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Research Article

EFFECTIVE DEVELOPMENT OF INDUSTRIAL ENTERPRISES AND COUNTRY INNOVATION ACTIVITY BASED ON INFORMATION TECHNOLOGIES IN THE DIGITAL ECONOMY

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ABSTRACT

Today, the development of the digital economy has become one of the urgent issues in the development of the financial sector. In the conditions of the digital economy, advanced technologies, digital transformation, artificial intelligence, blockchain and virtual reality are of great importance. The technologies considered in this article are the latest technologies of the digital economy, the emergence and development of which have a strong impact on all sectors of the economy and social activities, including production, health, education, financial services, transportation and other areas showed a secret. In this article, the importance of the role of information technology in the development of the economy of Uzbekistan, together with various economic reforms, has been demonstrated through reforms in the world and in our country.

KEYWORDS

Information and communication technologies, telecommunications, digital economy, LTE, 4G communication, 5G communication, digital transformation, strategic document.

INTRODUCTION

The population of the Republic of Uzbekistan is growing, which in turn leads to the economic activity of the population and measures to strengthen the activities of industrial enterprises,

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and leads to the development of not only industry, but also the overall economic activity of the republic. The digital revolution, which is manifested as a new stage of economic and technological development, has rapidly changed human life, created wide opportunities, and started a period of further tightening of the international competition.

The increase in the share of innovative activity has led to the fact that innovations are considered the wealth of the country, like minerals, production capacity and intellectual potential. There is no way to effectively use the innovative and scientific-technical potential in the interests of our country and its citizens without creating the legislative basis for the formation and implementation of a multi-disciplinary innovation policy in our country. The head of our state stated that "Although our country has risen by 8 points in the international information and communication technology development index in 2019, it is still far behind. It is also true that most ministries, agencies, and enterprises are far from digital technologies. Of course, we know very well that the formation of the digital economy requires the necessary infrastructure, a lot of money and labor resources. However, no matter how difficult it is, if we don't start today, when will we?! Tomorrow will be too late. Therefore, active transition to the digital economy will be one of our top priorities in the next 5 years".

Digital technologies not only increase the quality of products and services, but also reduce excess costs. At the same time, they are also an effective tool in eliminating the scourge of corruption, which worries and bothers me a lot. We all need to understand this deeply. It is possible to widely introduce digital technologies in state and community management, social sphere, increase efficiency, in a word, dramatically improve people's lives.

According to the results of various studies, the weight of the digital economy in the world economy ranges from 4.5 to 15.5 percent. The United States and the People's Republic of China account for almost 40 percent of the value added in the global information and communication technology sector and 75 percent of the patents related to blockchain technologies. According to the statistics provided by the President of our country Sh.M.Mirziyoyev at the event dedicated to the development of information technologies on February 13, 2020, the share of the digital economy in the gross domestic product in the United States is 10.9 percent, in China it is 10 percent, and in India it is 5.5 percent. In Uzbekistan, this figure does not exceed 2 percent. To appreciate the growing importance and influence of digitization, it is enough to look at the share of global market capitalization of several large technology companies and digital platforms in the last decade. In today's information age, the information communication system continues to develop consistently. Today, it is impossible to imagine our life without modern information technologies. At the national level, the development of this sector has become one of the important factors.

That is why special attention is being paid to the development of telecommunication networks in

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our country. In particular, mechanization and development of the industry according to international standards have been identified as priorities. As a result of practical efforts, the efficiency of creating and using information resources in remote regions of our country is increasing. The choice of the state to develop the digital economy opens up new directions in the field of information technologies and in general, in the field of circulation of electronic documents. The turn to "digital technologies" was caused by the development of the worldwide Internet network and quality communication.

Methodical approach to research. Studying the legal campaigns for the development of the digital economy in our country;

- to study the place of the digital economy in the development of the countries of the world;

- analysis of reforms in our country in numbers;

- presentation of conclusions and proposals.

The main results of the research. In modern conditions, the governments of various countries are spending large amounts of money on scientific research and innovation. Developed countries spend about 3% of GDP on innovation, while countries with transition economies spend much less. However, in the context of the global economic crisis, the task of increasing the efficiency of the use of funds allocated to enterprises and scientific groups is in the first place. In this regard, we come across the concept of economic efficiency. For these purposes, the European Innovation Indicators (EIK) are published annually in the countries of the European Union. Also, in 2007, technical efficiency indicators were calculated for a number of EU countries based on the method of analyzing the working environment. The analysis of the competitiveness of the Belarusian economy and the impact of innovations on this indicator was carried out based on the method of analyzing the activity environment. In this study, the author used 43 countries, 3 input parameters (GDP intensity, number of scientists per million people, education expenditure relative to GDP%), as well as 3 variables (number of national patent applications, high technologies) exports as a % of industrial exports, ICT exports in the total export volume%). The result shows that profit in this case is created not by material production (industrial economy), not by finance (capital), but by innovation fields and the intellect of scientists. Researchers E. Toffler, F. Fukuyama, D. Bell, J. Naisbitt and others believe that for most developed countries in the modern world, it is the innovative economy that provides global economic superiority. Currently, the United States, Germany, Japan, Australia, Canada, Sweden, Finland, Singapore, Israel and other countries are among the countries with innovative economy, which have developed venture business of innovative economy. If we pay attention to the following thoughts of Karl Schwab, we should understand how technologies are changing our lives and how they will change the lives of the future generation, because these technologies are completely changing the economic, social, ecological and cultural

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conditions of our lives. Who will develop the digital economy? An important question arises.

