



FOREIGN EXPERIENCE OF DIGITAL ECONOMY DEVELOPMENT STRATEGIES

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Article history:	Abstract:
Received: 7 th January 2024 Accepted: 26 th February 2024	In this article are described the development of the digital economy in the world, the advantages and disadvantages of digitalization, highlights the problems and limitations that impede the full construction of the digital economy of the Republic of Uzbekistan, and also identifies promising directions for its development

Keywords: digitalization, digital economy, economic development, globalization, data security, new technologies, employee qualifications, improving the quality of life of the population

Annotation..

Key words:.

INTRODUCTION. Digitalization is the process of transforming analogue data and work processes into a digital format. It includes the use of digital technologies to automate business processes, improve the quality of services, optimize production and increase the efficiency of enterprise organizations as a whole. Digitalization is aimed at a complete digital transformation of a person's entire life through the introduction of digital technologies. If the goals of digitalization are successfully achieved, human civilization will reach a qualitatively new level of development. Most of the advantages of digitalization lie in the introduction of new technologies, which, despite all the disadvantages, make human life more convenient and easier. Studying foreign experience in digital transformation is necessary for further reform of the digital economy in the Republic of Uzbekistan.

LITERATURE ANALYSIS. In 1995, Canadian business strategist Don Tapscott published a book called *The Digital Economy*, which examined in detail the impact of the Internet on economic society. It is believed that he was one of the first to propose the very concept of "digital economy" [1]. Following this, a whole series of books were published, such as "The Information Age. Economy, Society and Culture" by Manuel Castells, "Being a Digital Organization" by Nicholas Negroponte and many others, after which this concept quickly gained popularity [2].

According to researchers A.V. Keshelava, V.G. Budanova, V.Yu. Rummyantsev, "digital" (electronic) economy is an economy whose characteristic feature is the maximum satisfaction of the needs of all its

participants through the use of information, including personal information" [3].

According to R.K. Asanov that the digital economy is an economy based on the production of electronic goods and services by high-tech business structures and the distribution of these products using e-commerce [4].

ANALYSIS AND RESULTS OF THE STUDY. In the 1990s the growth rate of the global economy slowed, while the US economy remained consistently strong for ten years in a row until the late 2000s. At the same time, there was continuous development of the economy and production, and the level of unemployment and inflation decreased. The main catalyst was primarily the first appearance of modern information and communication technologies. According to former US Labor Secretary Robert Reich, 70% of US economic growth is due to computers and the Internet. The ones and zeros of the Internet have changed the way information is transmitted and interacted, trade is exchanged and trade is conducted. The commercialization of the Internet has shown its exceptional viability. Against this background, the concept of the digital economy emerged and became the center of everyone's attention. In 1998, the US Department of Commerce issued a report entitled "The Advancement of the Digital Economy," which drew public attention to the emergence of a "new type of economy" closely linked to Internet technologies.

In the United States, the "Cloud Strategy" was approved in 2009, the main goal of which was to reduce costs and improve management efficiency in



the public and private sectors. Since 2015, the country has had a State program called the Digital Economy Agenda. The lead agency responsible for its implementation is the US Department of Commerce, which has created a special position of director for the digital economy. Four of its structural divisions are key to the implementation of the program: the National Agency for Telecommunications and Information (NATI), the National Institute of Standards and Technology (NIST), the US Patent Office and the International Trade Administration. To develop "recommendations on accelerating economic growth and empowerment in the digital age," the Digital Economy Board of Advisors was created in March 2016, which included representatives of American companies (General Electric, Electrical and Electronics Engineers", "Microsoft", "Silicon Valley Bank", "YouTube", "McKinsey Global Institute", "Home Shopping Network", etc.), civil society and academic circles [5].

Governments of all countries have also begun to consider the development of the digital economy as an important tool for stimulating the economic growth of their countries. In the 21st century, all countries, one after another, began to develop a digitalization strategy, expecting that it could contribute to economic recovery.

In 1997, the Japanese Ministry of International Trade and Industry began to officially use the term "digital economy." But this country is taking an "original" approach to digital transformation. Its government documentation states that today the country is developing an "information" economic system and is working to create a "digital society." The project of a controlled transition to digital reality based on public-private partnership appears in official documents as the "Society 5.0" strategy.

