

ANALYSIS AND OUTLOOK ON THE DEVELOPMENT POTENTIAL OF UZBEKISTAN'S DIGITAL ECONOMY



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Abstract: *Amid the booming global digital economy, Uzbekistan demonstrates significant development potential thanks to its young population, continuously improving infrastructure, and strong government policy support. However, it also faces challenges such as uneven infrastructure development and a shortage of digital talent. This article aims to comprehensively analyze the development foundation, potential areas, cooperation opportunities, and challenges facing Uzbekistan's digital economy, providing valuable insights into its future development.*

Keywords: *Uzbekistan, digital economy, development potential*

1. Introduction

Uzbekistan, a strategically important country in Central Asia, has achieved stable economic growth in recent years through a series of reform and opening-up policies. Since President Mirziyoyev came to power, Uzbekistan has actively promoted market-oriented and liberalized economic reforms, resulting in rapid GDP growth, projected to reach 6.5% in 2024 and a 7.2% real growth rate in the first half of 2025. Against this macroeconomic backdrop, digital transformation has become a key strategic direction for Uzbekistan to optimize its economic structure and promote social development.

2. Policies and Strategic Planning for the Development of the Digital Economy in Uzbekistan

The Uzbek government attaches great importance to the critical role of digital transformation in the country's economic and social development and has formulated and implemented a number of strategic plans, of which the "Digital Uzbekistan 2030 Strategy" is the core policy framework. The strategy clearly sets out the ambitious goal of transforming Uzbekistan into a "Central Asian Information Technology Hub" and sets a series of specific targets: by 2030, achieving 100% internet access coverage for all residents nationwide, ensuring that every settlement has access to the internet at a data speed of at least 20 Mbit/s. This

strategy focuses not only on expanding technological infrastructure but also on the deep integration and application of digital technologies across all economic sectors and social levels.

In terms of policy support, Uzbekistan is fostering an environment conducive to the development of the digital economy through a multi-pronged approach. Tax incentives and fiscal support are key government incentives for digital investment. The government provides at least 5% of the initial investment capital for related projects and establishes "IT Industrial Parks" to provide tax incentives and infrastructure support for technology companies. These measures have significantly reduced business operating costs and attracted domestic and international investment to Uzbekistan's digital economy.

Table 1: Key Strategic Documents and Objectives for Uzbekistan's Digital Economy Development

Strategy Name	Main Objective	Key Measures	Expected Results
Digital Uzbekistan 2030 Strategy	Develop Uzbekistan into a Central Asian IT hub;	Expand broadband coverage, promote e-government, and support IT startups.	Achieve 100% internet access nationwide by 2030, with every residential area receiving at least 20 Mbit/s internet speed.
Uzbekistan 2030 Strategy	double GDP and increase per capita GDP to \$4,000;	Implement over 500 strategic technology and infrastructure projects valued at \$150 billion.	Promote economic diversification and increase the proportion of the digital economy.
IT Industrial Park Plan	and foster a tech startup ecosystem	Provide tax incentives, infrastructure support, and access to global markets.	Incubate 1,000 startups and create 50,000 IT jobs by 2025.

It is noteworthy that Uzbekistan's digital strategy is closely aligned with the country's overall economic development plan. The "Uzbekistan-2030" strategy sets the goal of doubling GDP and increasing per capita GDP to \$4,000 by 2030, and the digital economy is seen as a key engine for achieving this goal. The government plans to implement over 500 strategic technology and infrastructure projects, with a total value of \$150 billion, to provide a solid material foundation for the development of the digital economy.

3.Current Status and Existing Foundation of Digital Economy Development

3.1 Digital Infrastructure and Access

Uzbekistan's digital economy is built on an improving, yet still uneven, digital infrastructure. According to a report by the Asian Development Bank, Uzbekistan is still categorized as a "low-digitalization economy," placing it at a similar stage of development as countries such as Cambodia, Bangladesh, Mongolia, and Pakistan. The country faces multiple challenges in digital infrastructure: limited network coverage, particularly in rural areas where mobile network coverage is significantly lower than in urban areas, with a 7.4% gap in 4G coverage between urban and rural areas. High-speed internet access is still lacking in remote areas such as Karakalpakstan. Data costs are high, with mobile network fees accounting for a high proportion of income. The average cost of 1GB of data is approximately 1.5% of monthly income, exceeding the regional average. This makes digital services unaffordable for low-income groups.

