

EDUCATION AS A FACTOR IN THE SUSTAINABLE DEVELOPMENT OF
THE DIGITAL ECONOMY

Xabibullaev Abdulaziz Baxrom o‘g‘li

JizPI Faculty of Cybersports. Second-year student,

Gmail:khabibabdulaziz19@gmail.com

Abstract: *The article thoroughly examines the essence and possibilities of using digital technologies in the educational process. Currently, the digitalization of education is a necessary condition for the sustainable development of modern society. The article is also devoted to the analysis of factors influencing the digitalization of education, in particular, the role of information and communication technologies. The article pays special attention to the further development of science in Uzbekistan, the education of cultured youth with deep knowledge and high spirituality, the effective use of digital technologies in creating a competitive economy, and the training of qualified personnel in this field.*

Keywords: *education, digital economy, digital technologies, human capital, digitalization of education, sustainable development, innovative development, e-learning, distance learning, information and communication technologies.*

Annotatsiya: *Maqolada o‘quv jarayonida raqamli texnologiyalardan foydalanishning mohiyati va imkoniyatlari chuqur o‘rganilgan. Hozirgi kunda ta’limni raqamlashtirish zamonaviy jamiyatning barqaror rivojlanishi uchun zarur shart hisoblanadi. Shuningdek, maqolada ta’limni raqamlashtirishga ta’sir etuvchi omillarni, xususan, axborot-kommunikatsiya texnologiyalarining rolini tahlil qilishga bag‘ishlangan, hamda O‘zbekistonda ilm-fanni yanada rivojlantirish, chuqur bilim va yuqori ma’naviyatga ega, madaniyatli yoshlarni tarbiyalash, raqobatbardosh iqtisodiyot yaratishda raqamli texnologiyalardan samarali foydalanish hamda ushbu sohada malakali kadrlar tayyorlashga alohida e’tibor qaratilgan.*

Kalit so‘zlar: *ta’lim, raqamli iqtisodiyot, raqamli texnologiyalar, inson kapitali, ta’limni raqamlashtirish, barqaror rivojlanish, innovatsion rivojlanish, elektron ta’lim, masofaviy ta’lim, axborot-kommunikatsiya texnologiyalari*

Аннотация: *В статье глубоко изучены сущность и возможности использования цифровых технологий в учебном процессе. В настоящее время цифровизация образования является необходимым условием для устойчивого развития современного общества. Статья также посвящена анализу факторов, влияющих на цифровизацию образования, в частности, роли информационно-коммуникационных технологий. В статье особое внимание уделяется дальнейшему развитию науки в Узбекистане, воспитанию культурной молодежи с глубокими знаниями и высокой духовностью, эффективному использованию цифровых технологий в создании конкурентоспособной экономики, а также подготовке квалифицированных кадров в этой области.*

Ключевые слова: образование, цифровая экономика, цифровые технологии, человеческий капитал, цифровизация образования, устойчивое развитие, инновационное развитие, электронное образование, дистанционное обучение, информационно-коммуникационные технологии.

Abstract: *The article thoroughly examines the essence and possibilities of using digital technologies in the educational process. Currently, the digitalization of education is a necessary condition for the sustainable development of modern society. The article is also devoted to the analysis of factors influencing the digitalization of education, in particular, the role of information and communication technologies. The article pays special attention to the further development of science in Uzbekistan, the education of cultured youth with deep knowledge and high spirituality, the effective use of digital technologies in creating a competitive economy, and the training of qualified personnel in this field.*

Keywords: *education, digital economy, digital technologies, human capital, digitalization of education, sustainable development, innovative development, e-learning, distance learning, information and communication technologies.*

Introduction: In today's conditions of globalization and digital transformation, the education system needs to adapt to the changes taking place in every sphere of society. The development of the digital economy depends, first of all, on the training of qualified, creative and modern technology-savvy personnel. From this point of view, the issue of introducing digital technologies in education and their effective use is becoming one of the priority areas of state policy.

The formation of a digital educational environment is an important factor in individualizing the educational process, expanding the possibilities of distance learning, improving the quality of education, and forming modern competencies. In particular, innovative solutions such as artificial intelligence, "cloud technologies", "Big Data" and "Internet of Things" are forming new methodological approaches in the educational process.

