

## STATE REGULATION OF THE DIGITAL TRANSFORMATION OF THE ECONOMY

Mr. Azamat Davletyarov

Director of Graduate School of Business and Entrepreneurship,  
adavletyarov@mineconomy.uz

Dr. Dilmurod Suyunov

Professor, Head Theory and Practice of Corporate Governance,  
Graduate School of Business and Entrepreneurship,  
sdx2161@gmail.com

Dr. Aman T. Kenjabaev

Professor, Head of Marketing and Digital Economy Department,  
Graduate School of Business and Entrepreneurship,  
amankenja059@gmail.com

ABSTRACT	KEY WORDS
The digital transformation of society in the country, having formed the necessary basis for ensuring technological sovereignty, requires the executive and legislative authorities to accelerate the comprehensive regulatory support of state policy in this area. The state policy of digital transformation of Uzbekistan and its regulatory support are focused on the best world practices, claim to be an integrated approach, but a number of problems still remain: insufficient consistency, high volatility of the legal sector, insufficient development of technical regulation, the presence of contradictions in legislation, standards and technical regulations. The regulatory and legal framework for the digital transformation of business models in the economy of the republic, despite the measures taken, has not yet been formed at a level sufficient to solve the tasks set, which retains a number of barriers to digital development.	digitalization, digital transformation, economy, Industry 4.0, government regulation, legal support.

### Introduction

The development of business models for the economy as a whole with the modern challenges of digitalization is an urgent problem all over the world. The forced restrictions caused by the Covid-19 pandemic caused a significant increase in the introduction of digital technologies in all spheres of society, the economy and business. In Uzbekistan, the problem of this sphere has acquired special significance: in the face of challenges, the fourth industrial revolution.

The digital economy must adapt as quickly as possible to rapidly occurring changes, introducing new competitive IT ways of doing business. After the announcement in 2011 in Germany "Industrie 4.0."

as a state strategy for introducing the concept and technologies of the fourth industrial revolution, other countries of the world, including Uzbekistan, have adopted this paradigm as a call to action, having also developed state programs and development strategies aimed at digitalizing the economy as a whole and stimulating the use of digital technologies in other sectors. Digital transformation is officially one of the national development goals of Uzbekistan until 2030.

"Digital Economy" is the most important national project designed to shape the digital future of the country. However, the regulatory framework for state regulation of digital transformation in the republic is still in the process of active formation, characterized by insufficient consistency and a high degree of variability.

The program for the development of the digital economy of Uzbekistan was adopted by the Decree of the President of Uzbekistan "On measures for the widespread introduction of the digital economy and e-government" No. PP-4699, April 28, 2020. This document highlights topical issues related to the widespread introduction of digital technologies in the work of domestic enterprises and government services, the training of IT specialists, comprehensive support for IT entrepreneurship, and many others, and its main provisions are currently being actively translated into practice. In this program, digital economic data presented in digital form is a key factor in production.

The state policy of digital transformation of Uzbekistan and its regulatory support are focused on the best world practices, claim to be an integrated approach, but a number of problems still remain: insufficient consistency, high volatility of the legal sector, insufficient development of technical regulation, the presence of contradictions in legislation, standards and technical regulations. The regulatory and legal framework for the digital transformation of business models in the economy of the republic, despite the measures taken, has not yet been formed at a level sufficient to solve the tasks set, which retains a number of barriers to digital development.

As President Sh.M. Mirziyoyev, one of the priorities of the consistent socio-economic development of Uzbekistan is the widespread introduction of information, communication and digital technologies. It is digital technologies that are the effective tool that can ensure the qualitative reform of economic sectors and spheres of public life.

In the Address of the President Sh.M. Mirziyoyev to the Parliament and people of Uzbekistan in 2020, the issues of digital development were given. It is also symbolic that 2020 in Uzbekistan was declared the Year of the Development of Science, Education and the Digital Economy. It was during this period that the fundamental documents were adopted that laid the legal foundation for further digital reforms. The logical continuation of these works was the Decree of the President of the Republic of Uzbekistan dated October 5, 2020 "On approval of the Strategy "Digital Uzbekistan - 2030" and measures for its effective implementation". This policy document includes road maps for the digital transformation of priority economic sectors and regions.

