



Ways to improve modern digitalization in accelerating economic reforms in Uzbekistan

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ABSTRACT

This article presents an analysis of the features of entering the information society abroad and in our country in the conditions of the digital economy, organizational and functional relations of participants in the information and communication market.

Keywords:

Tax, budget policy, budget, tax administration, digital economy, information communications market, informed society, market, market infrastructure, information, network, industrial society, consumer, information products

Introduction:

Accelerating economic reforms in the Republic of Uzbekistan is one of the most important strategic tasks today. The widespread introduction of digital technologies and improving digitalization processes will help increase efficiency in all sectors of the economy, simplify the management system, and ensure transparency. In recent years, Uzbekistan has been consistently implementing digitalization processes in the fields of public administration, finance, taxation, banking, education, and healthcare within the framework of the "Digital Uzbekistan – 2030" strategy. These reforms not only help automate economic activity, but also rationally use resources, reduce bureaucratic barriers, and improve the business environment. Modern digital technologies - such as artificial intelligence, "Big Data," blockchain, cloud technologies, and innovative solutions such as IoT (Internet of Things) - allow for quick decision-making in economic management, data analysis, and process optimization. Therefore, improving

digitalization is an important factor in increasing Uzbekistan's competitiveness, ensuring sustainable growth of the national economy, and strengthening its position in the global digital economy. Based on this, studying ways to improve modern digitalization in accelerating economic reforms in Uzbekistan is of urgent scientific and practical importance.

Analysis of relevant literature

The theory of innovation was studied in the works of German economists W. Sombart and W. Mitscherlich as the basis for ensuring the economic stability of the country. In their opinion, the main link in the development system is the factor of "technical progress", in which it is possible to obtain significant profits through the production and dissemination of technical innovations, and strengthen the position of enterprises in the market. In addition, they emphasize that enterprises should not stop at the results achieved in practice, but should create new knowledge or new technical rules for solving production

problems, offer new types of products or services, and also take full responsibility [1].

B. Twiss, H. Freeman conducted research on the role and tasks of innovations at different stages of development in almost the same direction. They paid special attention to substantiating the specific features and tasks of implementing technical progress. In the 1970s and 1980s, innovative activity, its development trends and laws were continued by Y. Mensh, D. Mansfield, S. Kuznes, Y. Vadem, A. Kleinsekt, E. Moyvart and other economists [2].

The formation of the scientific theory of the term innovation was also significantly contributed by Garus research scientists. According to N.D. Kondratyev's theory of "macrocycles", society in the process of socio-economic development immediately and systematically assimilates new ideas, new results of technical progress, and implements inventions that ensure the country's economic security and stabilize the positive state of indicators at the macro and micro levels [3].

According to A.I. Anchishkin, the terms "innovation", "innovation" cannot be limited only to technical and technological changes. He gave this term a broad social meaning, considering innovations as an important means of developing society, and said that technical and technological innovations, having certain economic consequences, help to fight for the sales market, change the competitive environment, and thereby contribute to social development [4].

Analyzing different points of view on the definition of the concept of "innovation", L.S. Baryutin gives the opinion that "innovation" is a new (modified) practical tool that provides economic, social or technical benefits that meet the needs of a certain society, and its use should not yet have acquired a generalized character [5].

I. Perlaki understands innovation as "the process of emergence, creation and implementation of innovations". In this case, innovations are studied as a factor of intensification of production, and any innovation is interpreted as serving to achieve a specific goal or several interrelated goals [6].

E.A. Utkin's definition is as follows: "Innovation is the process of introducing new things, creating, distributing and using new things (new practical tools) to fully satisfy the changing needs of a person under the influence of social development." Another definition by E.A. Utkin defines innovation (innovation) as an object introduced into production as a result of scientific research or discovery, qualitatively different from its predecessor [7].

Based on the above ideas and summarizing them, it can be said that, in terms of its essence, innovation is a separate form of theory and practice, a holistic system of actions aimed at improving the properties of a social, economic, cultural object. Studies show that such a description determines the conduct of innovation processes in two directions. They are innovations and innovative technologies as discoveries, that is, those that allow the digitalization of the country's economy, the discovery of certain industries or scientific areas, and the discovery of their new properties, as well as innovations that are renewed and growing, that is, innovations associated with improving the properties of existing production processes and products.

Analysis and discussion of results.

The origin and stages of development of digitization. 1950–1970s — the emergence of the idea of digitization in the USA. The concept of digitization first appeared in the USA in the middle of the 20th century with the development of information technology and computer systems. In the 1950s, automated data processing systems were developed by IBM, AT&T and other technology companies. During this period, the use of digital information in public administration and business processes began, and the term "Digitalization" was first used in the 1960s.

1980–1990s — the experience of Europe and Japan.

Since the 1980s, the economies of European countries (in particular, Germany, Great Britain, Sweden) and Japan have begun to introduce production automation and electronic control systems based on digital technologies. During this period, the concept of "digital economy" emerged, and computer networks and software

management became the main tools in economic reforms.

