

INFORMATION TECHNOLOGY DEVELOPMENT TRENDS AND THE STRUCTURE OF THE DIGITAL ECONOMY IN UZBEKISTAN

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Annotation

This article analyzes the development directions of information technologies, their role in the formation of the digital economy, and the prospects for IT integration in various sectors of Uzbekistan. The study emphasizes the importance of technological innovations, digital infrastructure, and information systems in improving the country's economic efficiency. Analytical diagrams and statistical data are used to illustrate the structure of the digital economy and the contribution of IT sectors.

Keywords

information technology, digital economy, innovation, ICT, development, Uzbekistan.

Аннотация

В данной статье анализируются направления развития информационных технологий, их роль в формировании цифровой экономики, а также перспективы интеграции ИТ в различные сектора Узбекистана. В исследовании подчеркивается важность технологических инноваций, цифровой инфраструктуры и информационных систем для повышения экономической эффективности страны. Для наглядного представления структуры цифровой экономики и вклада ИТ-секторов используются аналитические диаграммы и статистические данные.

Ключевые слова

Информационные технологии, цифровая экономика, инновации, ИКТ, развитие, Узбекистан.

Introduction

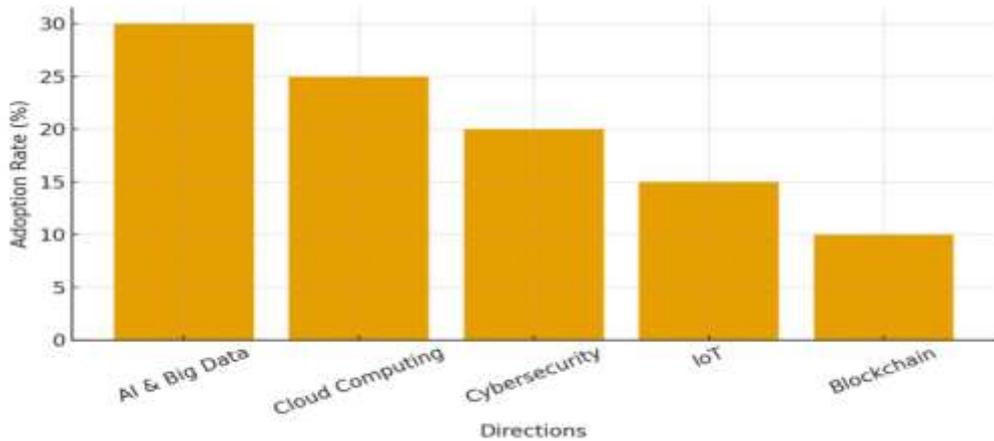
In the modern era, information technology (IT) has become one of the leading drivers of economic growth and innovation. Digitalization transforms every aspect of human activity – from education and healthcare to governance and business. The Republic of Uzbekistan, in recent years, has paid special attention to developing IT infrastructure and digital transformation as part of its national reform programs [1].

The ongoing process of technological modernization is shaping new economic structures, leading to the emergence of a digital economy. This transformation enables efficient data exchange, automation, and online services, which collectively enhance national competitiveness.[8]

Development Directions of Information Technologies

The development of IT in Uzbekistan can be categorized into several key directions: Digital Infrastructure Expansion, E-Government Services, Software Industry Growth, Cybersecurity Enhancement, and Education and Human Resource Development [2].

Below is the diagram that visually represents the percentage distribution of IT development priorities:



Акти

Diagram 1. Development Directions of Information Technologies in Uzbekistan

The Digital Economy Structure in Uzbekistan

The digital economy of Uzbekistan consists of several interrelated components. Each of them plays an important role in the country's overall innovation ecosystem [3].

