

Development of the digital economy in the Republic of Uzbekistan

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Abstract. This article discusses the relevance of articles related to the development and popularization of information and communication technologies, as well as the digital world in all areas of our lives from the moment we spend our time to our ability to manage money. In addition, the article provides information on the basic principles of the digital economy, increasing efficiency and creating "digital enterprises".

1 Introduction

Today, articles related to the development and popularization of information and communication technologies around the world are becoming increasingly relevant. The revolutionary impact of ICT is reflected in government structures and civil society institutions, in the economic and social spheres, in science and education, in culture and in the way of life of people. This is due to the fact that in general, communication services make it possible to fully use the existing potential, to a large extent contribute to the achievement of the goals of sustainable economic growth, prosperity, democracy, peace and stability [1-11]. In the Message of the President of the Republic of Uzbekistan to the OliyMajlis dated January 24, 2020, important areas of economic development are identified. This Message also details the need and important benefits of the transition to a digital economy for the country due to the fact that 2020 has been declared the Year of Science, Education and the Development of the Digital Economy [10].

Indeed, the digital revolution, which is becoming a new stage in economic and technological development, has dramatically changed people's lives, created huge opportunities and increased competition in the international arena. Now such digital technologies as big data, artificial intelligence, neurotechnologies, quantum technologies, cloud and mobile technologies, technologies of virtual and augmented reality, cross-exchange, blockchain technologies play a decisive role.

Taking into account that the development of any activity is based on normative factors and legal means, this article also analyzes the constitutional rights of citizens to information and the execution of relevant decrees and resolutions of the President of the Republic of

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Uzbekistan, based on the national legislation of Lex.Uz. In addition, the current aspects of the issues identified in the Message of the President of the Republic of Uzbekistan ShavkatMirziyoyev to the OliyMajlis are listed. In particular, the theoretical basis of the payment system and its improvement in the process of digitalization are the works of foreign economists such as S.R. Bruu, V.V. Gerashchenko, V. Kolesnikova, O.I. Lavrushina, I.V. Larionov. In addition, some aspects of digitalization have been studied in the scientific works of such scientists as K.R. McConnell, D. Polfreman, E. Reid, P. Rose, D.S. Sinki, V. Usoskin. This article also analyzes data from Internet sources and relevant literature, and develops practical recommendations for their use.

2 Research methodology

The methodological basis of this work was the legislative and regulatory legal acts on the development of digitalization processes in the country, in particular, Decree of the President of the Republic of Uzbekistan No. UP-5349 "On further improvement of information technologies and communications" dated February 19, 2018. Decree of the President of the Republic of Uzbekistan No. UP- 5953 "On the State Program for the Implementation of the Action Strategy in five priority areas of development of the Republic of Uzbekistan for 2021 within the framework of the Year of Science, Education and the Digital Economy" Uzbekistan dated March 2, 2017. In addition, the article uses modern statistical and observational methods used in the collection and processing of statistical data based on peer review and comparison. Also, graphical, analytical, structural analysis and other methods are widely used in the work. During the research it was revealed that:

External factors affecting the digital economy:

- increased competition at the international level;
- scale of investments and investment changes;
- innovative technologies;

- rapid development of information and communication technologies. Obviously, these external factors affecting the digital economy include the international competitive environment, the scale of investment and its changing conditions, the development of information and communication technologies, globalization processes and new innovative technologies.

In recent years, the processes of transformation of the post-industrial economy into a form based on the systematic use of ICT or known as "digital economy" have been accelerating. The digital economy is becoming a logical continuation of the evolutionary development of the digital ecosystem for a particular country and an opportunity to form an innovative economy that fully covers the state, enterprises, and the population.

Implementation of a single information base for the calculation of production indicators in the real sector of the economy, optimization of the existing information system for automation of production and management processes, and improvement of the CRM system, introduction of an information system for project management and evaluation of the KPI level of employees, "Road map" for 2020-2021 has been developed for the implementation of a unified system of personnel management (HR) for fully functional monitoring of the stages of work with employees.

