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РАҚАМЛИ ИҚТИСОДИЁТ ВА АХБОРОТ ТЕХНОЛОГИЯЛАРИ
DIGITAL ECONOMY AND INFORMATION TECHNOLOGY
ЦИФРОВАЯ ЭКОНОМИКА И ИНФОРМАЦИОННЫЕ ТЕХНОЛОГИИ

Электрон илмий журнал | Electronic scientific journal

МУНДАРИЖА:

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ЭЛЕКТРОН ИЛМИЙ ЖУРНАЛ

Мазкур электрон илмий журнал Ўзбекистон Республикаси Вазирлар Маҳкамасининг 2019 йил 19 декабрдаги “Оммавий ахборот ва коммуникациялар соҳасида давлат хизматлари кўрсатишнинг айрим маъмурий регламентларини тасдиқлаш тўғрисида”ги 1017-сонли қарорида белгиланган вазифалардан келиб чиқиб, Тошкент давлат иқтисодиёт университети томонидан 2021 йил март ойида таъсис этилган ҳамда халқаро интернет тармоғига жойлаштирилган.

This electronic scientific journal was established by the Tashkent State University of Economics in March 2021, based on the tasks defined in the decision of the Cabinet of Ministers of the Republic of Uzbekistan dated December 19, 2019 No. 1017 «On approval of some administrative regulations for the provision of public services in the field of public information and communications» posted on the internet.

Нашр қилинаётган “Рақамли иқтисодиёт ва ахборот технологиялари” электрон, илмий журнали Ўзбекистон Республикаси Вазирлар Маҳкамаси ҳузуридаги Олий аттестация комиссиясининг 2023 йил 31 январдаги 332/6-сон қарори билан Иқтисодиёт фанлари бўйича “Фан доктори” илмий даражасига талабгорларнинг диссертация ишлари, илмий натижалари юзасидан илмий мақолалар эълон қилиниши лозим бўлган Республика илмий журналлари рўйхатига киритилган.

The electronic scientific journal “Digital economy and information technologies” published by the decision of the Higher Attestation Commission under the Cabinet of Ministers of the Republic of Uzbekistan dated January 31, 2023 No. 332/6 announces scientific articles on the scientific results of dissertations of candidates for the degree of Doctor of Science in «Economic Sciences» included in the list of republican scientific journals that should be published.

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DIGITAL TECHNOLOGIES ARE A STRONG BASIS FOR THE SOCIO-ECONOMIC DEVELOPMENT OF THE COUNTRY

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Abstract. *In this article, the authors show that in the Republic of Uzbekistan much attention is paid to the development of the digital economy. In particular, a solid regulatory framework has been created, the quantity and quality of electronic services are constantly increasing, the Electronic Government system is being optimized, technologies such as artificial intelligence, BigData, the Internet of Things, blockchain, cloud services are being introduced into the activities of economic entities, which are the key to innovative development of the country.*

Keywords. *Digital technologies, economic development, people's welfare, economic growth, electronic services, innovations.*

Introduction:

Digital technologies are now firmly established in all areas of society. Currently, in economic science and practice, much attention is paid to the study of digital transformation issues. Many foreign and domestic scientists are studying the trends and features of the state management of digital transformation, new approaches to the activities of enterprises and organizations in the digital environment are presented. The "Strategy for the Development of New Uzbekistan for 2022–2026" is being successfully implemented in the Republic of Uzbekistan. A whole range of legal solutions has been developed aimed at the effective development of digital technologies in the public sector, increasing the quantity and quality of public services provided (by 2026, 100 percent of public services should be provided in electronic format), the development of industrial production, the use of innovative technologies in agriculture, healthcare, law enforcement, banking sector, education, housing and communal services, etc.

Analysis of literary sources on the research topic:

In the course of work on this article, the authors studied a fairly wide range of scientific works of domestic and foreign scientists. Among them are the works of such scientists as Abdrakhmanova G.I., Vishnevsky K.O., Gokhberg L.M. [1], Alimov R.Kh., Balatsky E.V. [2], Belikova K.M. , Begalov B.A. [3], Belov V.A., Nikulchev E.V. [4], Blagirev A.P., Khapaeva N. [5], Golovenchik, G.G. [6], Demyanova A.V., Zhikhareva O.B., Ryzhikova Z.A. [7], Elokhov A.M. [8], Ershov M.V., Zhukovskaya I.E. [9], Pankov A.V., Kribel A.M., Lauta O.S., Vasiliev N.A. [10], Pinier I., Osterwalder A. [11], Prokhorov P.E. [12], Sidorov A.A. [13], Yu.F. Telnov [14], Xashimxodjayev Sh.I., Pilipenko E.F. [15], Chekha V.V. [16], Shpileva A.A. [17] and others.

The research of the authors of the article showed that the above-mentioned scientists have made a significant contribution to the study of the theoretical and practical foundations for the development of the digital economy. However, it is worth noting that each scientist considers a separate digital solution or the impact of digital technologies on a separate sector of the economy. To date, the dynamics of the digital transformation of enterprises and organizations has not yet been shown, and all the factors affecting the effective functioning of enterprises in the economic market in the context of the use of digital technologies have not yet been clarified.

