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THE ROLE OF THE DIGITAL ECONOMY IN THE DEVELOPMENT OF INFORMATION AND COMMUNICATION IN UZBEKISTAN

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ABSTRACT

The article deals with the concept of "digital economy" and its relationship with information technologies, as well as details the content and composition of the digital economy, the motor base and the content of information. The article analyzes the experience of advanced countries in using of the digital economy in the field of production and social activities. Within the framework of the strategy of Uzbekistan, the possibilities of digitizing industrial and managing the daily life of the population are analyzed. The article deals with theuse of the digital economy in Uzbekistan. Examples of specific objects which characterize the advantages of digital economy of Uzbekistan are given.

KEYWORDS: *Digitalization, Digital Economy, Digitizing Industrial, State And Social Services, The Digital Company, Digital Technologies, Automotization, Innovation, Digital Skills.*

INTRODUCTION

The Term "digital economy" has moved from scientific journalism to the media relatively recently, in the last 5-6 years. But now this name has become common, including in the field of public administration. In particular, the President of the Republic of Uzbekistan declared the year2020 as the "Year of development of science, education and the digital economy", and therefore approved the state development program for this period, which includes a lot of points for digitalization of the economy and other areas of the country. To clarify the goals, objectives and content of the new direction in the development of the domestic economy, let's consider the essence of the basic concepts.

According to Gartner analysts, the digital economy is the creation, consumption, and management of value associated with digital products, services, and assets in organizations. Experts of the Organization for Economic Cooperation and Development (OECD) focus on

trade: “the digital economy is a market that operates on the basis of digital technologies that facilitate trade in goods and services through e-Commerce”. In our domestic environment, the digital economy is the economic activity of the state, the functioning of which is provided by automated management processes at all levels: from production to consumption (E. Gorokhov, Stack Group). Thus, the digital economy, in the broadest sense, means simply the use of information technologies in production, management, communications and entertainment.

Historically, since the beginning of the 21st century, the emergence of the digital economy has led to the widespread of broadband Internet access, the development of mobile technologies, high speed of information transmission in telecommunication networks, and the introduction of digital signatures. But not only that. We are talking about providing consumers with goods and services in electronic form, as well as wide automation of industry, agriculture and other sectors of the economy. Digitalization and globalization are inseparable. The smaller the borders, the faster the digital economy will develop and the countries that form a single economic space will benefit. The digital economy only reflects the trends we see today: it-companies outperform commodity corporations in terms of market capitalization.

Services are easier to digitalize, and its impact in trade, the financial sector, public administration, and education is more noticeable. The digital economy has many advantages. In online mode, the cost of services is lower than in the traditional economy (primarily due to lower promotion costs). In addition, goods and services in the digital world can quickly enter the global market and become available to people anywhere in the world. The proposed product can be almost instantly modified to meet the new expectations or needs of the consumer. The digital economy provides much more diverse content to consumers: information educational, scientific, and entertainment.

The Foundation of the digital economy is a grassroots business unit-a digital company-that seeks to move most business processes online. This is the management, control and analysis of all the main business processes of the company in online mode: agreement approval, accounting, logistics processes, registration of transactions, purchases, personnel training, monitoring of relationships with partners and customers, technical support for solutions, etc. In addition to information systems, it is necessary to implement the appropriate “digital” culture in the company. All this together makes the company “digital”, provides its efficiency, productivity, business growth potential, that is, competitive advantages.

The main content of the digital economy is a global network of economic and social activities implemented through platforms such as the Internet, as well as mobile and sensor networks. In 2019, sales in the global ICT market are estimated at 4,46 trillion USD.

We can say that these are electronic business technologies, internal driving forces. But the development of the digital economy depends on the implementation of such “external” advanced science-intensive technology, such as nanotechnology, biotechnology, technologies energy systems, quantum technologies, etc. And Vice versa, the further development of ICTs, including cloud computing, big data technology, mobile technology, technology, the Internet of things, geolocation technology, technology of distributed networks, gives stimulus to the development of high technologies in the real economy. Let's explain these new concepts.

Cloud computing technologies - provision of services: resource and infrastructure; platforms for application development; use of software for specific customer requests. The development of cloud services in the EU is determined by the strategy of the EU single digital market, i.e. the "European cloud", which should combine all digitized information stored in European databases in order to ensure access to it by all interested parties. Cloud creation is provided by public and private investments, which are estimated at 6.7 billion euros over 5 years.

The expected growth of digitized information in the digital economy and the development of cloud technologies require modern Data Processing Centers (data centers) that provide reliable storage of big data and implementation of various clouds, including public, hybrid and private ones. The data center is a key component of the unified technological infrastructure of e-government.

