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THE ROLE OF THE DIGITAL ECONOMY IN ECONOMIC DEVELOPMENT

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Abstract: This article analyzes the role of the digital economy in the modernization of national economies, increasing economic growth rates, improving labor productivity, forming new business models, and enhancing efficiency in public administration. The study scientifically examines the impact of digital technologies on economic processes, as well as the mechanisms and outcomes of their implementation.

Keywords: digital economy, digital transformation, innovative technologies, artificial intelligence (AI), Big Data, cloud technologies

1. Introduction

In recent years, the digital economy has become one of the key drivers of global economic growth. Digital technologies—such as artificial intelligence, cloud computing, IoT, Big Data, blockchain, e-government, and e-commerce—are leading to qualitative transformation of economic processes. The rapid development of the digital economy enhances production efficiency, reduces costs, improves service quality, and facilitates the formation of new markets.
In Uzbekistan, the digital economy has been identified as a priority direction in the process of economic modernization. Under the "Digital Uzbekistan – 2030" strategy, digital transformation is being implemented across various sectors, including public administration, education, healthcare, taxation, and banking. This article provides a scientific analysis of the impact of the digital economy on economic development.

2. Methods

The following scientific methods were employed in this research:

- **System approach:** Comprehensive analysis of the structural elements of the digital economy and their interrelations, along with their influence on economic processes.
- **Comparative method:** Comparison of digital transformation experiences in developed countries with changes occurring in the national economy.
- **Statistical analysis:** Examination of statistical indicators related to the application of digital technologies in the economy.
- **Analytical-constructive method:** Formulating scientifically grounded conclusions regarding mechanisms that enhance economic efficiency through digitalization.
- **Content analysis:** Analysis of government documents and data from international organizations (World Bank, OECD, UNCTAD).

3. Results

3.1. Impact of digital technologies on economic efficiency

The findings indicate that digital technologies lead to the following outcomes:

1. **Increase in labor productivity:** Artificial intelligence and automation reduce human error and save time.

2. **Cost reduction:** Cloud services and digital platforms lower infrastructure expenses for companies.
3. **Creation of new jobs:** New professions emerge, such as IT specialists, data analysts, and digital marketing experts.
4. **Market expansion:** E-commerce and electronic payment systems facilitate international trade.
5. **Enhanced transparency in public administration:** E-government services reduce human involvement and help combat corruption.

3.2. Development of the digital economy in Uzbekistan

Between 2020 and 2024, Uzbekistan achieved the following:

- Significant expansion of e-government services.
- Rapid growth in the volume of transactions made via mobile banking applications.
- Complete digitalization of the tax system: online cash registers, electronic invoices, etc.
- Development of key digital platforms such as “Uzbektelecom,” “Uzkart,” “Humo,” and “E-IJRO AUKSION.”

These developments have directly contributed to improving economic efficiency.

3.3. Impact of the digital economy on macroeconomic indicators

According to the analysis, the digital economy contributes to macroeconomic stability in the following ways:

- Increasing GDP growth rates due to the high added value produced by the digital sector;
- Raising tax revenues by reducing the share of the shadow economy;
- Improving financial inclusion by expanding access to banking services;
- Enhancing export potential through the development of IT service exports.

4. Discussion

The results show that the digital economy is a new driver of economic development. However, achieving its full potential requires fulfilling the following conditions:

1. **Well-developed digital infrastructure:** Internet speed, mobile communication quality, and stable data transmission networks directly affect economic activity.
2. **Human capital development:** Low digital literacy slows down economic digitalization. For Uzbekistan, training IT specialists remains a crucial task.
3. **Improved legal framework:** Legislation regarding electronic signatures, digital contracts, data protection, and cybersecurity is essential.
4. **Bridging the digital divide:** Differences in internet coverage and technical resources across regions hinder the development of the digital economy.
5. **Cybersecurity:** As the digital economy expands, the risk of cyberattacks increases, making robust protection systems indispensable.

5. Conclusion

The research findings confirm the significant role of the digital economy in modernizing the economy. Digital technologies contribute to increasing production efficiency, improving service quality, reducing costs, forming new business models, and enhancing transparency in public administration.

For Uzbekistan, the development of the digital economy is a key direction to accelerate economic growth, strengthen international competitiveness, and transition toward an innovation-driven economy. The expansion of digital infrastructure, improvement of human capital,

enhancement of cybersecurity, and development of digital services will have a substantial impact on future economic progress.

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