



DIGITAL TRANSFORMATION AND ECONOMIC DEVELOPMENT AT THE PRESENT STAGE

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Abstract: *The article is devoted to the role of digital transformation in the economic development of countries in modern conditions. This article gives the concept of digital transformation in the economy from the point of view of various approaches, its positive aspects for economic development, and provides various examples from the experience of countries in this area. The world over is changing the way people live with the rapid development of artificial intelligence. In this area, the speed of development directly depends on investments in ICT infrastructure and software. Given this, all countries have identified artificial intelligence as a priority area for their development in their national strategies . In this process, each country is promoting its strategies and policies in the field of artificial intelligence in order to be the first to gain strategic advantages and increase competitiveness in key industries. Particular attention is paid to artificial intelligence as an important aspect of the digital economy. Also considered are aspects of identifying the potential of countries to use digital technologies to determine priorities for long-term socio-economic development. The use of countries' experience in the process of developing digital technologies and artificial intelligence in Uzbekistan is characterized. As well as establishing cooperation and implementing joint projects with leading foreign innovative and scientific institutions for the development of artificial intelligence technologies,*

Key words: *digital transformation, digital economy, economic development, country potential, priority, innovation, efficiency, competitiveness, artificial intelligence, information security, digital technologies, infrastructure, information and communication technologies, software, cooperation.*

INTRODUCTION

Accelerated development and strengthening of the pace and scale of economic transformation of a given country largely depend on digital technologies that contribute to economic growth and job creation. As noted in the World Bank report, due to the expanded use of digital technologies, digitalization opens up unique opportunities for transformation in our time; together with the governments of more than 100 developing countries, the World Bank is working to create conditions for the development of the digital economy. As of June 2024, the total volume of committed funds in the World Bank's lending portfolio in the field of digital technologies is \$ 5.6 billion . Key initiatives in this area include the creation and improvement of digital and data transmission infrastructure, ensuring cybersecurity and data privacy for institutions, businesses and citizens, as well as the development of digital government services. [1]. In modern conditions, the further development and competitiveness of any country in the world will depend on the effective development of information technologies. Therefore, the accelerated development of modern digital technologies and the creation of all the necessary conditions for their application are given primary attention as one of the main priorities of the state policy of countries. Digital transformation is one of the important innovations for Uzbekistan, as it has the ability to bring the economy to a qualitatively new level. The formation of a digital economy is a priority for the development of Uzbekistan to change the technologies of interaction between firms and transform the education sector, the priorities of digital technologies will accelerate the implementation of innovations.

ANALYSIS AND RESULTS

The UNDP Digital Strategy 2022-2025 notes that increasingly powerful digital technologies offer an opportunity to accelerate progress towards achieving the Sustainable Development Goals (SDGs) by 2030 in many ways. Most governments around the world are rapidly increasing their use of digital technologies, creating opportunities to deliver faster and more effective services to

citizens, including women.[2]

UNCTAD's Digital Economy Report 2024 draws attention to the direct environmental impacts of our increasing reliance on digital tools, leading to the depletion of raw materials, increased water and energy consumption, declining air quality, pollution and waste. All of this is exacerbated by the emergence of emerging technologies such as artificial intelligence and the Internet of Things. [3] In recent years, Auer and Tsiatsos have focused on the digital transformation of education and its transition to the digital economy, which is increasing the demand for educational efficiency. [4] Gregori Vial has defined digital transformation as "a disruptive process in which digital technologies drive strategic responses in organizations seeking to change the way they create value while managing structural changes and organizational barriers that influence both the positive and negative outcomes of this process." [5] Digital transformation is a new technological revolution and, as Osburg argues, it requires not only cutting-edge scientific and technological developments but also a qualitative change in work culture. [6] Gelfand explained that weakening social norms weakens society, while strengthening them leads to increased resilience. [7]. The digital economy is also considered one of the important aspects of the socio-economic development of countries, as well as digital transformation at the current stage of development. The World Bank notes that "digital dividends" for citizens, businesses and the state can be quite significant. It includes support for economic growth, job creation, and the provision of new services [8].

Now we will analyze various interpretations of the digital economy.