2000s — the era of digital transformation in South Korea, China and Singapore. At the beginning of the 21st century, digital government (e-Government) projects were implemented in South Korea and Singapore. China, meanwhile, has become a global leader in the digital economy, having implemented the “Digital China” strategy since 2005. During this period, digitalization has become a key reform tool not only in the information system, but also in economic policy, taxation, finance, transport, education and healthcare systems.

From 2010 to the present — the era of the global digital economy. Today, digitalization is at the heart of the economic policy of all developed countries (USA, Japan, Germany, China, South Korea, Singapore, etc.). The UN and the World Bank have developed the “Digital Economy for Sustainable Development” program, and digital transformation has become a key factor in economic reforms.

The process of digitalization in Uzbekistan. Modern digitalization in Uzbekistan has reached a new level since 2018. On the initiative of President Sh.M. Mirziyoyev: The “Digital Uzbekistan – 2030” strategy (adopted in 2020), “Concept for the Development of Electronic Government”, as well as programs for the modernization of the State Digital Infrastructure were adopted. As a result, economic reforms are based on digital solutions, and digitalization is developing rapidly in the financial, tax, customs, banking, education and healthcare systems.

Tasks and functions of modern digitalization in accelerating economic reforms.

1. Tasks.

The main task of modern digitalization is to automate the economic management system, ensure efficiency, transparency and speed in economic processes. For this purpose, the following main tasks have been set:

Automation of economic management - simplifying management processes by introducing digital platforms in the activities of the state and private sectors. Formation of a database in digital form - consolidating economic entities, tax, customs, banking and

production data in a single electronic system. Use of analytical systems in economic decision-making - carrying out real-time economic analysis and forecasting through “Big Data”, artificial intelligence and analytical platforms. Creation of a transparent economic environment - conducting public procurement, tax and budget funds on open digital platforms. Support for entrepreneurship - introducing digital services for small businesses and startups, facilitating their online activities. Human capital development – increasing digital literacy, improving the system of training qualified personnel for the digital economy. Ensuring security – protecting data in digital infrastructure, strengthening cybersecurity.

2. Functions.

Modern digitalization performs a number of important functions in the system of economic reforms. They are as follows:

Information function – allows you to collect, store, analyze and use data on economic processes in management. Integration function – creates a single digital information space between different economic sectors (finance, tax, customs, transport, education, etc.). Control function – serves to monitor economic activity in real time, reduce illegal operations and corruption. Analysis and forecast function – allows you to analyze economic indicators, determine future growth rates and justify strategic decisions. Service function - providing online public services to the population and entrepreneurs, simplifying their economic activities. Innovation function - modernizing production and management processes by introducing new technologies (artificial intelligence, blockchain, IoT) into the economy. Coordination function - ensuring mutual information exchange and cooperation between various government agencies and economic entities.

The main methods of modern digitalization in accelerating economic reforms

1. Technological methods

These methods are aimed at increasing efficiency by directly applying digital technologies to economic processes:

Artificial intelligence (AI) - used in economic analysis, tax control, market monitoring and

decision-making automation. "Big Data" technology - allows you to analyze large volumes of economic data and forecast investment, consumption and production processes. Blockchain technology - ensures the transparency of financial and tax transactions, reduces the risk of corruption. Cloud technologies (Cloud computing) - allows for the secure and fast exchange of information between government agencies and business entities. IoT (Internet of Things) - forms digital monitoring systems in the production, transport and energy sectors.

2. Organizational and methodological methods. These methods determine the mechanisms for managing, controlling and strategically directing digitization:

Implementing the "Digital Government" system - transferring public administration to a fully electronic platform. Creating a single digital infrastructure - unifying databases of all government agencies and economic sectors into a single system. Developing a digital economy strategy - harmonizing digitization policy with the national development strategy. Implementing digital projects on the basis of public-private partnerships - strengthening cooperation between IT companies and government agencies.

3. Economic and methodological methods.

These methods are aimed at supporting digitization through economic incentive mechanisms:

Providing tax incentives for digital technologies. Allocating grants and loans to finance startups and innovative projects. Supporting local IT companies with subsidies. Attracting foreign investment in digital infrastructure.

4. Social and educational methods.

This direction involves preparing human capital for the requirements of the digital economy:

Increasing digital literacy - developing digital skills of the population, especially young people and entrepreneurs. Opening "Digital Economy" directions in universities. Retraining and advanced training programs for personnel.

5. Legal and methodological methods. Development of laws and regulatory documents regulating the activities of the digital economy.

Strengthening cybersecurity, personal data protection and electronic signature systems.

The harmonious application of technological, organizational, economic, social and legal methods of modern digitalization is one of the most important factors in accelerating economic reforms in Uzbekistan. This will significantly increase the transparency, efficiency and effectiveness of economic management.

