

## DIGITALIZATION OF THE ECONOMY AS A BASIS FOR INNOVATIVE DEVELOPMENT OF SOCIETY

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### Abstract

The role and features of the digitalization of the economy, which is an objective prerequisite for the innovative development of the state economic system, are revealed, and the results are studied and the prospects for the implementation of the digital economy in the countries of the post-Soviet space are determined. The features of digital representation of information, prerequisites, implementation and consequences of digitalization are considered. An analysis of the relationship between the concepts of "digitization", "digitalization", "digital economy", "digital transformation" is carried out based on the study of the specific features of these categories as a process, application and implementation of its results in building business models. The advanced experience of digitalization development in a number of countries of the post-Soviet space is studied. The forms and methods of assessing the degree of digitalization coverage of Uzbekistan are considered to obtain new opportunities for the use of digital technologies in business, the creation of information technology platforms, new values, benefits, and the provision of virtual services. It is proposed to intensify cooperation between IT companies of the countries in such areas as media content, e-commerce, e-government, digital banking technologies, exchange of experience, the development of innovation centers, the management of technology parks and the development of technological infrastructure. The important role of private business in stimulating the use of the results of the digital economy is noted.

**Keywords:** Digitalization, trend, socio-economic development, information, digital format.

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## **Introduction**

Statement of the problem. The current stage of global economic and social development is characterized by the use of technological capabilities of information databases, the accumulation of large volumes of transmitted information, accounting and analysis of business processes. Digitalization is considered as a process based on the use of digital information and communication technologies, the functioning of which is aimed at increasing the efficiency of social production, maintaining sustainable rates of economic growth in order to improve the well-being and quality of life of the population. Presentation of information in digital form ensures the creation of a specific product (or service). Providing citizens with access to the use of such a product (service) in various types of socio-economic activities: scientific and educational, in the field of healthcare and organization of medical care, organization of effective management and control of business, legal services, in the field of advertising, i.e. the creation of an electronic government (or state document flow), increases the efficiency of the economy and improves the quality of life. The study of the features of digitalization includes the disclosure of the essence of digitalization, the features of digital presentation of information, the prerequisites and possible positive consequences of digitalization for the countries of the post-Soviet space. Clarification of the relationship between the concepts of "digitization", "digitalization", "digital economy", "digital transformation" is aimed at creating business models, expanding the methods for assessing the degree of coverage of digitalization of individual countries, allows for new opportunities for the use of digital technologies in business and the creation of new values, determining the virtual source of profit created as a result of their activities. Analysis of the latest research and publications. In a narrow sense, digitalization is understood as the transformation of information into digital form, which in most cases leads to a reduction in costs, the emergence of new opportunities, etc. A large number of specific transformations of information into digital form lead to such significant positive consequences that they determine the use of the term "digitalization" in a broad sense [1, p. 42]. The transformation of information into digital format is considered as a method of improving various private aspects of life. V. Khalin, G. Chernova studied the impact of digitalization of socio-economic processes on social development. Digitalization in a broad sense is considered a modern global trend in the development of the economy and society, which stimulates their effective development, improves the quality of life of the population. Digitalization in a broad sense can be considered as a trend of effective global development only if the digital transformation of information meets the following requirements: covers production, business, science, the social sphere and the ordinary life of citizens; is accompanied only by the effective use of its results; its results are available to users of the transformed information; its results are used not only by specialists, but also by ordinary citizens; users of digital information have skills in working with it. Digitalization makes it possible to create integral technological "habitats" (ecosystems, information platforms), within which the user can

create environments for himself, including technological, instrumental, methodological, documentary, partner, as well as large databases of personnel, technical, material, financial, marketing data for solving entire classes of problems. The applied databases are easily replenished, rebuilt and used in accordance with the constantly updated needs of various consumer groups, regardless of their location. Digital innovations reflect the nature, process and result of innovation, as well as long-term and short-term social, economic effects, consequences of their cultural proposals. They are implemented through the following types of strategies: – development of a new technological strategy in the existing business context; – selection, adoption and implementation of new software or platform; – evolutionary transition from analog to digital processes. To maintain their competitive positions in the global digital market, companies must also develop and implement digital innovations, which are transformed into a number of advantages. These include optimized business processes resulting from automation, SaaS (Software as a Service) and other integrated technology solutions; digital solutions that reduce costs, increase profitability and increase revenues. The use of digital innovations by companies interested in development allows them to gain additional competitive advantages. Potential disadvantages include the possibility of damage to the company's core business as a result of the growth in the scale of cybercrime, lagging behind in the use of the latest information technologies, and insufficient funding for R & D in the country. A structured presentation of digital economy competencies allows us to identify the needs of organizations and citizens for new competencies for economic activity, and is used to find approaches to effectively manage their formation and train specialists in them. The features of information presented in digital form include: – the possibility of using various physical principles of its presentation, storage and transmission of information, including the possibility of encrypting a message, transmitting it in this form, and then decrypting it again; – the possibility of transmitting information using various material carriers; – copying and distributing information without losing its accuracy; – a multiple increase in its recording density and transmission speed, as well as its “non-decrease” and “non-disappearance” during consumption; – the creation of digital technologies that are more efficient in comparison with analog ones [3, p. 61]. Research methodology. The study of the forms of digitalization of the economy is based on the use of the method of analysis and synthesis in studying the relationship between the concepts of “digitization”, “digitalization”, “digital economy”, “digital transformation”, the comparative method in studying the advantages and disadvantages of using information technologies. The purpose of this article is to determine the role, features and results of the implementation of the digital economy in the countries of the post-Soviet space. The special properties of digital information have led to the emergence of a whole scientific field called “digital economics”, which includes mathematical methods and models based on the digital format of information presentation and its properties arising from it. Examples include technologies used in logistics, geotechnology, modern technologies for providing banking services,

