

## DIGITAL ECONOMY: ESSENCE, FEATURES AND STAGES OF DEVELOPMENT

Okhunov Dilshod Mamatzhonovich

Candidate of Economics, Associate Professor, Ferghana branch of the Tashkent University of Information Technologies named after Muhammad al-Khorezmi

Okhunov Mamatjon Khamidovich Ph.D., Associate Professor, Fergana Polytechnic Institute

> Minamatov Yusupali Esonali oʻgʻli Assistent, Fergana Polytechnic Institute E-mail: mamatdilshod@rambler.ru

## Abstract

The digital economy, operating on information technology platforms, is developing at an intensive rate, which necessitates the creation of new models of such platforms. In these conditions, strategies and plans for the formation of the digital economy have been developed and implemented in many countries. Uzbekistan has also adopted documents defining the prospects of this direction. This article examines the essence and features of the digital economy and digital society.

Keywords: digital economy, automation, computerization, "Homo intelligens", digital society

## Introduction

Digitalization of economic processes is becoming a comprehensive trend, covering not only the information and communication industry itself, but also all spheres of economic activity. Internet commerce, digital agriculture, "smart" network systems, unmanned transport, personalized healthcare, whatever direction we consider, the influence of the digital revolution gaining momentum is felt everywhere. Under these conditions, individual companies, regions, countries and their associations are beginning to actively engage in the process of forming and implementing strategic decisions in the field of the digital economy, seeking to ensure their long-term competitive advantages in the newly emerging markets of new types of technologies, goods and services. Our country is no exception, a number of fundamentally important documents have been adopted in Uzbekistan in recent years. According to the Decree of the President of the Republic of Uzbekistan No. 3832 dated July 3, 2018 "On measures for the development of the digital economy in the Republic of Uzbekistan", our country is taking large-scale measures to develop the digital sector of the economy, introducing electronic document management systems, developing electronic payments and improving the regulatory framework in the field of e-commerce [1,2].

In the modern world, a person is significantly affected by the globalization of all processes, increasing uncertainty of economic and political development, the digital economy, the export and import of educational services, the formation of a knowledge society, and this obliges to take everything into



account. Our brain tends to trust traditions and reject innovations that hinder the smooth flow of professional career and life. Human nature creates obstacles to the introduction of the new. Are we ready to solve this professionally? First of all, in the academic environment, progress in learning, compliance of the graduate with professional activity, in the organization of the educational process? The future in life belongs to genomic technologies, digital, artificial intelligence, robotics, nature-like technologies, etc. [3,4]. We must proceed from how and for what we should prepare our students. We need to make sure that they themselves see the prospect of applying their knowledge.

The digital economy is a worldwide network of economic activities, commercial transactions and professional interactions that are supported by information and communication technologies (ICT). It can be briefly described as an economy based on digital technologies. In its early days, the digital economy was sometimes referred to as the Internet economy, the new economy, or the web economy because of its dependence on internet connectivity.

However, economists and business leaders argue that the digital economy is more developed and complex than the Internet economy, which, according to one definition, simply means economic value derived from the Internet.

In the international sense, the digital economy is a network, systemically organized spatial structure of relations between economic entities [5,6]. It includes the sector of creation and use of new information, technologies and products, telecommunications services, electronic business, electronic commerce, electronic markets, remote services and other components.

The digital economy reflects the transition from the third industrial Revolution to the fourth industrial Revolution. The Third Industrial Revolution, sometimes called the digital Revolution, refers to the changes that occurred at the end of the 20th century with the transition from analog electronic and mechanical devices to digital technologies. The Fourth Industrial Revolution is based on the digital revolution.

Although some individuals today use technology to simply perform existing tasks on a computer, the digital economy is more developed. It's not just using a computer to perform tasks traditionally performed manually or on analog devices. The digital economy emphasizes the possibility and necessity for organizations and individuals to use technology to perform tasks better, faster and often differently than before [7,8].

