

## FUNDAMENTALS OF DIGITAL ECONOMY AND TECHNOLOGY DEVELOPMENT

**Achilov Bakhtiyor Muminjonovich**

The director of the technical school of industrial technologies of the cotton plant in the presence of the Jizzakh Polytechnic Institute under the Ministry of Higher Education, Science and Innovation of Uzbekistan.

**Abstract:** This article discusses the factors of economic development, the introduction and development of the digital economy, as well as the reforms being carried out in this regard. Also, the rapid digitization process has created a "new economy", this market segment, which is growing deeper every day, provides manufacturers with optimal methods of establishing effective marketing companies in business, obtaining maximum profit at minimum cost, and successfully selling goods and services

**Keywords:** digital economy, cryptocurrency technology, of telecommunication infrastructure, blockchain system, artificial intelligence, e-commerce, online payment, infrastructure, cyber security, automated registers, blockchain technologies.

### INTRODUCTION

In the conditions of the globalization of the world economy and the development of technologies, the economic development of Uzbekistan cannot be achieved without the development of the digital economy. In developed countries, the implementation of the digital economy has already begun. Currently, the rapid digitization process has created a "new economy", this market segment, which is growing deeper every day, provides manufacturers with optimal methods of establishing effective marketing companies in business, obtaining maximum profit at minimum cost, and successfully selling goods and services. provides quality service and convenience to consumers, buyers and clients, and at the same time leads to comprehensive development of the economy.

**LITERATURE REVIEW** The digital economy is an economic activity based on digital technologies, connected to e-business, e-commerce, producing and providing digital goods and services, where payments for economic services and goods are made through electronic money. The concept of digital economy is based on the transition from atom to bit, that is, from the smallest chemical particle to an electronic unit. The term "digital economy" was introduced into scientific practice by Manuel Castells, a Spanish and American sociologist and a leading researcher of the information society. In this regard, he published his three-volume monograph "Information Age: Economy, Society and Culture". To date, the theory of the digital economy has not yet been fully formed and is being widely studied by many economists. In the scientific literature, the modern "New digital economy" is called by different terms. For example, "Post-industrial economy" (D. Bell), "Information economy" (O. Toffler), "Megaeconomy" (V. Kuvaldin), "Economy based on information and communication" (I. Niiniluto), "Techno-economy or digital economy" (B. Gates), "Economy based on knowledge" (D. Tapscott) [1].

**RESEARCH METHODOLOGY AND EMPIRICAL ANALYSIS** The digital economy allows large industrial facilities to increase their work efficiency, increase production, ensure transparency of activity, and reduce product costs. According to the results of analyzes carried out by reputable international organizations, the digital economy will increase the gross domestic product by at least 30%, therefore, it will end the secret economy [2]. The state's provision of electronic services and electronic products for its citizens is a key part of the digital economy. Broad development of this sector in our country will end the scourge of corruption.

According to information provided by the information service of the Ministry of Information Technologies and Communications Development of the Republic of Uzbekistan, a number of works are being carried out in the direction of development of telecommunication infrastructure. The total bandwidth of the Internet connection is 1,200 Gbit/s, access to the Internet at a speed of 750 Gbit/s was created through the switching center, and the network load level is 76.6 percent. The number of

Internet service users increased from 22 million, of which the number of mobile Internet users was 19 million. In 237 objects across the republic, trunk telecommunication networks were expanded, telecommunication equipment was modernized, and the transmission capacity of trunk telecommunication networks was increased to 200 Gbit/s at the inter-provincial level, and 40 Gbit/s at the inter-district level. There are positive results, but this is not enough [13].

Blockchain technology is a technology that allows parties to conduct transactions safely and securely without any intermediaries. Although many people know it as a cryptocurrency technology, in fact, blockchain can be used as a digital identity, protection of ownership and property rights, and a payment system.

Open source platforms working on the basis of blockchain, such as Ethereum, allow to conclude transactions on any assets and provide banking services without traditional legal processes. Currently, the blockchain system is used in various countries of the world in the fields of financial technology, land resource management, transportation, health care, and education. The blockchain system increases the level of transparency of any industry and serves to reduce corruption. The possibilities of the digital economy and blockchain technologies are extremely promising in Uzbekistan. Interest in the digital economy has grown significantly due to significant changes taking place in society and the economy.