Despite this, Uzbekistan has made significant progress in its digitalization efforts. In accordance with the "Digital Uzbekistan 2030" strategy, the government plans to achieve full 4G coverage by 2027 and deploy 5G in major cities such as Tashkent and Samarkand. By 2024, the rural fiber optic project in Khorezm Province will connect 150,000 households to high-speed internet, demonstrating the government's efforts to narrow the digital divide. Meanwhile, the construction of new digital infrastructure, such as data centers, is accelerating. According to a German Statista forecast, Uzbekistan's data center market is expected to achieve an average annual growth rate of 13.54% from 2024 to 2029, and the market size may exceed US\$598 million by 2029.

3.2 Digital Literacy and the Digital Divide

Lack of digital literacy is a key factor hindering the further development of Uzbekistan's digital economy. This is particularly evident among the elderly, women, and rural residents, where digital skills shortages are particularly pronounced. Data shows that only 30% of adults in rural Uzbekistan are proficient in using basic services such as online banking and e-government, highlighting the urgency of promoting digital skills.

To address this issue, the Uzbek government, in partnership with the Ministry of Education and UNESCO, launched the "Digital Skills for All" initiative, aiming to train one million citizens by 2026, with a focus on rural women and youth. Tashkent University of Information Technologies (TUIT) offers free online programming and digital skills courses, attracting over 50,000 users, 40% of whom are women. These initiatives aim to lay the foundation for the digital economy through talent development while promoting social inclusion.

4. Development Potential in Digital Economy Subsectors

4.1 Fintech and Inclusive Finance

Fintech is one of the fastest-growing sectors in Uzbekistan's digital economy, with significant potential to promote financial inclusion. Local fintech companies such as Payme and Click have achieved initial success. The Payme platform serves over 2 million users, providing much-needed mobile payments and microloans to rural residents. These fintech platforms lower barriers to entry and costs, providing convenient access to financial services for those underserved by traditional banking services.

4.2 Digitalization of Agriculture

Agriculture, a traditionally important industry in Uzbekistan, accounts for 14.6% of GDP. Its digital transformation is crucial for improving production efficiency and sustainability. Digital technologies such as remote sensing and AI analysis can enhance agricultural productivity and disaster response capabilities. A pilot project in the Fergana region leveraged drone and satellite data to optimize irrigation, increasing cotton yields by 10%, demonstrating the value of digital technologies in agriculture.

4.3 E-Government and Digital Governance

Uzbekistan has made significant progress in promoting e-government. The my.gov.uz e-government platform now offers over 300 public services, including business registration and tax filing. The government plans to digitize 80% of public services by 2025. This will greatly facilitate access to government services for residents in remote areas, improve administrative efficiency, and reduce opportunities for corruption.

Table 2: Assessment of the development potential of Uzbekistan's digital economy sub-sectors

Areas	Current Development Level	Key Drivers	Growth Potential	Key Challenges
Fintech	Lower-medium, but growing rapidly	High financial inclusion, mobile device penetration, and government support	High	Imperfect regulatory framework, low consumer trust
Digital agriculture	Initial stage, pilot projects have been successful	High agriculture-to-GDP ratio, demand for resource efficiency, and climate change adaptation	Medium-High	Lack of digital skills among farmers, high investment costs
E-government	Medium,	Government	High	Difficulties in

	continuing to advance	digitalization strategies, support from multilateral institutions, and citizen demand		interdepartmental coordination, data security concerns
Digital education	Initial stage, but with some key projects	Young demographics, the 2030 Strategy goals, and international cooperation	High	Insufficient teaching staff, content localization challenges
E-commerce	Medium, with rapid growth	Accelerating urbanization, a growing middle class, and improved payment systems	Medium-High	Inadequate logistics infrastructure, consumer protection mechanisms

5. International Cooperation and Digital Silk Road Opportunities

Specific cooperation projects have been gradually implemented and are achieving positive results. Zhongke Ruiyan (Tianjin) Technology Co., Ltd. custom-developed an AI agent supporting the Uzbek language and an intelligent digital vocational skills training and certification platform for Uzbekistan, forming an integrated training system encompassing "learning-practice-examination-certification." After its trial launch in April 2025, the platform has garnered widespread attention from young Uzbek digital professionals. This collaboration not only helps Uzbekistan cultivate local digital talent but also provides Chinese digital technology companies with experience in overseas expansion. China-Uzbekistan cooperation has also made substantial progress in the field of energy digitalization. The first 400 MW of a 1 GW photovoltaic project invested by China Energy Construction Gezhouba Overseas Investment Co., Ltd. in Uzbekistan has been connected to the grid, generating 2.4 billion kilowatt-hours of electricity annually and reducing carbon dioxide emissions by 2.4 million tons annually. The project boasts a high local procurement rate of 65%, creating 1,600 jobs and setting a benchmark for the integration of green energy and digital technology. Goldwind Technology's Zarafshan wind power project in Uzbekistan has officially commenced operations with an installed capacity of 521.7 MW, becoming the largest operational wind power project in Central Asia and capable of meeting the electricity needs of 500,000 Uzbek households. These projects not only enhance

Uzbekistan's energy security but also provide stable power supply for the development of the digital economy.