According to one of the World Bank's points of view, the digital economy is a new order of the economy based on knowledge and digital technologies, within which new digital skills and opportunities are formed in society, business and the state. This economy provides an opportunity, thanks to the development of digital technologies, to increase labor productivity, competitiveness of companies, reduce production costs, create new jobs, reduce poverty and social inequality [9]. Another

concept of the digital economy is given by Deloitte , as a form of economic activity that arises due to a billion examples of network interaction of people, enterprises, devices, data and processes. From this point of view, the basis of the digital economy is hyperconnectivity , i.e. the growing interconnectedness of people, organizations and machines, formed due to the Internet, mobile technologies and the Internet of Things. The European Commission characterizes it as an economy dependent on digital technologies and the main source of growth, which will stimulate competition, investment and innovation, which will lead to improved quality of services, expanded choice for consumers, and the creation of new jobs.

The Organization for Economic Cooperation and Development characterizes the digital economy as being based on intangible assets, the massive use of data, the widespread adoption of multilateral business models , and the difficulty of determining the jurisdiction in which value is created. The results of international studies characterize the positive aspects of digital transformation: the impact of the introduction of digital technologies on labor productivity, as well as the saving of resources in various sectors of the economy, which gives it advantages. Digitalization provides fundamental changes in all spheres of human life and activity.

Under the influence of digitalization , the labor market, healthcare, education, and spatial development are changing radically. The benefits of the digital economy include the following:

- increasing the efficiency of service provision;
- optimization of time and material costs;
- reducing the negative impact on the environment.

The digital economy sets the direction for the transformation of traditional sectors of the economy, the emergence of new markets and niches. New business models are customer-oriented (customer centric), which completely determines their structure: from a value proposition aimed at solving a predicted customer need, just -in-time delivery , to revenue streams based on the time the customer uses the

product.

New digital technologies expand business opportunities to optimize many processes and improve the quality of decision-making.

These advantages of the digital economy give conviction to countries to use their practice of digital transformation. So in our republic the following are defined as priority directions of digital transformation:

- by improving the educational infrastructure and creating branches of leading foreign universities in the IT field, modernize the education system and professional training of IT personnel;

- support for startups in the IT sector and the implementation of the creation of technology parks, attracting venture capital, organizing business accelerators and incubators;

- ensuring the development of information and communication infrastructure to increase the capacity of the international Internet channel ;

- improving the mechanism of state electronic services;

- implementation of smart and safe city technologies in the regions of the country , taking into account the processing of big data, implementation of the Internet of things, intelligent video surveillance and monitoring systems in public places.

As we know from the world ranking of digital competitiveness "IMD World Digital According to the Competitiveness Ranking-2024, the leading positions are occupied by Singapore, Switzerland, Denmark, the USA and Sweden [10].

Currently, the fastest growing area of digital transformation is considered to be the use of artificial intelligence technologies.

Artificial intelligence has become one of the most promising tools today. Artificial intelligence is a set of technological solutions that allows simulating human cognitive functions and obtaining results when performing specific tasks that are at least comparable to the results of human intellectual activity. The set of technological solutions includes information and communication infrastructure,

software, processes and services for data processing and finding solutions. At present, it is important to solve the problem of obtaining specific economic effects. In China, artificial intelligence is expected to contribute 26.1% to GDP by 2030, in the UAE - 13.5%. [11]

Taking into account the analysis of the digitalization of the economy and the importance of artificial intelligence, Uzbekistan envisages the possibilities and potential for further development of the digital economy, the use of modern space technologies in various sectors of the economy, digitalization of the public administration system, the development of national information Internet resources, and an international system for training specialists in the field of the digital economy.

The beginning of the reform in our republic is the Resolution of the President of the Republic of Uzbekistan No. PP-3832 "On measures to develop the digital economy in the Republic of Uzbekistan" adopted on July 3, 2018. [12]

In the digital transformation of Uzbekistan, the Digital Trust Fund for Support and Development of the Digital Economy of Uzbekistan plays a very important role.

First pilot implementation of blockchain technology in Uzbekistan In November 2018, an automated registry system was implemented for the State Unitary Enterprise "State Center for Expertise and Standardization of Medicines, Medical Devices and Medical Equipment" . All data in the blockchain is accumulated and forms a constantly supplemented database. It is impossible to delete anything from this database or replace a block, it is unlimited - an infinite number of transactions can be recorded there. This is one of the main features of blockchain technology , based on digital trust. Blockchain will make all actions in this database transparent, thereby increasing the level of trust in the state quality control system for pharmaceutical products. Blockchain opens up new opportunities in many areas, including social ones, such as medicine, education, etc. First of all, it is the unification of critical data into a single reliable storage. If we consider this in the field of medicine, then the data is available to all institutions, doctors, suppliers, patients. This creates transparent control and audit of the public and the state, and

automates all processes.