The concept of the digital economy appeared in the last decade of the 20th century. One of the scientists who formulated the fundamental principles of the digital economy was Nicholas Negroponte, a computer scientist, founder of the Media Labs of the Massachusetts Institute of Technology (MIT). In 1995, he spoke about the disadvantages of classical goods (weight, raw materials, transport) and the advantages of the new economy (lack of weight of goods, virtuality, almost unnecessary raw materials, instant global movement) [9,10]. In 1999, Bill Gates in his book "Business with the Speed of Thought" concretized the ideas of the information revolution. According to him, the development of information technology (IT) and, in particular, the Internet, has a significant impact on all aspects of society. At the same time, modern business is obliged to respond quickly to changes and challenges of the "new economy", such as growing customer needs and increased competition. He's writing: "In the future,



there will be two types of companies on the market: those who are online and those who have gone out of business."

In modern conditions of high-tech scientific and technological development, automation and computerization, the intellectualization of workers has sharply increased, a new technostructure has been created: highly skilled workers, engineers, which creates conditions for the transition from the "homo faber" paradigm to "homo intelligens" [7].

"Homo intelligens" is an educated person with a high level of intelligence, informed, understanding that each person on the one hand is an individual with his own interests, on the other hand, each person is a member of a collective, society, and therefore there are collective public interests that can be satisfied only on the basis of mutual understanding.

The broad transition to the joint-stock form of enterprises has reinforced the need for coordinated behavior between workers, between workers and managers and owners, between management specialists themselves. The latter is due to the fact that the structure of managers is constantly becoming more complicated as the achievements of science and technology are introduced into production.

Various industrial enterprises play a connecting role between the participants of digital integration, as participants interact within the framework of economic activity (Fig. 1).

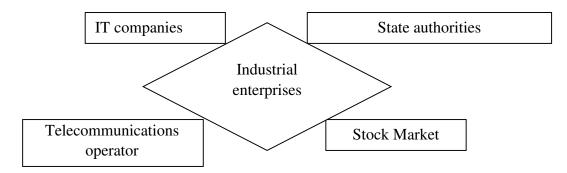
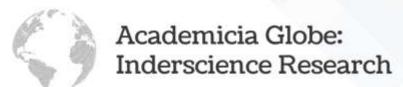


Fig.1. Participants of industrial integration processes, in the conditions of digitalization

The digital economy is changing the format of education, and therefore our main task is to teach learning, to teach thinking. Therefore, it is necessary to use new digital opportunities for educational purposes: hypertext, digital graphics, interactive format. But the effect of the development of mathematics was 50 times greater than the effect of the development of computer technology (according to Moore's law, the calculation of computing power due to mathematical ideas). Therefore, natural science knowledge is still ahead and dominates applied knowledge.

The digital society begins its journey from 30-40 years. The twentieth century since the birth of mass information processes: firstly, the development of mass media and their processing technologies, secondly, radio, thirdly, TV, and fourth, PC.

Today, transformations are taking place in all spheres of society, and they are caused by changes in the needs of the individual, society and the state. The state has 4 main spheres of society: political, economic, social and spiritual. The development of IT technologies, digital technologies covers all



spheres of society and changes their format. A lot of people are immersed in the digital environment and the state system takes this into account.

So what is a digital society? A digital society is a set of personalities united by social ties, using high-tech IT and digital technologies to achieve common development goals. The basis of the concept of digital society was stated in the Okinawa Charter of the Global Information Society (G-8) on July 22, 2000. In all spheres of digital society, any process is associated with the collection, processing, distribution, storage, analysis of information and its effective use. Thus, human activity is reflected in the digital environment (in local or global networks). So there were levels of use of digital technologies.:

- 1) Level User;
- 2) Level Special;
- 3) Level Global and local information resources.

Modern society lives in a digital world. Now there are huge flows of information and a person has to process them in a limited time. And one of the processes is "clip thinking": diverse, unrelated, fragmentary, heterogeneous, i.e. it is a person's adaptation to digital culture. The person of the digital society is increasingly focused on the perception of visual and sound images, which leads to a system of the deliberative nature of perception, it turns out like this "like / dislike". A person cannot comprehend a large flow of information, does not question the essence and meaning of events (momentary). Information generates the following types of communication: (verbal communication, nonverbal communication, quasi-communication, clip communication).