The National Project Management Agency under the President of the Republic of Uzbekistan is an authorized body in the field of introduction and development of the digital economy.

In addition, the Ministries of Economy, Finance, Information Technology, Justice, and other state structures have specific responsibilities and tasks for the development of the digital economy. This was also emphasized in President Shavkat Mirziyoyev's Address to the Senate and Legislative Chamber of the Supreme Assambley. It should be noted that some elements of the digital economy are already successfully operating in the life of our country. In particular, taking into account the mass transfer of documents and communications to digital means, authorization of electronic signatures and communication with the state are also being transferred to electronic platforms.

According to UN Secretary General Antonio Guterres, "the digital economy can create new risks, including threats to cyber security, facilitation of illegal economic activities, and violations of privacy. Making new decisions requires collaborative action by governments, civil society, academic groups, the scientific community, and the technology sector".

In fact, it is necessary to strengthen international cooperation as much as possible in the expansion of the scale of the digital economy. At this point, it should be noted with pleasure that as a result of the effective measures being taken in the field of information security in Uzbekistan in 2019, it rose by 41 places and took 52nd place in the Global Cyber Security Index.

In accordance with the decision of the President of the Republic of Uzbekistan No.2126 of February 12, 2014, the work on the development of the network of the national mobile communication operator of the GSM standard is being continued, the expansion of the mobile communication network of the GSM standard throughout Uzbekistan has been carried out.

In 2019-2020, JSC "Uzbektelecom" implemented 10 investment projects with a total equivalent of 282.8 million US dollars from all sources of financing (implementation of the projects is considered to be carried over from 2019 to 2020, of which 111.9 million were spent in 2019. USD, USD 170.9 million in 2020). Including:

The sources of funding for projects implemented in 2019-2020 are as follows:

- 100 mln. about US dollars due to loans from International Financial Institutions;
- 90 mln. USD from telecommunications equipment manufacturers product credit account;
- 3.1 mln. US dollars from foreign direct investment;
- 58.8 mln. US dollars from the company's own funds.

According to funding sources:

1. The following projects were implemented at the expense of loans from international financial

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institutions: "Modernization of switching centers based on IMS technology" project.

2. "Extension of trunk and multiservice data transmission networks based on DWDM technology" project.

The following projects were implemented at the expense of product loans of telecommunications equipment manufacturing companies and loans from foreign banks:

- "UzMobile" project to modernize the broadband connection network of the mobile operator, create a data storage and processing center and expand the DWDM transport network;
- "Expansion of modern telecommunications services in the territories of the Republic" project;
- Project "Extension of data storage center";
- "UzMobile" national communication operator network expansion project.
- At the expense of direct foreign investment:
- The project "Launching the production of optical fiber analog cables" is being implemented.
- Project "Uzbektelecom" AK and Asia is being implemented in cooperation with investors from developed countries in the region.
- "Global Optical Communication Uzbekistan" joint venture was established to implement the project.

Project implementation period: 2020-2021.

Own funds of "Uzbektelecom" JSC project "Construction of optical fiber communication lines across the Republic" was implemented.

As a result of the implementation of the above projects, the following results were achieved in 2020:

- speed of trunk and multiservice data transmission networks to regional centers is 200 Gbit/s. to district centers 40 Gbit/s. expanded to;
- the possibility of inter-network connection has been expanded to 23886 E1 digital ports;
- the capacity of transport switching centers increased to 701,500 simultaneous connections;
- 8 RRLs were modernized in the process of equipment;
- 431 mobile communication base stations were built;
- 3012 mobile communication base stations of 2G standard were modernized on the basis of 3G/4G technology;
- storage capacity of existing data and processing centers increased by 10 Petabytes;
- the above analysis shows that the company has increased its prospects for high results as well as using the investments effectively.

CONCLUSIONS

In the current era of human development and in the future, the qualitative development of economic networks, the social sphere and the state management system is directly related to the widespread introduction of digital

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technologies. The prospect of our country's development also depends on the development of the digital economy and the level of coverage of digital technologies. To achieve this, it is appropriate to list the following basic conditions and priorities for the development of a digital economy:

- Creating an institutional environment and digital infrastructure for the stable operation of digital technologies, providing public services, wide introduction of digital technologies in the real sector of the economy, healthcare and other areas, as well as developing the territory of the Republic of Uzbekistan step by step to ensure as complete coverage as possible with the possibilities of connecting to the global Internet network at the level of countries;
- Expanding the scope of personnel training and training qualified programmers and engineering personnel with in-depth knowledge in these areas, teaching modern information technologies that fully meet international standards at all levels of the educational system, including with our foreign partners trial implementation of projects with a high joint result in the territory of Uzbekistan;
- Strengthening the scientific-theoretical base in the field of digital economy and supporting scientific activities in this field with the purposeful use of the funds of the "Digital Trust" fund;
- Conducting seminars, courses and other events in educational institutions in order to promote and expand "digital literacy" among the broad strata of the population, to involve them in mastering information technologies;
- Strengthening the regulatory framework and improving legislation in the field of digital economy,
- To organize a labor market that meets the requirements of the digital economy and to improve the qualifications of specialists for the rapid assimilation of new technologies;
- Organization of modern scientific production laboratories for innovative developments.

International experience shows that today digital technologies are rapidly developing mainly in the scientific community and the private sector. Therefore, the state should create a favorable ecosystem by supporting innovative projects and IT companies in these areas.

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