A study of the scientific literature has shown that today there are many opinions about the definition of "digital economy". A number of scientists agree that this term first appeared in the writings of the Canadian scientist Don Tapscott. In particular, in his work entitled "The Digital Economy: Promise And PerilIn The Age Of Networked Intelligence" [18]. Most researchers in the field of digital economy believe that for the first time the term "digital economy" was expressed by the American scientist Nicholas Negroponte. It was in the works of this scientist that the thesis was first put forward that digitalization affects economic and social life [19]. In the works of N. Negroponte, it is noted that in the context of the development of the digital economy, information networks and communication infrastructure form a global platform on the basis of which economic entities interact [19].

After analyzing the scientific concepts and opinions of scientists in the field of the digital economy, we can give the following definition of the concept of "digital economy". In particular, under the digital economy we will understand a multi-level system of economic, social and cultural relations, which are based on the effective use of digital information and communication technologies.

Research Methodology:

The research methodology is based on the theoretical provisions of the scientific works of domestic and foreign scientists devoted to the issues of the digital economy, both in the methodological aspect and in the legal, technical, informational, technological and software aspects.

When writing this work, the authors used the method of theoretical and statistical analysis, methods of summary and grouping, methods of monographic research and systematization, as well as methods of working with computer networks and software products.

Research results:

To date, the Republic of Uzbekistan has already achieved positive results in the implementation of digital solutions in the activities of economic facilities.

According to the Statistics Agency under the President of the Republic of Uzbekistan, as of August 1, 2023, there were 476.7 thousand units (excluding farms and dekhkan farms) of enterprises and organizations in the republic [20]. And every enterprise uses information, communication and digital technologies in its activities.

Studies have shown that digital solutions are mainly used by state-owned enterprises and organizations, companies in the banking, financial and insurance sectors, commerce, etc. In recent years, online services, electronic payments, blockchain technology, artificial intelligence, robotization, etc. have been actively used in the activities of economic entities.

The country is improving the quality and quantity of communication and information services year after year (Fig. 1).

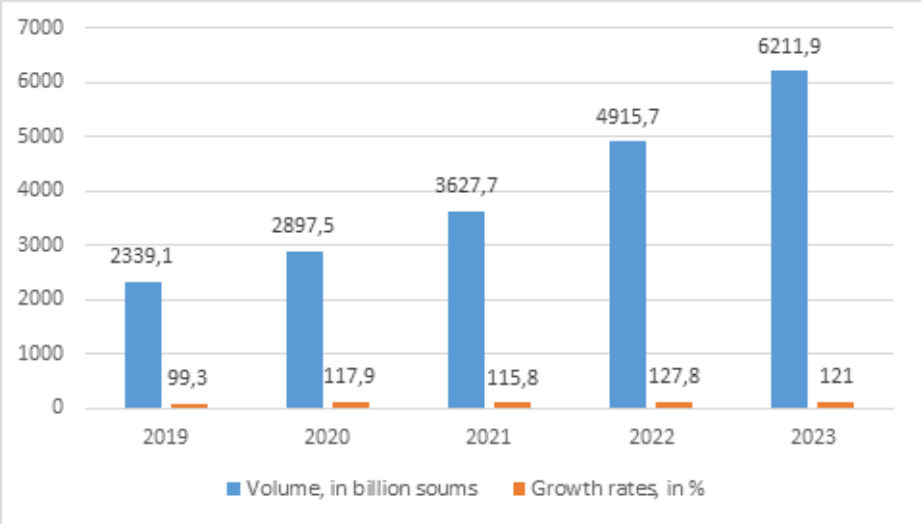

Fig. 1. Dynamics of changes in communication and informatization services in the Republic of Uzbekistan for the period from January 2019 to March 2023.

Source: *data from the Agency of Statistics under the President of the Republic of Uzbekistan*

As can be seen from Fig. 1, in the Republic of Uzbekistan, the number of communication and informatization services is increasing annually.

Telecommunications services, computer programming services, and information services predominate. Figure 2 shows the structure of communication and information services for the period from January to March 2023.

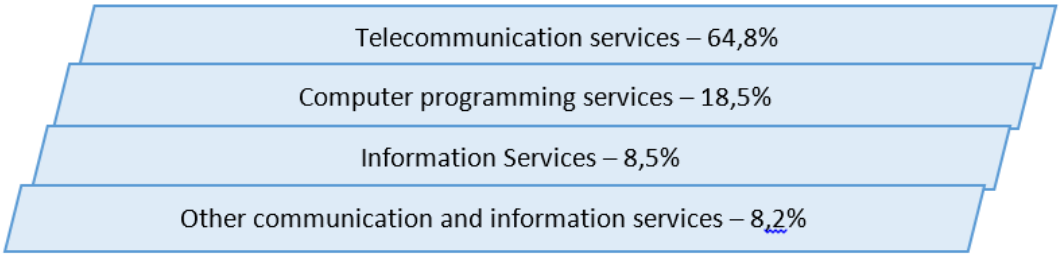

Fig. 2. Structure of communication and information services in the Republic of Uzbekistan for the period January – March 2023 [20].

