personnel into the IT sector. The number of HUMO cards will reach 35 million by 2023, confirming the rapid expansion of the cashless payments infrastructure.

All platforms in the table above have shown annual growth, which indicates the growing trust and demand for the digital economy. Moreover, the increase in the number of users is associated with the quality, convenience and speed of services - digital solutions are penetrating all aspects of life. This growth trend is directly related to government policy, investor interest and increasing digital literacy in society.

Table 2 Necessity and Positive Aspects of the Digital Economy [11]

№	Positive Aspect	Explanation
1	Increases production efficiency	Automation and digital tools boost labor productivity.
2	Simplifies public services	E-government platforms provide faster and more accessible services.
3	Creates new job opportunities	Thousands of jobs are generated in IT, fintech, and e-commerce sectors.
4	Boosts tax revenues	Digital payments and online commerce strengthen fiscal transparency.
5	Ensures financial inclusion	Helps unbanked populations access digital financial services.
6	Attracts investment	Countries with strong digital infrastructure appeal more to investors.
7	Reduces corruption	Digital traceability systems improve transparency in public processes.
8	Expands education and healthcare access	E-learning and telemedicine reach remote and underserved areas.

The digital economy plays a vital role in modern development. First, it increases productivity by automating industrial and administrative processes. Secondly, it simplifies access to public services through e-government platforms, making them faster and more transparent. It also creates thousands of new jobs, especially in IT, fintech, and e-commerce sectors. Moreover, digital transactions help raise tax revenues by reducing informal activities. Financial inclusion improves as more people—especially in rural areas—access digital banking and payment services. A well-developed digital infrastructure attracts foreign investment, enhancing economic growth. Importantly, it reduces corruption by minimizing human involvement and increasing traceability. Digital technologies also enable remote education and telemedicine, improving service access in remote regions. Furthermore, it fosters entrepreneurship by lowering entry barriers to business. Overall, the digital economy strengthens innovation, competitiveness, and long-term sustainability in national development.

Conclusions and Suggestions

The digital economy in Uzbekistan has been developing rapidly in recent years, contributing to increased efficiency in various sectors. The export of IT services, online payments, e-government, the growth of digital platforms and users indicate that this trend is taking shape on a large scale. Digital technologies simplify production processes, reduce bureaucracy, increase tax revenues and ensure transparency in society. At the same time, modern digital infrastructure has a positive impact on both economic and social stability.

Based on the above research, the following recommendations were formulated:

1. Increasing digital literacy - it is necessary to organize regular IT courses and trainings for the population and entrepreneurs.
2. Developing local digital products - it is necessary to support startups and innovative projects with state grants and tax incentives.
3. Expanding Internet infrastructure - it is necessary to ensure fast and affordable Internet access, especially in remote areas.
4. Strengthening cybersecurity - it is necessary to introduce modern technologies to protect users' personal data.
5. Integrating e-government systems - increasing efficiency by combining all government services on a single portal.
6. Improving a separate legislative framework for the digital economy - it is necessary to create clear standards and legal foundations.

If the above recommendations are put into practice, the development of the digital economy in Uzbekistan will accelerate further. The digital literacy of the population will increase, new jobs will be created. Public services will become simpler, and the level of corruption will decrease. The expansion of the Internet infrastructure will allow access to digital opportunities even in remote areas. Cybersecurity and the legal framework will be strengthened, creating a reliable environment for investors. As a result, the digital economy will provide a powerful impetus for the sustainable and innovative development of the country.

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