

The role and role of digital economy and information technology in the agricultural sector

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ABSTRACT

In this article, the content of the digital economy is theoretically covered, its role in the economic sectors (sectors), experience and achievements of developed countries, opportunities for its development in the country. The method of the literature review was used in the study of this article.

Keywords: digital economy, agrarian sector, development economy, information and communication technologies, electronic agriculture.

1. INTRODUCTION

Developing economies achieve economic stability through the rapid development of digital technologies and the wider use of its economy in society. The introduction and application of these technologies in all sectors have a positive effect on the economic development of the country. The development of digital economies in both developed and developing countries will help stabilize the national economy based on their development priorities. The use of digital technologies in the modernization of production (service) in the agricultural sector and liberalization of the system in the country provides economic stability in the industry.

Today, the rapid development of scientific research, the emergence of digital technologies in all sectors, in some respects, has a positive effect on employment growth due to lower labour costs in manufacturing (service). Government reforms also focus on minimizing the impact of the human factor through the gradual transformation of production and service systems in all sectors to the digital economy. In this regard, it is important to study the theoretical approaches and research conducted by economists and researchers to explain how and how the term "digital economy" can be distinguished by the term "traditional economy".

Digital Economy is a term that embraces the impact of digital technologies on production and consumption [5], which includes how goods and services are marketed, traded, and paid. The term originated in the 1990s and initially focused on the impact of the Internet on the economy and the emergence of new types of digital-driven firms and the emergence of new technologies. To date, the term embraces many new technologies and their application. That includes artificial intelligence, Internet of Things, enhanced and virtual reality, cloud computing, blockchain, robotics, and autonomous vehicles. In this regard, the implementation of the digital economy into our national economy, like other sectors, plays important strategic objectives for the development, competitiveness and efficiency of the agricultural sector.

The interpretation of the concept of "digital economy", taking into account the level of development of digital technologies, their role and importance in modern society. receive. Thus, it covers all kinds of activities, from traditional technologies, media and telecommunications to new digital networks. This digital economy [8] has become a commonplace economy with increasing adoption and application of digital technologies in every sector of the world.

2. MAIN BODY

Expanding the digital economy is one of the most modern ways to work with people and businesses. Another key technology that the digital economy relies on is the use of the Internet to benefit from its Internet-based activities. This means that most household appliances are connected to the mains,

but they are secondary. More and more objects of the material world are connected to the Internet, which provides access to information and even remote controls these objects. There is a virtual copy of a material object with different parameters of the outside world and objects, which allows the Internet to operate the object. Examples of items on the Internet include, for example, a system of Vital Data Transmissions that sends a list of spare parts that need to be replaced as a result of technical failures and unplanned repairs. The next step in the development of the Internet of Things is to be able to communicate not only with the person but also to achieve automated interconnection through conveyor lines, systems of repair, logistics, agriculture and many other businesses. allows you to But there are still issues that need to be addressed, such as the use of minimal electricity and the creation of new communication standards for the interconnection. Another innovative route to digitalization is Augmented Reality, AR. One of the most promising technologies is the complemented reality technology that enables virtual world objects to be added to the real world. Imagine walking down the street and seeing more people and objects near you. There are examples of filled reality, and they are actively used in life. For example, in some parks in Moscow, you can see signs indicating the connection of a material world object to a virtual world. Games with stuffed reality elements are actively spreading, stores have virtual mirrors and dressing rooms, and the reality is that cars are also being tested. Virtual reality technology is not so actively used in business where 3D-modeling technologies are in high demand. Examples of building the digital 3D models of the real world are service industries, agriculture, construction companies, manufacturers of sophisticated technological products, oil extraction and other industries. In 3D-modeling we can talk about not only building models, but also filling them with data, which in turn optimizes management decision-making processes and consequently tools for designing products. At the same time, further implementation of virtual reality technologies will need to further enhance the virtual reality of a new generation of devices that provide a more authentic human presence in virtual reality. Of course, the digital economy is also closely linked to robotics. Thanks to robots' participation in human life, many conveniences are created. The robots' simple functionality that humans make in production makes it possible to significantly reduce the number of errors and speed up the work. It is no secret that many industrial companies actively promote robotics in assembly lines and logistics, reducing the importance of human factors and attracting a minimal number of people. The penetration of the digital economy into the agricultural sector, in turn, plays an important role in increasing crop yields and productivity.

3. MATERIALS AND METHODS

In the study of this work, along with the study of foreign literature, scientific works and articles, works of economists, economists of our country Iskandarov I., Sharifhodjaev M., Gulyamov S., Tursunhodjaev M. ., Kadyrov A., Zaynutdinov Sh., Abdurakhmanov K., Abdullaev Y, Murtazaev. works and scientific articles. We have commented on the works and articles by economists using the method of "Literary Review" when writing scientific articles.

