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Current Status of Digital Transformation in Azerbaijan Economy

Abstract

The digital transformation of the economy in Azerbaijan has become one of the main directions of state policy in recent years. The goal of this process is to increase the competitiveness of the national economy, ensure sustainable development and form an innovation-oriented economic model. The "Digital Development Concept" approved by the Ministry of Digital Development and Transport in 2025 plays the role of a strategic framework in this direction. The concept identifies the development of the digital economy, improvement of e-government systems and expansion of digital services as priorities. Projects implemented by the Center for Analysis of Economic Reforms and Communication show that the digital economy is already becoming one of the main drivers of economic growth in Azerbaijan. The increasing level of digitalization in the banking sector, e-commerce, logistics, and SMEs (small and medium-sized businesses) demonstrates the practical consequences of this transformation. However, problems such as digital inequality, uneven development of infrastructure, and lack of digital skills still remain. Research conducted in the international context (MDPI publications, for example in the journals Sustainability and Systems) shows that digital transformation promotes economic efficiency, transparency, and social innovation in developing countries.

Keywords: *economy, digital, transformation, research, infrastructure*

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Azərbaycan iqtisadiyyatında rəqəmsal transformasiyanın mövcud vəziyyəti

Xülasə

Azərbaycanda iqtisadiyyatın rəqəmsal transformasiyası son illərdə dövlət siyasətinin əsas istiqamətlərindən birinə çevrilmişdir. Bu prosesin məqsədi milli iqtisadiyyatın rəqabət qabiliyyətini artırmaq, dayanıqlı inkişafı təmin etmək və innovasiya yönümlü iqtisadi modeli formalaşdırmaqdır. Rəqəmsal İnkişaf və Nəqliyyat Nazirliyinin 2025-ci ildə təsdiqlədiyi "Rəqəmsal İnkişaf Konsepsiyası" bu istiqamətdə strateji çərçivə rolunu oynayır. Konsepsiyada rəqəmsal iqtisadiyyatın inkişafı, elektron hökumət sistemlərinin təkmilləşdirilməsi və rəqəmsal xidmətlərin genişləndirilməsi prioritet kimi müəyyən edilmişdir. İqtisadi İslahatların Təhlili və Kommunikasiya Mərkəzi tərəfindən həyata keçirilən layihələr göstərir ki, rəqəmsal iqtisadiyyat Azərbaycanda artıq iqtisadi artımın əsas drayverlərindən birinə çevrilməkdədir. Bank sektoru, elektron ticarət, logistika və KOB-lar (kiçik və orta biznes) sahəsində rəqəmsallaşma səviyyəsinin yüksəlməsi bu transformasiyanın praktiki nəticələrini nümayiş etdirir. Bununla yanaşı, rəqəmsal bərabərsizlik, infrastrukturun qeyri-bərabər inkişafı və rəqəmsal bacarıqların çatışmazlığı kimi problemlər hələ də qalmaqdadır.

Beynəlxalq kontekstdə aparılan tədqiqatlar (MDPI nəşrləri, məsələn Sustainability və Systems jurnallarında) göstərir ki, rəqəmsal transformasiya inkişaf etməkdə olan ölkələrdə iqtisadi səmərəliliyi, şəffaflığı və sosial innovasiyaları təşviq edir. Azərbaycan da bu təcrübələrdən yararlanaraq, iqtisadiyyatın bütün sektorlarında rəqəmsal texnologiyaların inteqrasiyasını sürətləndirməyə çalışır.

Açar sözlər: iqtisadiyyat, rəqəmsal, transformasiya, tədqiqat, infrastruktur

Introduction

In recent years, technological innovations on a global scale have led to radical changes in the mechanisms of economic governance and development.
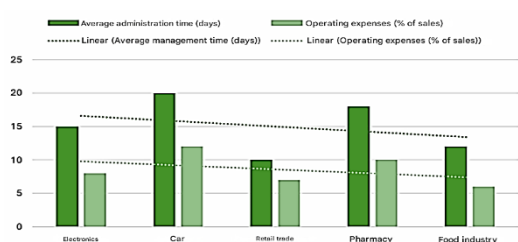
Digital transformation processes are creating both new opportunities and challenges for states. Azerbaijan's goal is to rapidly integrate into this process and increase the sustainability and competitiveness of the national economy. As shown in the study of Hajiyev and colleagues (Hajiyev, Ismayilov, Fataliyeva, Mahmudova, Asadova, 2025), digital transformation is one of the main directions for ensuring sustainability in Azerbaijan's economic development strategy. The authors note that the development of the digital economy makes a significant contribution to both increasing productivity and increasing transparency in governance. This approach is also supported in the work of Abdullayev (Abdullayev, Allahyarov, Teymurova, Zeynalov, Fataliyeva, 2024); in their opinion, digitalization is the main driving force in the formation of a competitive economic environment. The "Digital Development Concept" (Ministry of Digital Development and Transport of the Republic of Azerbaijan, 2025), approved by the Azerbaijani government in 2025, serves as the main document of the national strategy in this area. The concept aims to promote the digital economy, expand e-government services, and form governance mechanisms in line with the 4.0 industrial revolution. In this regard, the projects implemented by C4IR Azerbaijan reflect the application directions of the digital economy in the country (Center for Analysis and Coordination of the Fourth Industrial Revolution, n.d.; Kolomiyets, Rodchenko, Melentsova, Korol, Moskalenko, 2024), and the CAERC reflects the results obtained on international indicators (Center for Analysis of Economic Reforms and Communication, 2025; Report Information Agency, 2025; Suman Kalyan, 2024). Studies conducted at the international level also confirm the impact of digital transformation on economic and social spheres.