The main role in the digital economy will be played by private business with a strong entrepreneurial and innovative approach, and the state must create infrastructure and conditions for private initiative.

Uzbekistan has developed a concept for the development of “Digital Uzbekistan” until 2030. This concept includes the following activities :

- on the further development of telecommunications infrastructure;
- to provide the population with high-quality mobile communications and broadband Internet access ;
- on the implementation of modern information systems, software products and databases in the areas of healthcare, social protection of the population, education, public services, tourism;
- on the organization of “smart” and “safe” cities and regions;
- for the implementation of innovative projects based on public-private partnership in the field of digital economy;
- to support the production of modern software products;
- on further expansion of the system of providing electronic government services to the population and business entities based on the principles of “intelligent government”.

CONCLUSION

In conclusion, it should be noted that the experience of countries in the field of digital economy and artificial intelligence can be used in Uzbekistan. Although certain results have been achieved in Uzbekistan in the field of digital economy, only the first steps are being taken in the field of artificial intelligence.

Based on the Resolution of the President of the Republic of Uzbekistan “On measures to create conditions for the accelerated implementation of artificial intelligence technologies”, the Research Institute for the Development of Digital Technologies and Artificial Intelligence was established under the Ministry for the Development of Information Technologies and Communications.

The main objectives include the introduction of artificial intelligence technologies in economic sectors, the social sphere and the public administration system.

It is envisaged to conduct fundamental and applied scientific research in the field of artificial intelligence, form a scientific ecosystem for the development of digital technologies, develop innovative products for the automation of management and production processes based on artificial intelligence technologies, as well as their models, algorithms and software, establish cooperation and implement joint projects with leading foreign innovative and scientific institutions for the development of artificial intelligence technologies. [13]

All these measures are strengthened by Uzbekistan's accession to the IMD World Digital Competitiveness Ranking Digital Competitiveness Ranking » and take a worthy place in this rating in the future, developing innovations in the field of digital transformation and artificial intelligence in its practice.

REFERENCES:

1. A better bank for a better world. World Bank . Annual report , 2024. www.worldbank.org/mfd (07.11.2024).
2. United Nations Development Programme. Digital Strategy 2022–2025. UNDP 2022. <https://digitalstrategy.undp.org/>
3. Shaping a Sustainable and Inclusive Digital Future. UNCTAD Digital Economy Report 2024
4. Auer M., Tsiatsos T. (Editors) The Challenges of the Digital Transformation in Education Proceedings of the 21st International Conference on Interactive Collaborative Learning (ICL2018) Vol. 1. Springer Nature Switzerland AG, 2020.
5. Gregory Vial, "[Understanding Digital Transformation: A Review and a Research Agenda,](#)" The Journal of Strategic Information Systems 28, no. 2. June 2019. 118
6. [Florence Martin](#) and [Kui Xie](#) . Digital Transformation in Higher Education: 7 Areas for Enhancing Digital Learning. <https://er.educause.edu/articles/2022/9>
7. Gelfand M. The secret life of social norms. Honorary paper T-96. XXI April

Academic Conference. HSE, May, 21 2020. <<https://www.youtube.com/>

8. World Bank Digital Dividends . World Development Report, 2016.
URL

<http://documents.worldbank.org/curated/en/896971468194972881/pdf/102725-PUBReplacment-PUBLIC.pdf> (03/01/2019).

9. World Economic Forum. The Digital Transformation Initiative. – White Paper, 2017. URL : <https://www.weforum.org/whitepapers/digital-transformation-initiative> (10.03.2017).

10. IMD world digital competitiveness ranking 20 24
https://www.imd.org/globalassets/wcc/docs/imd_world_digital_competitiveness_ranking_20_24.pdf (17.11.20 24) .

11. Skolkovo approved five projects for implementation and for a total of more than 300 million rubles . <https://www.economy.gov.ru/material/news/>

12. Resolution of the President of the Republic of Uzbekistan dated July 3, 2018 No. PP-3832 “On measures to develop the digital economy in the Republic of Uzbekistan” : <https://www.lex.uz>

13. Resolutions of the President of the Republic of Uzbekistan “On measures to create conditions for the accelerated implementation of artificial intelligence technologies” dated 17.02.2021 N PP-4996 <https://nrm.uz/content>