DIGITIZATION OF SERVICE SECTORS AND TRANSFORMATION INTO A CORRUPTION-FREE SYSTEM

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Annotation:
This article analyzes the processes of digitalization in Uzbekistan's service sectors, their impact on efficiency, and their role in reducing corruption. The study explores the potential to minimize corruption risks through the implementation of digital technologies, which help reduce bureaucratic barriers, improve the quality and speed of service delivery, and ensure openness and transparency. Recent reforms in the country, including the development of e-government systems, online services, and smart solutions, are examined, and analytical recommendations are provided. The article also outlines key priority areas for enhancing the national model based on international experience.

Keywords: digitalization, service sector, anti-corruption, e-government, openness, transparency, digital reforms.

INTRODUCTION

The globalization of the world, driven by the rapid development of the digital economy, creates broad opportunities for economic activities based directly on information and communication technologies, as well as for the growth of digital production and services, and the increasing weight of knowledge and information with added value. "The digital economy is expected to cause profound changes in more than half of existing sectors. For example, research by World Bank experts shows that a mere 10% increase in the number of fast internet users can boost a country's GDP by 0.4–1.4% annually." [11]

It is known that "...digitization is the conversion of non-digital objects into digital images or artifacts." [12] Furthermore, digitization means transferring the information and knowledge in documents into a digital format. [1] Such tasks are directly outlined in the Five Key Initiatives proposed by the President of the Republic of Uzbekistan in March 2019. These initiatives include engaging youth in culture, art, and sports, developing their skills in using modern information technologies, promoting reading culture, and ensuring employment for women. One of the goals is to develop an innovation strategy based on the efficient use of knowledge

and human skills through digital technologies, as an alternative to a raw material-based economic model.

As part of the implementation of the third initiative—organizing computer and internet access for the population and youth—more than seventy "Digital Technology Training Centers" have been established, opening new opportunities for young people.

It is also planned to improve Uzbekistan's position in the Global Innovation Index and join the ranks of the top 50 countries by 2030. To achieve this, it is necessary to create broad opportunities for implementing innovation projects, and introduce modern mechanisms to support research and innovation initiatives. In this context, we believe that the use of modern digital competencies in regional development and especially in the digitization of key services, including healthcare, is crucial.

It is known that for several years, digital transformation was understood merely as storing data in digital format rather than traditional forms. In fact, this is only a narrow interpretation of digital transformation. In our opinion, this concept involves not only digitizing data but also a broader process in which enterprises and institutions begin to fully utilize digital information and develop special processes for this purpose.

Digital transformation is the integration of modern digital technologies into the business processes of socio-economic systems at all levels. This approach not only involves installing modern equipment or software but also entails a fundamental change in management, corporate culture, and external communications.

In Uzbekistan, the organizational and economic mechanisms of digitalization in the service sector reflect macroeconomic, socio-demographic, and technological trends and determine both the limiting and accelerating internal and external factors of digital transformation in socio-economic systems. Therefore, a classification of the influencing factors has been developed based on supporting digital governance, creating digital competence centers, establishing flexible models for managing business processes, and forming a technological base.

LITERATURE REVIEW

Currently, the process of digitalizing the economy is rapidly developing worldwide. The application of digital and information technologies in many economic processes leads to high economic efficiency. Banking and credit systems are among the crucial sectors of the economy. The effective organization of digitalization in these fields plays an important role in increasing economic efficiency. Therefore, the use of blockchain, artificial intelligence, IoT, cloud technologies, and other innovations in the digitization of banking and credit processes is considered highly relevant by global scholars.

Initial studies on the application of blockchain in financial systems were presented by Japanese researcher Satoshi Nakamoto [2], who proposed models for forming cryptocurrencies and processing transactions, laying the foundation for Bitcoin. W. Frank [3] and Y.N. Sotskov [4] directed their research towards the economic-mathematical modeling of the credit sector, emphasizing the need for mathematical modeling and programming in its digitization.

According to studies by C. Lin [5], D. He [6], S. Zeadally [7], and N. Kumar [8], blockchain technology in credit systems increased information exchange processes in banking institutions by 30%.

In academic circles, J. Boliyev (2025) [9] noted that the introduction of digital technologies in service systems increases the efficiency of public administration. R. Ayupov (2020) [10] addressed the issues and solutions in implementing Uzbekistan's "E-government" concept. According to him, digitalization not only improves the quality of services but also significantly reduces the risk of corruption.

Looking at foreign experiences, countries like Estonia, Singapore, and South Korea have simplified relations between the government and citizens and drastically reduced corruption through full digitalization of their service sectors. For example, in Estonia, all public services are delivered via a single digital platform, eliminating bureaucratic barriers.

Scientific literature also provides extensive analysis of how artificial intelligence, blockchain, and automated monitoring systems can detect and prevent corruption risks in the service sector.

RESEARCH METHODOLOGY

This study aims to identify and analyze the key directions for combating corruption through digitalization in the service sector. The following scientific and methodological approaches were applied during the research:

1. **Analytical approach** – Based on the experiences of Uzbekistan and foreign countries, the role of digitalization processes in service systems in reducing corruption was analyzed.
2. **Comparative method** – The digitalization levels and outcomes in various countries' service sectors were compared to identify effective mechanisms.
3. **Statistical analysis** – Data on the pace of digitizing public services, changes in corruption levels, and public trust were analyzed.
4. **Content analysis** – Documents, legislative acts, and scientific articles related to e-government, open data platforms, and anti-corruption strategies were examined.
5. **Practical observation** – Real-life examples of digital mechanisms in Uzbekistan's service sectors (e.g., the Unified Portal of Interactive State Services) were observed and evaluated.