"Society 5.0" is no longer just a scientific and theoretical development, but a project that is actually being tested and promoted. The main thing is that it goes beyond changes in individual areas of the economy or the wider use of digital technologies in production. The task is set to transform society as a whole, including the paradigm of social thinking and social values, institutional and legislative frameworks, methods of national and industrial management. In conditions when traditional tools for stimulating economic growth no longer work, possible trajectories for further socio-economic transformation of society are modeled. At the same time, the Japanese are closely monitoring the successes of other countries in accelerating the processes of digitalization of all

spheres of people's lives. Examples of state strategic planning of scientific, technical and economic development are given by "Industry 4.0" in Germany (2006), "Advanced Manufacturing Partnership" in the USA (2014), "Internet Plus" and "Made in China 2025" in China (2015), "New Industrial France" in France (2013), "RIE 2020" in Singapore (2016), "Make in India" (2014) [6].

The concept of "Society 5.0" first appeared in the fifth "Basic Plan for the Development of Science and Technology" of the Japanese government for the period 2016–2021. It is broadly defined as: "A people-centered society that achieves both economic development and solutions to social problems through a system that integrates cyberspace (virtual space) and physical (real) space." It also introduced a new definition of society as a "super-intelligent" one, which will be created through the introduction of information and communication technologies (ICT) into all areas of cyber and physical space. Thus, the emphasis is not on the autonomous development of the ICT industry, but on changing the entire context of social life with the inclusion of ICT in all spheres of human activity. An important characteristic of "Society 5.0" will be an open environment for transmitting data and information. It is assumed that people and objects will be connected through the Internet of Things (IoT). Timely and quick access to the necessary information will be provided using artificial intelligence (AI). In Society 5.0, it is assumed that a huge amount of information from sensors in physical space will accumulate in cyberspace. This "big data" will be processed not by humans, but by artificial intelligence, which will begin to transmit the results of the analysis to people in various ways. Thus, the synergy of physical and digital spaces will form a digital environment in which a person will not have to spend time searching, independently processing and evaluating all the information necessary for his life. Cyber systems will be able to independently perform these tasks in many areas and provide ready-made solutions. For example, in healthcare, they will constantly monitor the condition of patients and offer optimal options for solving detected problems [6].

The key technological elements of such a society will be the Internet of Things, big data, 5G technology, artificial intelligence, robots, unmanned vehicles and delivery vehicles, cashless payment systems, electronic translators working in real time, as well as virtual reality, which is becoming increasingly in demand for solving security issues.



It is assumed that "Society 5.0" will solve the problems that are acute in Japan today. The widespread introduction of unmanned robotics will help alleviate the situation with labor shortages. More convenient infrastructure will be created everywhere, providing people with maximum living comfort. It is expected to increase the efficiency of meeting many needs by reducing losses in the supply chain from the stage of the beginning of product production to the moment of its consumption [6].

Since about 2011, Brussels has identified comprehensive digitalization of all socio-economic spheres of the EU member states as one of the priorities for the development of the economic and political space of the European Union. The European Commission (EC), under the leadership of J.-C. Junckera (2014–2019) developed one of the first fundamental documents in this area - the Strategy for creating a single digital market. Started in 2015, it provided for the development and subsequent implementation of 30 legislative initiatives in the field of digitalization. As a result, 28 of them were implemented. In many ways, this was a reaction to the legislation adopted in 2013–2014. the leading EU states have adopted the Industry 4.0 strategy, which became a response to the Fourth Industrial Revolution proclaimed by Germany in April 2011. As part of this approach, numerous national programs have been adopted aimed at supporting the comprehensive digitalization of both industry and other sectors of the economy [7].

European countries have managed to create the foundations of a common information space and harmonize the rules of its functioning, including the freedom to transfer non-personal data in the absence of geo-blocking and roaming. EU states have begun to interact in the areas of artificial intelligence (AI), blockchain technologies, cybersecurity and government services [7].

By 2022, the European Commission as a whole managed to formulate a comprehensive vision of the processes of digitalization of the economic and political space of the EU for the medium term. An important stage was the presentation by Brussels in March 2021 of the strategic document "Digital Compass 2030: the European path to the digital decade" [7]. EC experts specified the medium-term goals of digitalization and identified five main strategic goals for the decade of digital transformation of the European Union that has begun:

1) Training citizens in digital skills/training highly qualified specialists in the field of digital technologies;

2) Create a secure and powerful digital infrastructure. It is achieved by ensuring: its sustainability; access of all European households (and contextually also economic entities) in all localities to gigabit networks operating in 5G mode; doubling the EU's share in the global semiconductor market (up to 20%); creating the first quantum computer in European history and launching ten thousand climate-neutral, highly reliable, highly secure peripheral nodes.

