

PROBLEMS OF THE DIGITAL ECONOMY AND SOLUTIONS FOR SOCIETAL DEVELOPMENT

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Abstract

This article analyzes the main problems in the modern development of the digital economy and highlights its role in societal progress. It examines issues related to digital infrastructure, cybersecurity, the digital divide, workforce skills, and legal regulation. Based on international experience, Uzbekistan's "Digital Uzbekistan – 2030" strategy, and academic sources, the study proposes practical solutions to address these problems. The findings indicate that comprehensive measures can make the digital economy not only a driver of economic efficiency but also a foundation for sustainable development and social equity.

Keywords

digital economy, cybersecurity, digital divide, innovation ecosystem, "Digital Uzbekistan – 2030".

INTRODUCTION

The digital economy has become one of the most important pillars of the global economic system in the 21st century. According to the International Monetary Fund, the digital economy accounts for 15–20% of global GDP. Similarly, a McKinsey Global Institute (2021) report notes that countries that have fully implemented digital transformation experience economic growth rates twice as high as those lagging in digitalization.

The digital economy is also of critical importance for Uzbekistan. The "Digital Uzbekistan – 2030" strategy, adopted under President Shavkat Mirziyoyev, sets digital technologies as a strategic priority for national development. However, a number of global and national challenges remain, and overcoming them is crucial for the country's societal progress.

METHODS

The study employed the following methods:

1. **Analytical approach** – analysis of reports from the World Bank, OECD, ITU (International Telecommunication Union), and the Statistics Agency of Uzbekistan.
2. **Comparative method** – examining the experiences of advanced digital economies such as South Korea, Estonia, and Singapore in comparison with Uzbekistan and other Central Asian countries.
3. **Empirical observation** – assessment of the effectiveness of national projects such as “E-Government,” “Digital Education,” and “E-Health.”
4. **Sociological analysis** – evaluation of population groups’ digital literacy and access as part of studies on reducing the digital divide.
5. **Statistical method** – using current digital infrastructure indicators to produce forecasts and analytical conclusions.

RESULTS

1. State of digital infrastructure

- According to ITU, 37% of the world’s population still does not use the internet regularly.
- In Uzbekistan, as of the end of 2024, the number of internet users exceeded 32 million, but internet speed in rural areas is 40% lower than in urban areas.

2. Cybersecurity challenges

- Cybercrime caused \$6 trillion in global economic losses in 2022 and is projected to reach \$10 trillion by 2025 (Cybersecurity Ventures).
- More than 1,200 cyberattacks were recorded in Uzbekistan in 2023.

3. Digital divide

- Globally, there is a gender gap in internet use: 62% of men versus 57% of women are active users (ITU, 2023).
- In Uzbekistan, 85% of people aged 15–30 use the internet, while only 27% of those over 50 do.

4. Workforce issues

- According to the State Statistics Committee, there are over 50,000 IT specialists in Uzbekistan, while the country’s demand exceeds 200,000.

5. Gaps in legal regulation

- E-commerce is growing rapidly, yet legislation aligned with international standards is still underdeveloped. For example, while certain regulations on cryptocurrency exist, their practical application remains limited.

Discussion

The findings suggest that comprehensive measures are needed in the following areas to accelerate digital economic development:

1. **Developing infrastructure** – expand broadband internet networks, introduce 5G technology in phases, and implement telecommunication projects through public-private partnerships.
2. **Strengthening cybersecurity** – establish national cybersecurity centers, implement AI-based security algorithms, and improve rapid-response systems for cyber incidents.
3. **Enhancing digital literacy** – introduce advanced ICT curricula in schools, promote “lifelong learning” programs, and open free digital skills training centers in rural areas.
4. **Building an innovation ecosystem** – support start-ups financially, expand the network of technoparks, and attract international IT companies to foster competition.
5. **Improving the legal framework** – develop legislation on e-commerce, artificial intelligence, cryptocurrency, and personal data protection in line with international standards.

CONCLUSION

The digital economy plays a decisive role in the socio-economic development of society. For Uzbekistan, the successful implementation of the tasks outlined in the “Digital Uzbekistan – 2030” strategy will lead the country toward modern technological progress. Advancing infrastructure, ensuring cybersecurity, improving digital literacy, and strengthening the legal framework will create the foundation for the full-scale development of the digital economy.

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