Problems of improving modern digitalization in accelerating economic reforms in Uzbekistan

Although large-scale work has been carried out in the Republic of Uzbekistan in recent years to transition to a digital economy, automate public administration, and accelerate economic reforms, a number of systemic problems remain in these processes. The following are the main problems in improving modern digitalization:

Insufficient development of information and communication infrastructure.

Some parts of the population, especially in remote areas, cannot fully use the Internet. This hinders the equal introduction of digital services.

Shortage of qualified IT specialists.

Human resource capacity is of great importance in the implementation of the digital economy and modern technologies. However, there are not enough specialists with practical IT skills in the education system.

Weakness of the information security and cybersecurity system.

As digital platforms expand, the risk of unauthorized access to databases, cyberattacks, and personal data leaks increases.

Incomplete establishment of an information exchange system between government agencies.

Different agencies use information systems that are not integrated with each other, which leads to data duplication, bureaucracy, and slow decision-making.

Low level of digital literacy.

The majority of the population, especially small businesses and civil servants, are unable to fully utilize the potential of digital technologies.

Limited financial resources.

Digitization processes require significant investment. In many cases, sources of financing for IT projects are insufficient or unstable.

Incomplete formation of the regulatory framework.

Laws and regulatory documents related to the digital economy are not sufficiently developed. For example, there is a lack of clarity in areas such as electronic signatures, digital assets, and data protection.

Uncompetitiveness of domestic IT products and technologies.

Most digital systems are based on foreign programs and platforms, which makes it difficult to achieve technological independence. In conclusion, in order to deepen the digitization processes in Uzbekistan, it is first necessary to modernize the infrastructure, strengthen the personnel training system, strengthen cybersecurity, and improve the legal framework. Only then can modern digitization serve as a real driver for accelerating economic reforms.

Modern digitalization is an important and necessary process in accelerating economic reforms in Uzbekistan.

1. Increasing the efficiency of economic management

Digitalization reduces unnecessary bureaucratic processes in public administration, allows for quick and informed decision-making. For example, by reducing the human factor through digital solutions in tax, customs, financial and banking systems, the risk of errors and corruption decreases.

2. Ensuring transparency and openness

Digital systems store and track all economic data in electronic form. This strengthens openness, citizen trust and control mechanisms in the activities of state bodies.

3. Increasing tax and budget revenues

Through digitalization, it is possible to track taxpayers' activities online, reduce the size of the shadow economy and expand the tax base. This brings additional income to the state budget.

4. Simplifying business processes

Electronic licenses, online registration, digital settlements and electronic payment systems

facilitate entrepreneurship, save time and resources.

5. Increasing international competitiveness

The digital economy is an integral part of global integration. Technological modernization is necessary for Uzbekistan to actively participate in international digital markets.

6. Ensuring sustainable economic growth

Digitalization increases production efficiency, creates new jobs, and paves the way for the transition to an innovative economy.

7. Improving the quality of services

The introduction of digital services in healthcare, education, transport, and other areas creates convenience for citizens and improves the quality of public services.

Modern digitalization is not only a technological upgrade that meets modern requirements for Uzbekistan, but also the main driving force of economic reforms. Through it, the country achieves economic independence, sustainable development, and competitiveness in the international arena.

Conclusions and proposals. In the process of accelerating economic reforms in our country, improving the modern digitalization system is considered an important factor in increasing the sustainable growth and efficiency of the national economy. As a result of the introduction of digital technologies, transparency, openness, efficiency, and the effectiveness of control mechanisms in the economic management system are significantly increasing. In particular, digital solutions in the tax, financial, and banking systems contribute to the rational use of economic resources, reduce administrative costs, and improve the investment climate. At the same time, there are some systemic problems that hinder the full implementation of digitalization processes in our country. In particular, these include the insufficient development of information and communication infrastructure in some regions, the shortage of qualified personnel in the IT sector, the insufficiently strong cybersecurity system, and the incomplete establishment of digital data exchange between government agencies.

Based on these circumstances, the following scientific and practical proposals are put forward:

Modernization of digital infrastructure - expansion of high-speed Internet networks, formation of a single data platform between the state and private sectors. Development of human resources - expansion of state programs for training modern IT specialists in the field of digital economy, introduction of training modules based on foreign experience. Increasing the accuracy and speed of management decisions by applying artificial intelligence and big data technologies to the fields of economic analysis, tax administration and public administration. Strengthening the cybersecurity system - introduction of security standards in the national information space, improvement of data protection mechanisms in state and private systems. Deepening the concept of "digital state" - gradual transition of all state services to electronic form and creation of convenient digital platforms for citizens. Expanding public-private partnerships - involving business structures in financing innovative IT projects, encouraging the activities of startups, and expanding tax incentives. In conclusion, improving modern digitalization in Uzbekistan will not only accelerate economic reforms, but also serve as a decisive factor in increasing the efficiency of public administration, strengthening investment attractiveness, and ensuring international competitiveness.

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