The priorities of the reforms implemented in our country today are to accelerate the introduction of innovative projects in various sectors of the national economy, including the production of innovative products by industrial enterprises, the achievement of high economic growth indicators due to the wide use of management innovations in practice, as well as O It is aimed at further increasing the indicators of Uzbekistan in the global rankings. In particular, the government of our country has set a long-term strategic goal to become one of the top 50 countries in the world by 2030 in the Global Innovation Index.

Based on the analysis of the indicators of innovative efficiency of industrial enterprises, it is possible to assess the extent to which the innovative activity of the enterprise is organized, as well as its existing achievements and shortcomings. In the conditions of a perfectly competitive market economy, further improvement of the existing management system is achieved based on the evaluation of the indicators of the innovative efficiency of the management of industrial enterprises. Transferring the economic activities of the enterprise to the path of innovative development is achieved through the introduction of a modern management system in its management practice, as well as technical and technological modernization of production, and the implementation of innovative projects in production processes. Based on the assessment of the efficiency of innovative management in the enterprise, it will be possible to determine the indicators of economic efficiency achieved due to the introduction of innovative projects into production. This situation serves to a certain extent in the practice of enterprise management, as well as for the improvement of its competitive indicators in the market.

According to the experts of the World Bank, the indicator of economic efficiency of the enterprises that implemented the innovative project compared to the enterprises with traditional management practices depends on factors such as the characteristics of a certain economic region or industry, the scale of the enterprise (large, medium or small). Despite the decrease or increase of secret circles, it is high in the range of 20-45 percent.

According to the results of the analysis of the ownership form of industrial enterprises in the implementation of innovative management practices in our country, state enterprises and foreign firms take the leading place compared to private enterprises (see Table 1). The analysis shows that private enterprises, especially small and medium-sized enterprises, have high requirements for financing innovations, including the use of services of financial service organizations for their financing, as well as the qualifications of employees in enterprises. the presence of problems such as insufficiency has been determined.

Table 1. In 2018-2022, indicators of innovative activity of enterprises by ownership types in Uzbekistan (in percent) [12].

	Product innovation		Management innovation		Scientific research works		External knowledge		An internal opportunity		External opportunity	
	yes	no	yes	no	yes	no	yes	no	yes	no	yes	no
State enterprises	29	36	17	22	7	15	9	13	13	16	7	15
Foreign companies	29	33	17	24	7	7	10	10	13	19	7	4
Private enterprises	36	28	21	17	10	7	10	9	19	13	9	7

For this reason, the indicators of activity of private industrial enterprises in the implementation of innovative projects in our country remain at a relatively low level. This situation makes it necessary to form a national mechanism for supporting innovative activities of private enterprises in our country based on advanced foreign experience.

Through the establishment of associations of industrial enterprises engaged in innovative activities in the regions, besides increasing the speed of mutual transfer of innovations, it allows further development of innovative cooperation relations between enterprises. Based on the proposed mechanism, associations of regional industrial enterprises will have to perform the following tasks:

- implementation of innovative projects by industrial enterprises;

- formation of cooperation between industrial enterprises on the implementation of innovative projects;
- acceleration of mutual transfer of innovations between industrial enterprises;
- conducting innovative marketing research;
- formation of requirements for new innovative projects;
- to improve the efficiency of using internal and external opportunities in the development of innovative activities of industrial enterprises.

In our opinion, in the following years, by forming reports on innovative management based on the methodology proposed by industrial enterprises in our country, not only enterprises, but also the level of innovative development of our country's economy, as well as the development of state programs aimed at identifying existing shortcomings and their elimination allows for data aggregation. This creates a basis for the successful implementation of the innovative development strategy in our country in the long term.

Internal factors affecting the digital economy:

- scientific research and mechanisms for their stimulation;
- training and retraining of personnel;
- integration of practice and improvement of the quality of education;
- potential personnel who can work in innovative technologies.