For example, Zhou and Wang (Zhou, Wang, 2025) showed that digitalization systematically reshaped organizational knowledge flows and decision-making mechanisms. Zhang (2025) emphasized that the development of the digital economy has a positive impact on reducing carbon emissions and improving environmental efficiency.

Research

The implementation of digital transformation in Azerbaijan has become a priority direction of state policy in recent years. The goal of this process is to increase the competitiveness of the economy, optimize management systems, and promote innovation-oriented development. Studies show that the application of digital technologies not only increases efficiency in the production and service sectors, but also provides transparency and flexibility in making management decisions (Hajiyev, Ismayilov, Fataliyeva, Mahmudova, Asadova, 2025; Lobacheva, Yadova, 2020).

Graphic 1. Key indicators of the digital economy in Azerbaijan (2020-2024).
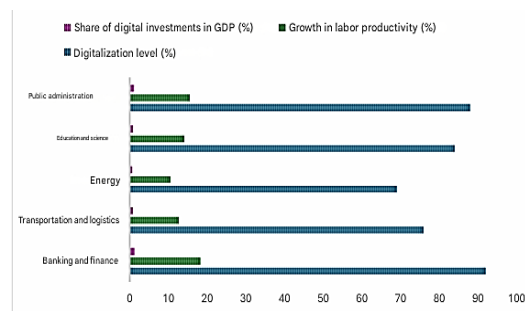

Source: Compiled by the author

This table reflects the dynamic development of the digital economy in Azerbaijan during 2020-2024. The data shows that the share of digital services in GDP increased from 4.8% in 2020 to 8.5% by 2024. E-commerce turnover increased from 2.1 billion manat to 8.3 billion manat, showing almost fourfold growth. The share of Internet users increased from 82.3% to 92.7%, which proves the expansion of digital accessibility and ICT infrastructure.

The level of digital public services has also increased significantly, from 68% in 2020 to 90% in 2024. These indicators are associated with the effective implementation of e-government projects and digital platforms such as "MyGov" and "ASAN xidmət" in Azerbaijan.

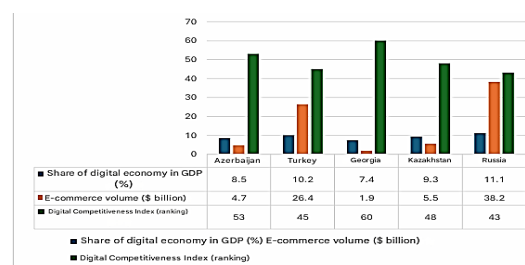**Graphic 2.** Sectoral impact of digitalization.

Source: Compiled by the author

Graphic 2 shows the level of digitalization in various economic sectors and its impact on labor productivity. The banking and financial sector is the leader with a 92% digitalization level, which is due to the widespread use of online banking services, mobile payment systems and fintech platforms. Digitalization in public administration has reached 88%, increasing flexibility and transparency in management (Siregar, 2023; Purnomo, 2023).

The 84% digitalization in the education and science sector is due to the widespread use of online learning environments and digital resources. Although the application of digital technologies in the transport, logistics and energy sectors is somewhat slower, the growth dynamics remain stable. Overall, the share of digital investments in GDP across all sectors has approached 1%, which has become one of the main indicators of technological modernization at the national level.

Graphic 3. International comparison of the digital economy (2024).

Source: Compiled by the author

This table assesses the level of development of the digital economy by comparing Azerbaijan with the countries of the region. According to the data, the share of Azerbaijan's digital economy in GDP was 8.5%, which puts the country ahead of Georgia (7.4%), but slightly behind Turkey (10.2%) and Kazakhstan (9.3%). The total volume of e-commerce is $4.7 billion, making it a significant share of the regional market. Azerbaijan is ranked 53rd in the digital competitiveness index, which reflects the positive results of the "Digital Development Concept", "AzInTelecom cloud centers" and "e-Commerce 2030" initiatives implemented in recent years.

Conclusion

The analysis of the three tables shows that the digital transformation process in Azerbaijan is accompanied not only by technological modernization, but also by the renewal of the socio-economic structure. The growth of the ICT sector, the development of e-commerce, and the digitalization of public services have increased the country's international competitiveness. However, issues such as the equal development of digital infrastructure among regions and the improvement of digital skills still remain strategic priorities.

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