Geolocation technologies have opened up new opportunities for providing information services based on the location of the client (user), for example, satellite tracking services for transport and people: GPS, GLONASS. Business application satellite tracking makes it possible to determine deviations from routes, unauthorized stops and non-intended use of transport, control of fuel consumption, etc. high-precision Mapping software products are used for indoor use: airports, stadiums, train stations, etc.

Distributed communication network technologies are the basis of the data center business model: capacity consolidation and creation of mega-data Centers combined in a distributed network connected by high-bandwidth channels. Due to the scale effect, maximum reliability, information security, fault tolerance, high standards of service agreements and attractive cost of services are provided.

Ecosystem-combines data Centers, backbone network infrastructure, traffic exchange points, and its own import-independent cloud platform.

Infrastructure of the digital economy - elements of external support for digitalization: management, legislative and regulatory acts;supplies organizations: energy, communication, educational, utilities, etc.

The effectiveness of the transition to the digital economy is determined by the availability and possibility of using information created in one area of people's lives, in other areas and industries. Taking this into account, the key condition is to ensure compatibility of elements of its ecosystem: application implementation platforms and services, elements of telecommunication networks, and software applications themselves. The solution to this problem is the result of the coordinated work of the entire infrastructure of the digital economy, the creation of which is a function of the state.

Experience of developed countries in implementing digital strategies

The US Department of Commerce proposed criteria for classifying "digital economy companies" in 2016:

- Companies use technologies such as mobile apps to bring together transaction participants;

- Manager relies on a rating system of user ratings to control the quality of services;

- Companies offer service providers flexibility in determining their working hours;

- Manager trusts performers to use their own tools and assets.

According to these strict criteria, only about 100 organizations (for example, Uber, Airbnb) have been identified in the United States). Of course, no country in the world today has achieved full digitalization of the economy. According to experts, Japan, Singapore, and the United States are ahead. The share of the digital economy in the GDP of developed countries increased from 4.3% (2010) to 5.5% (2016). In developing countries over the same period - from 3.6% to 4.9%.In recent years, state programs (strategies, concepts) for the development of this area have been adopted and implemented in countries that are at the forefront of digitalization of the economy:

- USA: "Cloud strategy". The main goal is to reduce costs and improve the efficiency of management of organizations and enterprises in the public and private sector.

- China: Internet plus concept (2015). Directions of the concept: Internet + Manufacturing industry; Internet + Finance; Internet + Medicine; Internet + Government; Internet + agriculture.

- Germany: industry 4.0 program.

- European Union: Digital Europe 2020 strategy.

This index takes into account five major groups of indicators: development of ICT infrastructure (telecommunications); human capital (share of population with Internet skills); activity (use the Internet); integration of digital technologies business; digital public services (volume of services in the form of ICT) [11]. According to the 2017 DESI rating, the most advanced digital economies are Denmark, Finland, Sweden, and the Netherlands. At the end of the rating - Romania, Bulgaria, Greece and Italy.

Prospects for the development of the digital economy of Uzbekistan

Strategic planning for the digitalization of the economy of Uzbekistan is reflected in the State Program for 2020. The program assumes the fulfillment of tasks and achievement of goals in the following key areas:

• State regulation;

• Information infrastructure;

• Development and research;

• Education and human resources;

• Information security;

• State leadership.

For the successful implementation of the Strategy, it is necessary to provide, as a priority, that:

* Development of online services (public services, socially significant services);

* Transition to digital technologies of state bodies and departments;

* Development of the Internet of things in the individual consumer sector and in the industry;

* Creating domestic ICT software products to replace foreign ones.

These tasks are already being partially solved today, within the framework of various Federal and regional programs. The digital economy is incapable without digitalization of society, business and government at the same time, so its development consists in accelerating the penetration of digital relations at all levels of interaction of its participants - from state to personal.

CONCLUSIONS

Digital economy - the interaction (relationship) of all participants in economic processes, based on the use of modern channels of electronic document management. Digitalization of production, as the basis of the digital economy, is a set of tools for optimizing the workflow, through software and hardware solutions. This process requires not only the replacement of production tools but also the introduction of analytical systems that make production cost-effective as much as possible. Key indicators of a good level of digitalization are decision-making based on objective business analysis data and the use of technological tools to increase productivity.

This is a new stage in the development of society, with the widespread use of technologies such as artificial intelligence, the Internet of things, and machine learning. There is a serious shortage of qualified personnel in the ICT sector in Uzbekistan. This problem must be solved at the level of schools and companies (corporate training), and at the state level (state programme of support for the development of education in ICT).

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