Source: data from the Agency of Statistics under the President of the Republic of Uzbekistan

Figure 2 shows that the largest percentage falls on telecommunications services (transmission of voice, text and video messages) - 64.8%, computer programming services reach 18.5%, information services - 8.5%, the share of other services accounted for 8.2%.

The distribution of communication and informatization services by region is illustrated in Table 1.

Table 1

The distribution of communication and informatization services by region

Region	Volume, in billion soums	Growth
The Republic of Uzbekistan	16970,7	+23,6%
Tashkent city	10868,2	+23,5%
Fergana region	786,4	+20,7%
Samarkand region	736,0	+23,7%
Andijan region	588,9	+24,3%
Tashkent region	585,1	+23,7%
Kashkadarya region	531,8	+23,0%
Namangan region	520,8	+25,4%
Surkhandarya region	431,1	+28,0%
Bukhara region	423,8	+21,7%
Republic of Karakalpakstan	384,6	+23,9%
Khorezm region	380,5	+24,8%
Jizzakh region	274,9	+22,4%
Navoi region	247,4	+23,9%
Syrdarya region	198,1	+24,6%

Source: data from the Agency of Statistics under the President of the Republic of Uzbekistan

An alternative set of ICT services, content and media sectors is characterized by Table2.

Table 2

An alternative set of ICT services, content and media sectors (January-July 2023)

Name	Volume in billion soums	Specific gravity in total volume, %
Total	17 737,5	100,0
including:		
ICT services sector	16 118,6	90,9
including:		
Software publishing services	613,5	3,8
Telecommunication services	9797,8	60,8
Computer programming, consulting and other related services	3 561,9	22,1
Data processing, hosting and related services; web portals	1 378,6	8,5
Computer and communications equipment repair services	766,8	4,8
Content and Media Sector	1 618,9	9,1

including:		
Publishing services for books, periodicals and other publishing services	371,6	23,0
Video film and television production services, sound recording and music publishing services	155,4	9,6
Programming and broadcasting services	570,1	35,2
Other information services	521,8	32,2

Source: compiled by the authors based on data from the Statistics Agency under the President of the Republic of Uzbekistan

The implementation of the "Digital Uzbekistan-2030" strategy involves providing all social facilities with the Internet by 2030, bringing the coverage of settlements with broadband mobile Internet to 100% [21].

As practice shows, digitalization implies the development of an e-government system designed to provide an effective mechanism for interaction between the authorities and the population based on the use of digital technologies. The implementation of the "Digital Uzbekistan -2030" program provides for bringing the share of e-government services to 90% by 2030, bringing users of the Unified Portal of Interactive Government Services to 0.5 million.

The success in the development of digitalization in the Republic of Uzbekistan is evidenced by the fact that in the Open Data Inventory ranking Uzbekistan has taken the most advanced positions in Central Asia. At the same time, in the Electronic Participation Index (EPI) it improved its position by 13 points and took 46th place.

Research in the field of application of digital technologies in the Republic of Uzbekistan shows that good results have been achieved in the implementation of the «Digital Tashkent» program. Using digital technological solutions, an index of the comfort of city districts was compiled, which made it possible to solve everyday problems, such as unloading traffic arteries, paying bills, optimizing space and creating a comfortable environment in residential areas, etc.

Today, much attention in the Republic of Uzbekistan is paid to the development of digital platforms, which are effectively used in education, healthcare, tourism, and other industries and areas of the national economy.

Analysis:

These studies in the field of digital economy in the Republic of Uzbekistan show that today a legal, technical and technological basis has been created for the further development of digitalization in the country. Thanks to digital technologies, labor productivity in enterprises and organizations is growing, production processes are being optimized and improved. In addition, digital technologies help to obtain more accurate predictive estimates of the development of business structures and optimize various types of activities of economic entities of the national economy.

But, digital technologies are developing at a very rapid pace and require the heads of enterprises and organizations, ministries and departments to take a new approach to managing workforces and constantly learning new digital technological solutions, mastering advanced hardware and software tools.

In this regard, it is necessary to pay special attention to the training of highly qualified personnel in higher educational institutions, to constantly improve the system of advanced training for employees of enterprises and organizations, based on the best world practices.

Conclusion

Studies have shown that digital technologies are currently the driving force behind sustainable development and improvement of production and social processes.

The mobile devices used today are smartphones, laptops, tablets, etc. are important tools for the efficient collection, processing, storage and transmission of both structured data and large amounts of unstructured information. In addition, cloud services and the Internet of Things technology are gaining popularity, providing the ability to remotely monitor and make decisions.

Thus, it can be concluded that digital technologies stimulate the growth of innovations in industries and areas of the national economy, contributing to the socio-economic development of the country, increasing its competitiveness on a global scale and improving the quality of life of the population.

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