information security technologies, etc. It is quite natural to understand the digital economy as an economy whose main trend for effective development is digitalization. This definition highlights the impact of progress on the development of digital innovations as the main feature of the digital economy. It should be noted that there are many definitions of the concept of "digital economy", highlighting different aspects of the impact of digitalization on the national economy, for example, on the use of innovative information and communication technologies (ICT); on providing ICT with various types of interactions; on the use of the Internet, mobile and sensor networks, online work capabilities; on the use of electronic document management, modern electronic communication channels, methods of accounting and storing information; on the creation of new business models, new markets and new consumers, etc. Digital transformation is considered as a process of transforming business strategies, models, operations, products, marketing and management approaches based on the use of digital. A summary of the most important of them allows us to highlight the following features:

- is a system of socio-economic relations based on the use of digital technologies to change the business model of development and contribute to increasing the competitiveness of the economy;

- expressing the modern paradigm of accelerated economic development, in which increasing competitiveness and efficiency becomes a vital necessity;

- characterizing the current stage of the evolutionary development of the socio-economic and production model of society;

- covering the sphere of public life, production, business, science, management, households and individuals

- ; – reflecting the specifics of the new technological generation - the use of a huge amount of data generated in a wide variety of information systems and processed in order to extract useful information from them;

- aimed at making a profit by creating new industries, business models, management models, new markets and new consumers;

- based on digital transformation, which includes the transition from analog interaction and the use of analog storage media to electronic interaction based on the use of modern electronic means, including the active use of innovative digital information and communication technologies, modern electronic communication channels, electronic document management, as well as electronic methods of accounting for the processing, storage and transmission of information;

using the latest mathematical methods and models of information processing based on the digital form of its representation and the properties of digital information;

implemented, as a rule, online via the Internet, mobile and sensor networks. Presentation of the main research material. The following definitions of the digital economy are currently official and adopted at the government level in a number of post-Soviet countries:

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- digital economy is an economic activity in which the key factor of production is digital data, the processing of large volumes and the use of the analysis results of which, in comparison with traditional forms of management, can significantly increase the efficiency of various types of production, technologies, equipment, storage, sale, delivery of goods and services;

- the digital economy is an economic activity in which the key factor of production is data in digital form. It contributes to the formation of an information space taking into account the needs of citizens and society in obtaining high-quality and reliable information, the development of the information infrastructure of the Republic of Uzbekistan, the creation and application of information and telecommunication technologies, as well as the formation of a new technological basis for the social and economic sphere. A comparison of the concepts of "digitalization" and "digital economy" shows that digitalization is the basis of the digital economy, which determines the direction of global development of the economy and society. It defines the main modern trend in the development of the economy and society, based on the transition to a digital format for presenting information, which stimulates the availability and reliability of storing and transmitting large volumes of data. Improvement involves an increase in the speed of interchange, availability and security of information, as well as an increase in the role of automation as the basis of digitalization. The implementation of digitalization requirements is to a certain extent met by the presence of prerequisites for digitalization at the macro-, meso- and micro levels. Therefore, the task of the state in creating favorable conditions for digitalization is to ensure opportunities for their implementation. In a number of other post-Soviet countries, digitalization of the economy involves the use of information technologies, the creation of new products, values, properties, and serves as the basis for obtaining competitive advantages in most markets. The governments of the post-Soviet countries are taking large-scale measures to develop the digital sector of the economy, introducing electronic document management systems, developing electronic payments, and improving the legal framework in the field of e-commerce. The digital economy uses information technology platforms and is developing at an intensive speed, which necessitates the creation of new models of such platforms. In the near future, it is planned to develop a National Concept of the Digital Economy, which provides for the renewal of all spheres of the economy based on digital technologies, and the implementation of the Digital Uzbekistan–2030 program. The digital economy will ensure growth of the gross domestic product by at least 30% and sharply reduce corruption. This is confirmed by analytical studies of authoritative international organizations. The use of information technology ensures the transformation of the production system, the creation of new business models, and stimulates an increase in labor productivity. According to international experts, if developing countries such as Uzbekistan reach the level of Internet penetration as in developed markets, their long-term productivity will increase by 25%. Uzbekistan has all the conditions to take advantage of a dynamic digital economy. The Republic is the most populous country in the Central Asian