Modern technologies and platforms have helped businesses and individuals to reduce costs by minimizing personal communication with customers, partners, and government organizations, as well as making communication faster and easier. The result is a digital or electronic economy based on network resources. As the President of our Republic Sh.M. Mirziyoev noted, "Innovation is the future. If we start building our great future today, we should start it on the basis of innovative ideas and an innovative approach" [14]. Digital technologies not only improve the quality of products and services, but also reduce excess costs. Moreover, it is an effective anti-corruption tool. We all need to understand this deeply. Widely

introducing digital technologies in the public administration and social sphere means increasing productivity and, in a word, improving people's lives.

#### CONCLUSION AND DISCUSSION

Today, old and new companies that use IT tools to create new services and business models around the world are creating strong competition for leading companies in most industries. According to forecasts, in the coming years, the macro-economy is expected to be strongly dependent on manufacturers relying on the criteria of "lean production", additive, nano and biotechnology. In this regard, the volume of information considered necessary for rational management will also increase, and the structure of production and civil communication, business and government authorities will undergo serious changes.

#### LIST OF REFERENCES:

1. Lapidus L.V. Digital economy. - M.: Infra-M, 2019.
2. From the speech of Eldor Tulyakov, executive director of the Development Strategy Center. 2020.
3. D.Kh. Suyunov Corporate management mechanism: problems and solutions. Monograph - T.: Academy, 2007.
4. D.Kh. Suyunov and others. Electronic commerce. Textbook. -T.: 2023.-298 pages.
5. Yuldasheva, G. I. (2022). Use of electronic textbooks in improving educational efficiency. Youth, Science, Education: Topical Issues, Achievements And Innovations, (5), 36-38.
6. Yuldasheva, G., & Yoldasheva, M. (2022). Factors of informatization of the process of primary education. Elektronnoe nauchno-prakticheskoe periodicheskoe izdanie "Ekonomika i sotsium, 12(91), 689-692.
7. Yuldasheva, G., & Yoldasheva, M. (2022, September). Information security threats and their prevention factors. In International scientific conference "innovative trends in science, practice and education" (Vol. 1, No. 2, pp. 231-236).

8. Suyunov D.Kh. Scientific online magazine of TMI "International Finance and Accounting", No. 3, July, 2020, pp. 58-63.
9. Suyunov D.Kh. State regulation of the digital transformation of the economy. American Journal of Business Management, Economics and Banking ISSN (E): 2832-8078 Volume 9, | Feb., 2023
10. Suyunov D.Kh. Digitalization of the economy: concepts, problems and implementation strategy. Spectrum Journal of Innovation, Reforms and Development Volume 12, Feb., 2023 ISSN (E): 2751-1731 Website: [www.sjird.journalspark.org](http://www.sjird.journalspark.org)
11. Ashurova Sh.A. The wonders of the unexplored cave in Uzbekistan. American Journal of Business Management, Economics and Banking ISSN (E): 2832-8078 Volume 9, | Feb., 2023
12. Ashurova Sh.A. The features of the development of pilgrimage tourism in the world economy TJE - Thematic journal of Education ISSN 2249-9822 Vol-7-Issue Q3- 2022 <http://thematicsjournals.in/index.php/tjed> DOI <https://doi.org/10.5281/zenodo.6674372> UIF 2020= 7.528 IFS 2020= 7.433 2022 sjifactor 4.549 pp. 190-196.
13. Ashurova Sh.A. Valuable aspects of implementation of digital transformation in to the economy. In Volume 22 of the "World Economics & Finance Bulletin " Scholar Express Journals, Berlin Germany, May, 2023.
14. Ashurova Sh.A. The importance of innovation in the development of the digital economy Current issues of improving corporate management in the context of capital market development and privatization. Proceedings of the international scientific and practical conference. Tashkent, 2023. - B. 401-404.
13. <https://yuz.uz/news/raqamli-iqtisodiyot>
14. <https://www.khabar.uz/tekhnologiya>