3) The third goal is the digitalization of economic entities, which is implemented through: the introduction of digital technologies in 75% of economic entities by 2030; integration of cloud computing, big data and artificial intelligence into business processes; an increase in these indicators three times compared to 2020; paying special attention to the digitalization of small and medium-sized companies, incl. providing "basic digital intensity" to 90% of them; promoting their innovation and investment, as well as increasing access to necessary financial resources; doubling the number of companies with a capitalization of one billion euros or more.

4) comprehensive digitalization of public services, including: massive support for the activities of all departments and organizations of the state, primarily the services they provide to the population; in this context, ensuring remote access for 100% of EU citizens to basic government services and their electronic medical records; using 80% of their number of electronic ID technologies.

5) development of international interaction in the digital sphere, incl. in the field of convergence of norms and standards and cooperation of national regulators (both within the European Union and outside it) [7].

China started developing the digital economy late and for a long time lagged behind the developed countries of America and Europe. According to China Info 100 (Chinese information research platform), in 1996, China's digital economy was \$4.3 billion, only 1/63 of the size of the United States, 1/23 of Japan, 1 /6 - in the UK. It was only at the beginning of the 21st century, especially over the last ten years, that the growth of the digital economy in China accelerated sharply. In 2016, at the G20 summit, China proposed signing the G20 Digital Economy Development and Cooperation Initiative document [8].

According to Tencent Research Institute's "Internet + Digital Economy in China 2017" report, in 2016, China's digital economy totaled about 22.77 trillion yuan (or \$390 million), making it the world's second largest digital economy, second only to USA. China has



become a leader in the volume of supplies of computers, mobile phones, the number of Internet users, the volume of online retail trade and the development of mobile Internet. Together with the United States, China has created the world's ten largest Internet companies. The importance of the digital economy in China's national economy is constantly growing, as is its share in GDP. In 2016, it reached 30.61%, increasing by 25.61 percentage points compared to 1996. A new wave of entrepreneurship and innovation in the digital economy is rising in China. This is facilitated by both the scientific and technological revolution and industrial transformations, as well as strong support from the government. More and more new platforms are appearing for startups, venture investments, and entrepreneurs. The development of the digital economy has led to the emergence of many Internet companies with enormous development potential. This, in turn, has led to a surge in innovation, entrepreneurship and employment.

With a vast market and the world's largest manufacturing industry, Chinese enterprises are constantly innovating. In some aspects, China's mobile Internet has already surpassed the United States and has forced Silicon Valley enterprises to start looking for new ideas related to Chinese applications such as WeChat, Alipay, Didi Chuxing, etc. [8].

In terms of ICT development, Russia occupies an average position among other countries, while the geopolitical confrontation and international sanctions that affected Russia were not sufficient to undermine the effect of technology development, as well as the mass use of smartphones and social networks among the population of these countries. Despite the relatively low overall level of digitalization, Russia is demonstrating steady growth rates and has the potential to take a leading position. According to the McKinsey report "Digital Russia: a new reality", in terms of the number of Internet users, Russia ranks 1st in Europe and 6th in the world (87 million people). According to Rosstat statistics, from 2010 to 2016. the number of households with access to the Internet increased from 48.4 to 74.8%. Russia ranks 2nd in the world for the lowest prices for the Internet and mobile communications, and the number of users of state and municipal service portals doubled in 2016 alone and reached 40 million people [9].

It must be recognized that Russia today has the resources to form a mature digital economy, while a distinctive feature of the Russian economy is the fact that the lion's share of GDP is created by state

corporations (or companies with a significant share of state participation). In many industries, state-owned players can account for up to 80% of the market. In such conditions, the most rational step seems to be the creation of a number of industrial digital platforms under the leadership of relevant ministries or state corporations. Such platforms will create the necessary infrastructure basis for the fastest possible development of the digital economy and the dissemination of related technologies. When building digital economy platforms, it is necessary to focus efforts on key areas such as transport, telecommunications, energy, and data processing. The development of these particular areas will make it possible to create an infrastructural and technological basis, replicating which to other areas, Russia will be able to develop a mature digital economy as quickly as possible. The purposeful construction of a number of industrial platforms of the digital economy with a unified architecture and standards will make it possible in the future to build a single digital space that unites all industries and industries. This approach will contribute to a significant increase in the transparency, controllability and flexibility of the country's economy [9].