These methodological foundations allowed the formulation of scientific conclusions and the identification of actual results of digitalization in the fight against corruption.

ANALYSIS AND RESULTS

Significant positive changes are being observed in the digitalization of service sectors in Uzbekistan. Systems such as the Unified Portal of Interactive State Services (my.gov.uz), the digital services of the State Tax Committee, the "People's Control" system, and the "e-anticor.uz" platform are important projects aimed at reducing corruption.

Furthermore, based on relevant presidential decisions, measures are being taken to digitize the operations of healthcare institutions across the country. Modern technologies are being adopted, and "smart" equipment is being installed.

In recent years, significant steps have been taken to digitize healthcare and implement integrated information systems. These efforts aim to reduce redundant procedures in management and expand the scope of medical services to the population.

As a logical continuation of these efforts, programs like "Electronic Polyclinic" and "Electronic Prescription" are being gradually implemented. These systems allow for automation of queues in medical institutions, monitoring of doctors' activities, and control over the movement of medicines.

Analyses show that:

Reduction of the human factor: Digitizing services such as diagnostics, prescriptions, and referrals significantly decreases **the healthcare system reduces the human factor, minimizes the potential for subjective errors, and limits opportunities for corruption.**

Transparency and accountability: With the digitalization of services such as electronic prescriptions and referrals, patient records and drug circulation become traceable and verifiable, contributing to increased transparency in the health sector.

Operational efficiency: Digital systems accelerate administrative processes, reduce paperwork, and improve coordination between different departments and institutions, ultimately enhancing the quality of public services.

Increased public trust: Citizens become more confident in public service systems when they are transparent, prompt, and accessible, thereby strengthening trust in state institutions.

CONCLUSIONS AND RECOMMENDATIONS

The conducted analysis confirms that digitalization in Uzbekistan's service sectors is not only a driver of modernization and efficiency but also a significant tool in combating corruption. The implementation of electronic government systems, smart services, and integrated platforms minimizes bureaucratic obstacles and increases transparency in the interaction between the state and citizens.

Based on international experience and the current state of digital reforms in Uzbekistan, the following key recommendations are proposed:

1. **Expand e-government services** across all sectors by integrating databases and ensuring interoperability among systems to avoid duplication and inconsistency.
2. **Develop digital competencies** among public servants and the general population through systematic training programs.
3. **Strengthen legal and institutional frameworks** that regulate digital platforms and ensure data protection, privacy, and cybersecurity.
4. **Enhance citizen participation** in governance through open data portals and feedback mechanisms that allow monitoring and assessment of public services.
5. **Encourage public-private partnerships** to accelerate innovation, infrastructure development, and the introduction of AI, blockchain, and other digital tools in public services.

The experience of countries such as Estonia and Singapore shows that a comprehensive approach to digital governance not only improves efficiency but also significantly curbs corruption. Uzbekistan's path to becoming a digitally advanced society must be supported by strategic planning, transparent management, and the active involvement of all stakeholders.

References:

1. Ермоленко В. В., Ермошина А. С., Ланская Д. В. Электронные документы, оцифровка и археология знаний //Естественно-гуманитарные исследования. – 2020. – №. 3 (29). – С. 152-158.
2. Nakamoto, Satoshi, Bitcoin: A Peer-to-Peer Electronic Cash System (August 21, 2008). Available at SSRN: https://ssrn.com/abstract=3440802 or http://dx.doi.org/10.2139/ssrn.3440802
3. Frank, Mark William. The impact of rate-of-return regulation on technological innovation. The University of Texas at Dallas, 2000.
4. Sotskov, Yuri N. "Assembly and production line designing, balancing and scheduling with inaccurate data: A survey and perspectives." Algorithms 16.2 (2023): 100.
5. Lin, C.C., Mariotto, A.B., Siegel, R.L., Stein, K.D., Kramer, J.L., Alteri, R., Robbins, A.S. and Jemal, A. (2014), Cancer treatment and survivorship statistics, 2014. CA: A Cancer Journal for Clinicians, 64: 252-271. https://doi.org/10.3322/caac.21235
6. He, Daihai, and Jianxue Xu. "Study on the amplitude conversion pulses method to control chaos in discrete neural networks." Kongzhi Lilun Yu Yingyong/Control Theory and Applications 16.2 (1999).
7. Zeadally, Sherali, Jesús Guerrero, and Juan Contreras. "A tutorial survey on vehicle-to-vehicle communications." Telecommunication systems 73.3 (2020): 469-489.
8. Kumar, Nirmalya. "Internet distribution strategies: dilemmas for the incumbent." Financial Times Special Issue on Mastering Information Management 7 (1999).

9. Qaxramonovich, Boliyev Jaloliddin. “Xizmat Ko ‘Rsatish Sohasini Rivojlantirishda Raqamli Texnologiyalarni Joriy Etishning Iqtisodiy Samaradorlik Tahlili.” International Conference of Economics, Finance and Accounting Studies. Vol. 14. 2025.
10. Ayupov, RAVHAN HAMDAMOVICH. “Raqamli iqtisodiyot va elektron tijoratda yangi texnologiyalar.” O ‘quv qo ‘llanma. Toshkent: Nizomiy nomidagi TDPU 554 (2020).
11. https: World_bank.org.
12. What is Digitization, Digitalization, and Digital Transformation?// https://www.arcweb.com/blog/what-digitization-digitalization-digital-transformation