The following pie chart illustrates the structure of the digital economy in Uzbekistan:

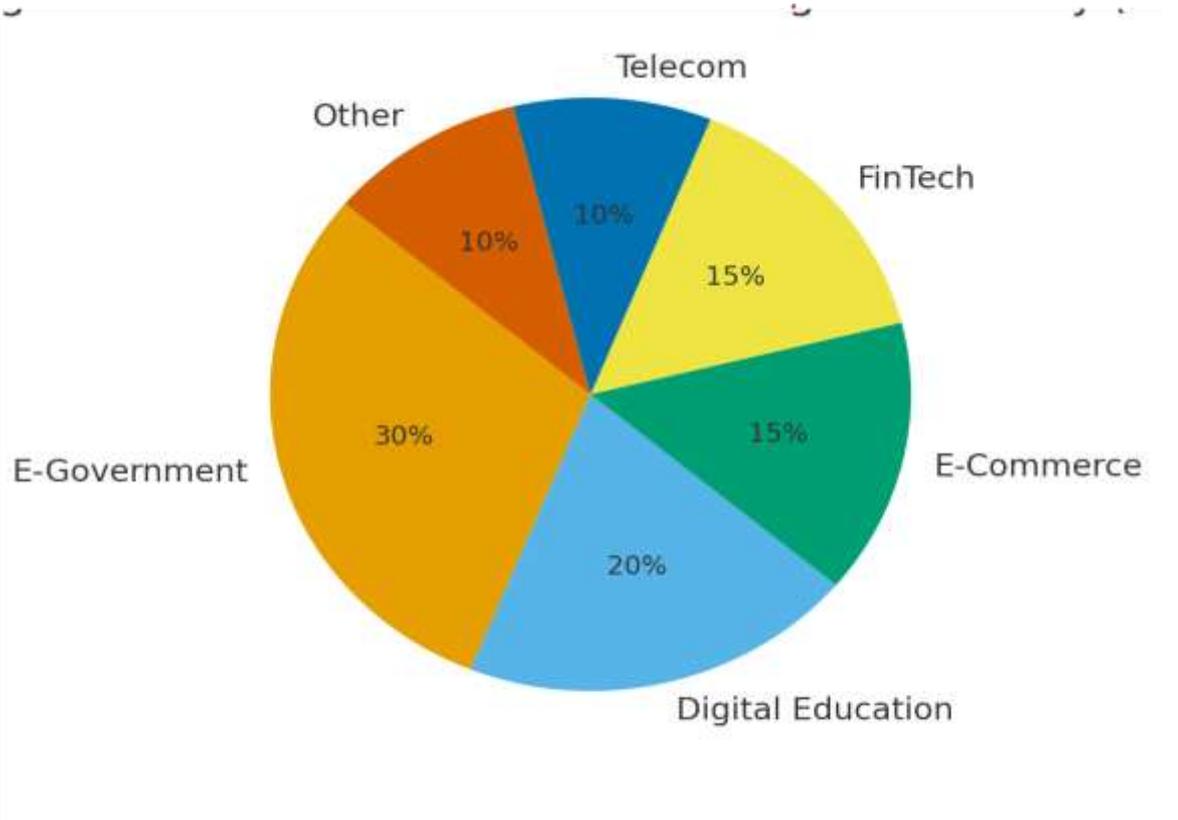


Diagram 2. Structure of the Digital Economy in Uzbekistan
The Role and Contribution of IT Sectors

Information technologies contribute significantly to the modernization of national industries. The IT sector serves as a key enabler for sustainable economic growth, improving productivity and communication efficiency [4].

Table 1. The share of IT sectors in Uzbekistan’s economy (2024):

IT Sector	Share (%)
Telecommunications	28
Software Development	25
E-Government Systems	20
Digital Finance (FinTech)	15
Education Technologies	12

Challenges and Future Prospects

Despite the rapid growth of IT, several challenges remain. Among them are insufficient digital literacy in remote regions, cyber risks, and the need for international cooperation in innovation. However, the government’s ongoing reforms—such as the establishment of IT parks, support for startups, and educational initiatives—create strong potential for overcoming these challenges [6]. The future of Uzbekistan’s IT sector will likely focus on artificial intelligence (AI),

blockchain, and big data analytics. These technologies will not only optimize production but also ensure transparency in public administration and increase trust in digital systems.

Conclusion

In conclusion, information technologies play a decisive role in shaping the digital future of Uzbekistan. Their integration into various fields of the economy ensures efficiency, innovation, and global competitiveness. The success of digital transformation depends on strategic planning, technological investment, and continuous professional development [7]. The use of IT solutions will continue to serve as a foundation for economic growth, social progress, and the realization of the 'Digital Uzbekistan - 2030' goals.

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