Today, every country considers the development of the digital economy its priority. With the help of government programs, digitalization, security and legal regulation, the level of digital literacy in our country is analyzed and developed. Uzbekistan is also increasing the pace of adaptation to the process of development of the digital economy. On April 28, 2020, the President of the Republic of Uzbekistan signed Resolution No. 4699 "On measures for the widespread introduction of the digital economy and e-government" [10]. In addition, Presidential Decree No. 6079 of October 5, 2020 approved the national strategy "Digital Uzbekistan - 2030" [11].

As of 2021, the share of the digital economy in Uzbekistan's gross domestic product was 1.6 percent, in the USA - 9.3 percent, in China - 3.8 percent, in India - 8 percent.

The global digital economy is projected to reach US\$23 trillion by 2025, with its share of global GDP increasing from 24.3% to 24.3%. There will be 100 billion connections worldwide to digitally transform utilities, industry and agriculture, transport, finance and more. The digital economy, operating on information technology platforms, is developing rapidly, which requires the creation of new models and technologies for such platforms. These are conducive (complex) technologies of the digital economy:



1. Big data technologies;
2. Internet technologies (IoT – Internet of Things);
3. Mobile technologies;
4. Cloud computing;
5. Virtual and augmented technologies (VR – virtual reality) (AR – augmented reality);
6. Neurotechnology and artificial intelligence (AI);
7. Digital platforms;
8. Quantum technologies;
9. Robotics;
10. Blockchain and cryptocurrency technologies;
11. Crowdsourcing and crowdfunding.

The introduction of the digital economy into the real sector of the economy serves to develop technical and technological competencies, which requires the creation of centers for expert support of scientific research and development, as well as their commercialization.

Thus, the practice of forming the “Digital Economy” shows that its influence on economic processes is multifaceted, and this impact is sustainable and penetrates into all spheres of society, the state and the life of the population [12].

The main advantages of digitalization include the following:

- labor productivity at enterprises increases through automation and robotization of production processes;
- there is a deeper interaction with clients, their needs are more effectively identified and satisfied;
- the process of transformation of business models is accelerating (through the use of outsourcing and outstaffing);
- digitalization, acting as a catalyst for the development of the Internet economy, transfers business to the Internet space, which leads to an improvement in online sales, as well as the development of e-commerce;
- communication processes are improved due to digital technologies;
- innovation is accelerating, new startups, useful IT and Digital solutions are appearing, rapid mobile development is taking place, social networks are developing;
- there is a transition to an ESG strategy for sustainable development (Environment (ecology and environment), Social (social development), Governance (corporate governance));
- through the use of digital technologies, bureaucracy is reduced and corruption is eradicated, public administration is optimized and simplified;
- digitalization, being a tool of globalization, without which it is impossible, strengthens the

interconnectedness and interdependence of the states of the world in all spheres (single market and information space, liberalization of trade, growth of people’s well-being, erasing of any borders and barriers between people) [13,14].

However, the process of forming a digital economy is not always easy and instantaneous. To date, the following problems have been identified in the implementation of the national strategy “Digital Uzbekistan”-2030:

- equipping the regions of Uzbekistan with fiber optic systems is still insufficient;
- the speed and percentage of wireless broadband Internet coverage are low;
- access to basic network infrastructure in remote areas of the country is difficult;
- despite the active training of specialists in the ICT industry, there is a shortage of highly qualified personnel;
- the processes of effective development of the digital economy require constant modernization of technical and technological platforms [14].

To quickly eliminate these problems and achieve the set goals, a national program and a road map for the digital economy until 2030 have been developed.

CONCLUSION. Technical progress is the locomotive of the industrial revolution. Steam engines brought about a revolution in industry, ICT brought about the information revolution, and today they are driving the continued growth of the digital economy. The breakthroughs observed in recent years in the mobile Internet, cloud computing, big data, artificial intelligence, Internet of things, blockchain and other information technologies, their integrated development - all this stimulates the rapid development of a new type of economy.

In the Republic of Uzbekistan, based on foreign experience in digitalization and transition to a digital economy, it is necessary to accelerate the transformation processes, in which highly qualified personnel, government policy and other factors play an important role.

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