In recent years, even in the context of the COVID-19 pandemic, large-scale digital reforms have been carried out in the country. And, importantly, today, at such a difficult stage for the country and all of humanity, the importance of measures for the widespread introduction of digital technologies in the field of public administration, public services, and trade has been clearly demonstrated.

## Literature Review

Time passes, people's views change, scientific and innovative ideas contribute to the constant improvement and updating of technology, the emergence of new modern products. The 21st century

was marked by the rapid development of digital technologies, without which today it is difficult to imagine the future of spheres of life of society or sectors of the economy. Current consumers, customers prefer to receive high-quality goods and services as quickly as possible, in the minimum distance and having a choice of payment in any form. We are aware of a number of publications by foreign scientists, economists and experts who have been studying the digital economy and methodological aspects of the digital transformation of business processes for many years. Of interest are the works of N. Hanna <sup>1</sup>, M. Pratt <sup>2</sup>, D. Sparapani , N. Fenwick <sup>3</sup>, R. Kinzyabulatov <sup>4</sup> and others. They outline the theoretical foundations and practical experience in the field of the digital economy, as well as the digital transformation of business processes of enterprises and organizations in Europe, Asia and Russia.

Questions regarding the digital transformation of business processes of enterprises and organizations are described in detail in the joint research work of S. Kraus <sup>5</sup>, P. Jones, N. Cuyler , A. Weinmann , N. Chaparro-Banegas , N. Roig-Tierno .

Also, the research of domestic scientists is devoted to increasing the competitiveness of the national economy of the Republic of Uzbekistan in the digital economy, improving the theoretical and practical aspects of the digital economy, as well as the introduction of digital technologies in public administration. Research related to the use of information technology in the economy of Uzbekistan was carried out by such scientists as S.S. Gulyamov , T.S. Kuchkarov , A.T. Kenzhabaev , A.T. Shermukhamedov , Sh.Sh. Shokhazamiy , V.K. Kabulov, R.Kh. Ayupov , A.A. Musaliev , A.M. Abduvokhidov , Y.A. Abdullaev, A.B. Bobozhonov , N.M. Makhmudov, I.K. Mirzaev, Sh.G. Odilov , D.M. Rasulev , B.T. Salimov, Z.Kh. Toshmatov , N.Kh. Khaidarov, G.R. Baltabaeva, R.A. Dadabaeva , I.E. Zhukovskaya, T.Sh. Chodiev and others.

These studies of domestic scientists have made a huge contribution to the development of the digital economy. However, the introduction of the digital economy in the regions is not covered enough, in particular, the lack of knowledge of the activities of local authorities requires research in this area.

## Methods and Analysis

As part of the digital development of the republic, special emphasis is placed on providing social facilities with high-speed Internet connections. At present, 97% of general education schools, 82% of mahalla gatherings of citizens, 56% of police stations, as well as 100 percent of preschool educational and medical institutions are connected to a high-speed Internet network. The task was set to fully provide all social facilities with high-speed Internet communications by the end of this year.

---

<sup>1</sup>Hanna N. A role for the state in the digital age. *Journal of Innovation and Entrepreneurship* 7, 5 (2018). URL: <https://innovation-entrepreneurship.springeropen.com/articles/10.1186/s13731-018-0086-3/> ( date circulation : 22.04.2022).

<sup>2</sup> Pratt M., Sparapani J. [DEFINITION] What is digital transformation? URL: <https://www.techtarget.com/searchcio/definition/digital-transformation/> ( date circulation : 22.04.2022).

<sup>3</sup> Fenwick N (Forrester) . Digital business: transformation, disruption, optimization, integration and humanization. URL: <https://www.i-scoop.eu/digital-transformation/digital-business/> (accessed 22.04.2022).

<sup>4</sup> Kinzyabulatov R. What is a business process and a description of a business process . [Electronic resource]. URL : <https://habr.com/ru/post/342448/> (date of access: 04/22/2022).