The main internal factors influencing the digital economy include the development and retraining of personnel to acquire new knowledge, the quality and excellent incentives for research, the development of integration with practice in improving the quality of education, information and communication technologies and information security, mechanisms and anti-virus software, innovative technologies, as well as potential personnel who can work with them. The digital economy is a new economic environment that creates huge new business opportunities. In the digital economy, under the influence of new technologies of the digital economy and e-commerce, both the structure and nature of competition and business models are completely changing. For example, passenger market aggregators (GetTaxi, Yandex.Taxi, etc.) have made many changes in the activities of transport companies and managed to bring them closer to consumers. Food delivery companies have also made great strides in the competitive market by bringing suppliers closer to consumers. As a result, traditional offline companies are forced to transform their business or switch to an online mode [1]. This kind of situation encourages entrepreneurs to start their business on the Internet. Currently, there are completely online companies such as Amazon or Ozone, social networks, instant messengers, eBay, Avito or retail chains, online stores and logistics companies that have placed their e-commerce channels in a traditional offline business. The digital economy has provided businesses with the ability to generate new insights based on rapid business intelligence analysis and provide feedback to customers. This made it possible to have a reactive influence on the innovative expectations of potential customers. As a result of such work, such free services as Google Analytics and Yandex, Metrika were created. In addition, the digital economy is characterized by a significant reduction in the life cycle of innovations. This will lead to the rapid emergence of new versions of many new models of smartphones, computers, mobile applications, computer games [2]. According to scientists and experts, the emergence of new innovative transport systems is expected. For example, magnetic levitation vehicles, vacuum vehicles, Hyperloop systems, and others can be prime examples of this kind of innovative transportation system. In addition, there will be the generation of innovative ideas using collective knowledge (mass cooperation, the sharing economy), the production of products and services, and the financing of new innovative projects. The sharing economy has changed the attitude of many members of society towards the possession of material goods. [3] For example, many young people in developed countries are not very interested in buying private property and owning it for themselves, because freedom of life, freedom of

spiritual action and devotion to emotions, traveling the world, eco-tourism have become more important for them. The role of social networks in shaping the perception of a product or service by consumers is increasing more and more, because it is no secret that today work and communication in social networks have become an integral part of the life of all young people. New types of licenses for intellectual property (public licenses) have appeared. In this case, the rule of public ownership of the created product or service applies. Based on the foregoing, it is obvious that the digital economy is very important in the social environment. But it remains unclear what role their digital economy should play in the Republican program. First of all, due to limited resources, a decision will probably need to be made in which direction to focus efforts. Accordingly, society has two paths ahead: one is to engage in social adaptation of technologies, and the other is to increase local technological bases [4, 5-15].

3 Conclusion

In conclusion, as the ICT sector and its tools are evolving at an ever faster pace, moving away from them is tantamount to moving one step forward and then two steps back. This is due to the fact that preparedness for global ICT challenges requires the creation of a transparent system through the digitization of public services and almost all sectors of the economy. In this regard, people are encouraged to start the digitization process on their own. For example, an entrepreneur engaged in small business and actively using ICT tools, saving his resources and achieving efficiency, will have an idea of how to develop web platforms for his activities, as well as create opportunities for the development and implementation of components of Digital Uzbekistan 2030 - a project with public participation. Not only entrepreneurs, but also people from all walks of life can take an active part in this, but the process of "digitalization" is carried out only by the public sector, which does not involve public figures, IT specialists in the private sector. For the further development of the digitalization process in Uzbekistan, attention should be paid to the following necessary aspects:

- further development of employees' skills and abilities in this area;
- improvement of training and retraining mechanisms, formation of a competitive environment in training centers;
- Increasing the speed of the Internet, reducing its cost and ensuring the information security of all enterprises and organizations;
- creation of an electronic accounting system at all enterprises and organizations;
- creation of software platforms for the development of priority sectors and sectors of the economy, as well as continuous improvement of the electronic system of public services.

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