region, with a significant young and well-educated workforce. Currently, Uzbekistan employs about 29,000 people in the ICT sector, working in 1,400 enterprises, whose total contribution to GDP is 2.2%. The gradual opening of the sector is already allowing citizens of the country to receive Internet services, and businesses to benefit from the digital economy. The priority areas of ICT development and the formation of the digital economy are: – modernization of the information and communication technology sphere, taking into account global and local achievements in the field of nanotechnology, genetic engineering, NBIC convergence, information and biotechnology aimed at the development of human intellectual abilities; – invention of modern multicomponent materials based on the achievements of photonics, robotics, optoinformatics; – fight against cybercrime, strengthening information security on the Internet; – legal regulation in the field of providing citizens with free access to information and ensuring economic and state security; – development of freelancing opportunities; – regulation and support of the process of formation of the digital economy in all sectors of the national economy. The priority areas of digital transformation of Uzbekistan include the following: – modernization of the education system and professional training of IT personnel by improving the educational infrastructure and creating branches of leading foreign universities in the field of IT. Today, IT specialists make up about 1% of the total employed population of the country in the labor market. In the next five years, it is planned to increase this figure to 2.5-3%, which corresponds to the world average; – implementation of mechanisms to support startups in the IT sector, including the creation of technology parks, attracting venture capital, organizing business accelerators and incubators. Currently, 300 IT companies in Uzbekistan use the conditions of the Mirzo Ulugbek Innovation Center, established in 2017. The current task is to increase the share of the IT sector in GDP to 4% and increase the export of IT services by 10 times over the next few years; – ensuring the development of information and communication infrastructure. By the end of 2020, an increase in the capacity of the international Internet channel will be ensured by 10 times, more than 2,300 km of fiber-optic communication lines will be completed, more than 2,000 fourth-generation base stations will be installed; – improvement of the mechanism of state electronic services. Implementation of smart and safe city technologies (smart cities) in the regions of Uzbekistan, including big data processing, implementation of the Internet of things, intelligent video surveillance and monitoring systems in public places.

#### **Conclusion.**

The article examines the role, features and results of the implementation of the digital economy in the countries of the post-Soviet space. An analysis of the relationship between the concepts of "digitization", "digitalization", "digital economy" and "digital transformation" based on the study of the specific features of these categories as a process, application and implementation of its results. The feasibility of accelerated digital transformation of the economy within the framework of close international cooperation

between countries based on the use of information technology platforms is indicated. The advanced experience of digitalization and development of information technologies in a number of post-Soviet countries, including Russia and Uzbekistan, is studied. It is proposed to intensify cooperation between IT companies of the countries in such areas as media content, e-commerce, e-government, digital banking technologies, exchange of experience, and development of innovation centers. The important role of private business with a strong entrepreneurial and innovative approach with state support for the development of the digital economy infrastructure is indicated.

### **References**

1. Sologubova, G.S. Components of digital transformation / G.S. Sologubova. - M.: Yurait, 2019. - 147 p. (Current monographs).
2. Nambisan, S. Handbook of Digital Innovation / S. Nambisan, K. Lyytinen, Y. Yoo. – Edward Elgar Publishing, 2019. – 320 p.
3. Dneprovskaya, N.V. Method of studying the competencies of subjects of the digital economy / N.V. Dneprovskaya // Open education. - 2020. - Vol. 24. No. 1. - Pp. 4-12.
4. Gorelov, N.A. Development of the information society: digital economy: textbook. manual for universities / N.A. Gorelov, O.N. Korableva. - M.: Yurait, 2019. - 241 p.
5. On measures to develop the digital economy in the Republic of Uzbekistan [Electronic resource]: resolution of the President of the Republic. Uzbekistan dated June 03, 2018, No. PP-3832. - URL: <https://buxgalter.uz>. - Access date: 06/26/2020.
6. Message of the President of the Republic of Uzbekistan Sh. Mirziyoyev to the Oliy Majlis dated December 28, 2018 [Electronic resource] // Narodnoe slovo. - December 29, 2018 - URL: <https://nrm.uz/>. - Access date: 06/26/2020.
7. Information Agency of the Republic of Uzbekistan [Electronic resource]. 2019. - URL: <https://regnum.ru/>. - Access date: 06/26/2020.
8. Nosova, O.V. Development of economic science in the context of innovative changes / O.V. Nosova // Economic and financial mechanisms of innovative development of the digital economy: collection of scientific. Art. In 2 parts / Under the scientific editorship of V.V. Puzikov, M.L. Zelenkevich. - Minsk: Institute of Business, BSU, 2019. - Part 2. - P. 8-15.
9. The best companies of Ukraine in the field of digitalization are named [Electronic resource]. 2019. - URL: <https://delo.ua/business/nazvany-luchshie-kompanii-ukrainy-v-sfere-didzhi-369282/>. - Date of access: 06/26/2020. Received 08/17/2020.