Digital society is the history of human development in the information sphere (XX - XXI centuries). Stage I mechanical and analog electronic technologies of the digital society (printed publications, books, CDs, floppy disks, semi-automatic machines, etc.) and stage II digital technologies of the digital society (e-book, online magazines, IT platforms, optical fiber, etc.). We can achieve good results by implementing smart devices and innovative projects created for the development of these technologies[12].

So what kind of digital economy specialist is needed? What qualities should he have? Talking about the portrait of a future specialist [11], experts of the largest Western companies claim that one of the main characteristics will be digital thinking. The amount of information in the world is growing exponentially, and, on the one hand, a person should know everything, on the other - be able to quickly analyze a large amount of data. The list of required competencies includes media literacy as the ability to navigate information sources, and the ability to design processes, and the ability to build virtual communications. In the future, multi-thinking will be relevant - quick analysis, quick decision-making and forecasting. Experience as accumulated theoretical knowledge will become less and less important, and the key characteristic of the portrait of a future specialist will be the ability to quickly learn and enter a new subject area. But let us to some extent disagree with these, since it is fundamental theoretical training that acts as a platform for retraining and reprofiling a specialist in the future.



## References

- 1. Mirziyoyev Sh.M. We will all build a free, democratic and prosperous state of Uzbekistan together. T.: "Uzbekistan", 2016. 56
- 2. Resolution of the President of the Republic of Uzbekistan on July 3, 2018 "On measures for the development of the digital economy in the Republic of Uzbekistan" PP-3832
- 3. D.M. Okhunov, M.H. Okhunov, M.U. Akbarova. General methodology of evaluation and selection of components of automated systems. CAD and modeling in modern electronics: collection of scientific papers of the III International Scientific and practical conference. Bryansk, 2019, pp. 54-58.
- 4. Okhunov Dilshod, Okhunov Mamatjon. General methodology of evaluation and selection of components of automated systems. CAD and modeling in modern electronics: collection of scientific papers of the V International Scientific and Practical Conference. Bryansk, 2021.
- 5. Dilshod Okhunov, Mamatjon Okhunov, Mukaddas Akbarova. Method of calculation of system reliability on the basis of construction of the logical function of the system. E3S Web of Conferences 139, (2019)/ RSES 2019.
- 6. D.Okhunov, S.Semenov, S. Gulyamov, D.Okhunova, M.Okhunov. Tools to support the Development and Promotion of Innovative Projects. SHS web of Conferences 100, 01008(2021) ISCSAI 2021, https://doi.org/10.1051/SHSconf/202110001008
- 7. D.M.Okhunov, M.H.Okhunov. Development of a model for the selection of automated objects for the implementation of work management processes for the creation and development of information systems. Collection of scientific papers of the II International Scientific and Practical Conference "CAD and modeling in the modern economy". Russia. Bryansk. October 24-25, 2018. From 147-150.
- 8. D.M. Okhunov. Modeling of selection processes of automated objects. The magazine "Continuum. Mathematics. Computer science. borazovanie". Russia. Yelets State University named after I.A. Bunin. Issue No. 3 (11) (2018). pp. 36-42.
- 9. D.M. Okhunov. Modeling of drawing up a calendar plan of project work on the development of automated systems. The sixteenth International Conference "Informatics: problems, methodology, technologies". Voronezh. February 11-12, 2016. pp. 121-126.
- ${\tt 10.\,http://pki.gospmr.org/kornUC.asp-the\ root\ certification\ center\ of\ the\ PMR.}$
- 11. United Nations E-Government Survey 2014: E-Government for the Future We Want. United Nations, 2014. –284 p.
- 12. Okhunov, M., & Minamatov, Y. (2021). Application of Innovative Projects in Information Systems. European Journal of Life Safety and Stability (2660-9630), 11, 167-168.