6.Recommendations and Future Outlook

Based on an analysis of the potential and challenges of Uzbekistan's digital economy development, this article proposes the following layered strategic recommendations:

6.1 Infrastructure First: Laying the Foundation for Digital Economy Development

The primary task is to address the imbalance in digital infrastructure, particularly network coverage in rural and remote areas. The government can adopt low-cost solutions such as spectrum sharing and low-orbit satellites to accelerate broadband and 5G coverage in rural areas (such as Kashkadarya and Surkhandarya Oblasts). Mongolia's experience in connecting remote schools with satellites can also be leveraged. Furthermore, Thailand-style subsidies or universal service funds can be introduced to reduce network costs for low-income groups. For example, mobile data subsidies could be provided to farmers in Andijan Province to help them access agricultural digital platforms. Regarding green digital infrastructure, China's "Eastern Data West Computing" model could be followed, with renewable energy data centers being built. Uzbekistan's Navoi region, with its abundant solar energy resources, could be a pilot program.

6.2 Digital Literacy Enhancement: Cultivating Local Digital Talent

Implement a nationwide digital literacy training program, focusing on vulnerable groups. Following the example of Bangladesh, collaboration with local IT companies could be used to train rural residents. At the same time, we will strengthen the training of high-level digital talent, expand the scale and coverage of online programs at the Tashkent University of Information Technologies, and increase female participation. We will collaborate with international companies such as China Science and Technology to establish a tiered digital skills development system: comprehensively enhance digital literacy; provide in-depth training for those passionate about digital skills; implement a refined training model tailored to occupations, fields, and levels; and ensure that digital talent becomes the core of the national talent think tank for digital development.

6.3 Innovative Policy Support: Optimizing the Development Environment for Digital Enterprises

Tax incentives and regulatory sandboxes will be used to encourage companies like Payme and Click to expand digital financial services in rural areas (such as Bukhara Province). We will establish a national platform similar to India's Open

Network for Digital Commerce (ONDC) to integrate local businesses, such as expanding Uzum Market to support the export of Samarkand handicrafts. Furthermore, we will gradually improve laws and regulations in areas such as data protection, cybersecurity, and digital transactions to protect consumer rights and provide clear regulatory guidance for businesses.

6.4 Deepen International Cooperation: Integrate into the Global Digital Ecosystem

Uzbekistan should continue to actively participate in the development of the "Digital Silk Road" and strengthen cooperation with Shanghai Cooperation Organization member states in the fields of digital technology and artificial intelligence. We can learn from India's experience in digital infrastructure development and develop a platform similar to the Unified Payments Interface (UPI); refer to South Korea's green digital strategy and build a sustainable digital industry through carbon pricing and renewable energy applications; and learn from Indonesia's fintech development experience by collaborating with international payment systems through Payme to expand service coverage.

Looking ahead, Uzbekistan's digital economy holds broad prospects for development, driven by policy support, international cooperation, and endogenous momentum. According to the World Bank, Uzbekistan's per capita GDP is expected to reach US\$3,400 by 2025. With continued economic development and deepening digital transformation, the digital economy is expected to become a key force in driving Uzbekistan's medium- and long-term development goals. By 2030, if Uzbekistan effectively addresses current challenges, it is expected to become a major digital hub in Central Asia, achieving the goals set out in the "Digital Uzbekistan 2030 Strategy" and promoting the transformation of its economic structure towards a more diversified, innovation-driven, and high-quality development model.

7 Conclusion

The future of Uzbekistan's digital economy hinges on the effective implementation of a comprehensive strategy combining infrastructure expansion, digital literacy enhancement, innovative policy support, and deepening international cooperation. China's Digital Silk Road initiative presents a valuable opportunity for Uzbekistan. Joint projects between the two countries in digital technology, artificial intelligence, and digital education have demonstrated significant potential. With the deepening of digital transformation, Uzbekistan is poised to achieve deep integration of digital technology across all sectors of the economy and society, injecting new impetus into the country's high-quality economic development while

also making significant contributions to the development of the digital economy in Central Asia.

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