<sup>5</sup> Kraus S., Jones P., Kailer N., Weinmann A., Chaparro-Banegas N., Roig-Tierno N. 2021. " Digital Transformation: An Overview of the Current State of the Art of Research ," *SAGE Open* , vol. 11(3), pages 21582440211, September.

It should be noted that if earlier the expansion of mobile networks was carried out on the basis of 2G technologies, today projects based on 3G/4G technologies are being implemented. Thus, last year 3.6 thousand base stations were upgraded on the basis of 3G/4G technologies. Work is underway to develop 5G technology in Uzbekistan. In the future, it is also planned to deploy a 5G network in regional centers.

At the same time, the needs of the telecommunications infrastructure for sufficient resources for processing and storing data are also growing. To this end, in 2020, a Data Processing Center with a capacity of 5 petabytes was put into operation in the republic. In the future, it is planned to launch additional data centers with a total capacity of more than 25 petabytes [9].

The development of the e-government system in Uzbekistan is considered as one of the priority areas of digital reforms, which will allow to qualitatively reform the activities of public authorities and administration. Large-scale reforms in the public sector cover all spheres of activity without exception with the broad involvement of ministries and departments.

The most important role in the development of the E- gov system is assigned to the Unified Portal of Interactive Public Services (SPIS), through which a wide range of services for the population is provided. In the first half of this year, over 2.3 million services were provided through the SPIS, which saved citizens' funds in the amount of more than 18 billion soums . To date, about 300 types of public services are provided through the SPIGU. In order to create even greater convenience for citizens, a mobile version of the SPIGU has been launched, through which more than 50 types of electronic public services are provided today , including about 20 types without prior registration. In the future, it is planned to increase their number to 100 species.

Among the important advantages of the Single Portal is a preferential 10% discount for users. Conveniences have been created for making electronic transactions in the SPIS system by linking a subscriber's bank card to the PaySys payment system .

Further development of the e-government system implies the improvement of existing e-service systems and the greatest possible involvement of the number of citizens in digital processes. In this regard, one of the significant e-government projects is the Unified Identification System for Citizens OneID ( <https://id.gov.uz/> ).

With its help, citizens get access to various electronic resources of the government, including through the issuance of ID-cards with the automatic creation of an owner account. To date, more than 80 information systems and resources of state bodies and organizations have been integrated in this system. The number of users of this system is 1.5 million people.

One of the priority tasks in the framework of the development of the e-government system is the creation of an effective mechanism for interaction between the authorities and the population with the widespread use of digital technologies.

A number of important projects have been implemented aimed at developing a public dialogue between citizens and the government: a virtual reception of the President of the Republic of Uzbekistan for appeals from citizens on any issues (pm.gov.uz), a virtual reception of the Prime Minister of the Republic of Uzbekistan for consideration of applications from entrepreneurs ("business.gov.uz"), the portal of collective appeals " Mening fikrim " - "My opinion" (meningfikrim.uz), a system for assessing the impact of legislative acts - ( [regulation.gov.uz](https://regulation.gov.uz/) ).

As the figures clearly demonstrate, the digitalization of the public sector has made it possible to increase the efficiency of government agencies . The following successes have been achieved:

- thanks to the introduction of the "Electronic work book" system, about 3.0 billion soums were saved ;
- more than 200.0 thousand people were provided with jobs through the National database of vacancies;
- through the system of the Unified Register of Social Protection, social assistance was issued to more than 1 million families;
- through the information system "Electronic passport" more than 2.0 million certificates were digitized;

Digital technologies are also being actively introduced into the private sector. Thus, thanks to the introduction of the "Digital Bank" system, the number of Internet banking users has grown to 20.0 million people

## Conclusion

A comprehensive program of measures for the study and implementation of artificial intelligence technologies in 2021-2022 has been developed. In accordance with it, a list of pilot projects for the introduction of artificial intelligence technologies was approved, which will be implemented in 2021-2022 in agriculture, banking and finance, transport, healthcare, pharmaceuticals, energy, taxation and e-government. Importantly, these projects are planned to be implemented with the direct participation of IT Park residents . [9]