Some publications that are not directly related to knowledge-based economies are developing aspects of intellectual capital and knowledge management theory [9]. Developing a modern, intellectual economy, the formation of a digital economy is a complex process that depends on many factors, and their econometric analysis enables the rational management and regulation of the digital economy. To the development of the theory and practice of modern economic development among the scientists of our country M. Sharifkhojaev, S. Gulyamov S., Abdullaev Y and others contributed to the development of economic management theory. Scientists from the Center for Economic Research have sought to assess the state and extent of the knowledge economy in Uzbekistan within the UN. Gulyamov S., Begalov B., Shodiyev T., Abdugafforov A., Alimov R., Ataniyazov B., Khodiev B., Mahmudov N., Kholmuminov Sh., Nabiyev H., Aripov AN, Iminov OK, Muhiddinov HA and others have explored methodologies for ICT technologies and econometric modelling of economic processes [3], [11]. Analyzing the current level of the digital economy, electronic government, e-profile, e-commerce and digital economics are important in enhancing economic potential in the country. shows that the country has significant scientific and resource potential for the development of the digital economy, including modern agriculture in Uzbekistan. The current trends and promising areas of digital economy development in Uzbekistan [10] will be reviewed, and their implementation in the agricultural sector will facilitate economic development.

The development of agriculture in our country depends on the level of food security, social stability of the society, and the agrarian sector, as well as other sectors. One of the major trends in the development of the global economy is the active development of the digital economy. The national economies of the countries are also adapted to the changes taking place in the global economy and are sometimes aligned with previous levels of development. The level of development of digital technologies is also gradually affecting agriculture, as evidenced by the introduction of new high technologies, the development of artificial intelligence in agricultural production and other processes. Information and communication technologies, computerization, the Internet, mobile and other attributes are an integral part of the business, which can actively innovate in the production and service. The use of digital technology to provide information on industrial activity (service) in the highly developed countries of the world plays an important role in improving the productivity of the product or service [4].

Digital Agriculture is a new transformation that will help meet the needs of the world population in the future, changing every part of the agrarian sector. The value chains will be most closely monitored and coordinated, Various fields, crops and animals can also be managed according to their optimal recipes: Digital agriculture creates highly productive, anticipated and adaptable systems that can be adapted to climate change. In turn, digital agriculture can bring economic benefits through agricultural productivity, economic efficiency and market opportunities, social and cultural benefits, as well as improving food security, profitability and sustainability. The First President of the Republic of Uzbekistan, I. Karimov, assesses the importance of agricultural reform: "... The problems of radical reform and accelerated development of the agricultural sector are crucial in the early stages of reforms and Uzbekistan's market strategy. We set a task to ensure the highest level of rural development, to restore the agriculture on a qualitatively new basis [2]..."

The Concept of Social and Economic Development of the Republic of Uzbekistan until 2030 and the Concept of the Strategy Uzbekistan 2030 were presented to the general public. It aims to introduce high-quality and inexpensive Internet and mobile communications, reduce the digital divide between urban and rural areas, and strengthen the priority of e-mails and anti-corruption. The more members of the community acquire new digital, high-tech products, the greater their demand and value, or the greater the volume of consumption. As a result, the potential for economic development will be further enhanced. As stated in the Address of the President of the Republic of Uzbekistan, the digital economy is capable of building, energy, agriculture and water management, transport, geology, cadastre, healthcare, education and archives. directions [1].

4. CONCLUSION

The gradual transition of the digital economy to the agrarian sector, along with a positive impact on the growth of labour productivity and product quality through the reduction of manual labour output in rural areas, also contributes to the employment of the working population in agriculture. directs to non-league activities.

REFERENCES

1. O'zbekiston Respublikasi Prezidenti Shavkat Mirziyoyevning Oliy Majlisga Murojaatnomasi. 2020 yil 24-yanvar; Toshkent. <https://president.uz>
2. Karimov I.A. O'zbekiston iqtisodiy islohotlarni chuqurlashtirish yo'lida. -T.: O'zbekiston, 1995, 59-60 b.
3. Aripov A.N., Iminov O.K., Muxiddinov X.A. Infoiqtisodiyot asoslari. -T.: 2006.
4. Murtazayev O., Axrorov F. Qishloq xo'jalik iqtisodiyoti. -T.: "Ilm-ziyo", 2017
5. How big is China's Digital economy? Alicia Garcia Herrero, Jianwei Xu. Bruegel, Working Paper, Issue 04, 17 May, 2018
6. Дынкина А.А., Ивановой Н.И. Инновационная экономика. - М., Наука, 2001
7. Климов С.М. Интеллектуальная Ресурсная Организация. СПб.: ИВЕСЭП, Знание 2002.
8. Глухов В.В., Коробко С.Б., Мараринина Т.В. Экономика. - СПб: Питер, 2003
9. Gulomov S, Begalov B. Iqtisodiy informatika. -T. TDIU, 2002.
10. Shodmonov Sh.Sh., Xodiyev B.Yu., Iqtisodiyot nazariyasi. Darslik. - T.: Barkamol fayz media, 2017.-783 – bet
11. <http://www.freedomhouse.org/research>