Since AI technology is a very knowledge-intensive industry that requires highly qualified personnel and sufficient material and technical resources, the Research Institute for the Development of Digital Technologies and Artificial Intelligence under the Ministry for the Development of Information Technology and Communications was established. In order to train qualified personnel in the field of AI, a list of higher educational institutions and scientific organizations has also been approved, where future specialists in this area will be trained. When digitalizing Uzbekistan , as in other countries, it is necessary to pay close attention to the main features of the digital economy, such as:

- creation of cyber-physical systems in which a person and a machine represent a single, harmoniously working organism.
- use of intellectual platforms in all spheres of social and economic activity.
- introduction of the Internet of people, the Internet of things, the Internet of services (along with the already well-mastered Internet of ideas).
- application of Big technologies Data (processing "big data").
- the use of modern information technologies, such as blockchain , providing transparency of transmission, reliability of data storage; Nadzh technologies that contribute to the promotion of products (goods and services) on the market.

In conclusion, we can say that the comprehensive digital reforms being carried out today in Uzbekistan are aimed at achieving the main goal - to become one of the leading states with a prosperous economy and a strong civil society.

## Literature:

1. Доклад о мировом развитии 2016 «Цифровые дивиденды». URL: <https://documents1.worldbank.org/curated/en/224721467988878739/pdf/102724->



WDRWDR2016Overview-RUSSIAN-WebRes-Box-394840B-OUO-9.pdf (дата обращения: 23.07.2022)

2. Дмитриева Н.Е., Минченко О.С., Рыльских Е.В. Цифровые платформы как субъект и объект регулирования, или как платформы изменяют систему госуправления // Вопросы государственного и муниципального управления. 2022. № 2. С. 60–84. DOI: 10.17323/1999-5431-20220

3. <https://odin.opendatawatch.com/Report/countryProfileUpdated/UZB?year>

4. Указ Президента Республики Узбекистан об утверждении стратегии «Цифровой Узбекистан-2030» и мерах по ее эффективной реализации г. Ташкент, 5 октября 2020 г., № УП-6079.

5. Кенжабаев А.Т. Современное содержание и понятие цифровой экономики. Журнал “Экономика и бизнес” теория и практика. №1-1 (71), 2021 год.

6. Кенжабаев А.Т., Абдуллаев М.Х. Ўзбекистон Республикасида хавфли геологик жараёнларни кузатишда ахборот-коммуникация технологиялари жорий этиш босқичлари ва истикболлари. Geologiya va mineral resurslar. Геология и минеральные ресурсы. Geology and mineral resources. Научно-практический журнал. 5’2021 год.

7. Suyunov D.H. “The main problems of corporate governance and ways to solve them”, EPRA International Journal of Economic Growth and Environmental Issues (EGEI) ISSN:2321-6247 Impact Factor: 8.007 (SJIF 2020) 202101-13-006137, 9, 1, January, 2021.

8. Суюнов Д.Х. ТМИнинг “Халқаро молия ва ҳисоб” илмий онлайн журнал, №3, июл, 2020 йил, 58-63 бетлар.

9. Kenjabaev A.T., Valikhanov A.R. Post-pandemic perspectives for the development of digitalization in Uzbekistan International Journal of Management, IT & Engineering Vol. 12 Issue 9, September 2022, ISSN: 2249-0558 Impact Factor: 7.119 Journal Homepage: <http://www.ijmra.us>, Email: editorijmie@gmail.com Double-Blind Peer Reviewed Refereed Open Access International Journal - Included in the International Serial Directories Indexed & Listed at: Ulrich's Periodicals Directory ©, U.S.A., Open J-Gate as well as in Cabell's Directories of Publishing Opportunities, U.S.A.

10. Suyunov D.H Theoretical principles of improving the modern corporate control system in joint stock companies. International Journal of Economic Perspectives, 16(11), November 2022. 90-97. Retrieve from. 2022 by The Author(s). ISSN: 1307-1637. Impact Factor: 5.865.

11. Suyunov D.H The role of energy in the economic development of Uzbekistan. UIF-2022: 8.2. ISSN: 2181-3337. International Scientific Journal Science and Innovation. 2022. <http://scientists.uz/>