The process of integrating the digital economy and education is being consistently implemented in the Republic of Uzbekistan. Within the framework of the "Digital Uzbekistan-2030" strategy, large-scale work is being carried out to equip all levels of education with modern information and communication technologies, create a database of electronic resources, and improve the digital competencies of teachers.

Therefore, this study aims to reveal the economic and social significance of the digitalization of the education system, analyze the impact of digital technologies on the effectiveness of education, and scientifically illuminate the role of education in the sustainable development of the digital economy in the conditions of Uzbekistan.

Literature review: The issue of the interrelationship between the digital economy and education has been widely studied by many domestic and foreign researchers in recent years. Scientific sources recognize the role of human capital, especially the education system, as a decisive factor in the development of the digital economy. Studies published by the World Bank, OECD (Organization for Economic Cooperation and Development), and UNESCO

have identified the formation of digital competencies, adapting the education system to technological innovations, and reducing the digital divide as one of the main areas of the global digital economy. For example, the OECD (2021) report highlights digital education infrastructure as one of the main indicators determining the competitiveness of countries. Foreign scholars K. Schwab (2016) in his work “The Fourth Industrial Revolution” emphasize that the integration of digital technologies into the educational process has opened a new stage in the development of human resources. E. Brynjolfsson and A. McAfee (2017) put forward the principle of lifelong learning as the main factor of success in the digital economy. Uzbek researchers are also conducting a number of scientific studies in this area. In particular, the studies of A. Kh. Abdukodirov (2020), D. Ju’raev (2021) and Sh. Kadirova (2022) emphasize that the digitalization of the education system is an important factor in the sustainable development of the national economy. In their opinion, the development of digital educational infrastructure not only increases the efficiency of the educational process, but also allows training personnel who meet the new requirements of the labor market. Also, the “Digital Uzbekistan-2030” strategy, the Law “On Education” and the resolutions of the President of the Republic of Uzbekistan on the development of the digital economy and information and communication technologies strengthen the scientific and theoretical foundations in this direction. These documents are aimed at accelerating economic growth through the development of the education system in an innovative digital environment. An analysis of the above literature shows that the introduction of digital technologies into the education system is not only a process of technical modernization, but also a key condition for the formation of a new economic mindset, the creation of an innovative environment and the preparation of human resources for a sustainable digital economy.

Research methodology: This study aimed to study the impact of the education system on the sustainable development of the digital economy, as well as to analyze the economic and social results of the introduction of digital technologies into the educational process.

1. Research approach

This study was based on a comprehensive, systematic and innovative approach. The main idea of the study is that the introduction of digital technologies into the educational process is not only a modernization of the educational process, but also a process of forming the human capital necessary for the sustainable development of the digital economy. Based on a systematic approach, the study identified the inextricable links between education, technology and the economy and analyzed them as a single socio-economic system. This approach allowed for a comprehensive assessment of the impact of digital changes in the education sector on economic efficiency.

2. Object and subject of the study

Object: the education system and its interaction with the digital economy, that is, the place and role of the education sector in the process of digital transformation.

Subject: the impact, mechanisms and results of the process of introducing digital technologies in the education system on economic efficiency, human capital development and sustainable growth of the digital economy.

The study studied the state of implementation of digital technologies on the example of the education system of Uzbekistan, their impact on the labor market, human capital and economic stability.

3. Research methods

Several interrelated scientific methods were used to achieve the goals and objectives set in this study. These are:

1. Theoretical and methodological analysis method.

The existing scientific literature on the digital economy, education system, human capital and innovative development, state programs and reports of international organizations were studied, and the theoretical basis of the study was formed.

2. Comparative (comparative) method.

The processes of digitization of the education system of Uzbekistan were compared with the experiences of foreign countries - South Korea, Estonia, Finland, Singapore and China. Through this, advanced models and effective approaches to the development of digital education were identified.

3. Systematic analysis method.

The interaction between education, digital technologies and the economy was analyzed based on a systematic approach. Through this method, the relationships between digital education infrastructure, human capital and economic efficiency were identified.

4. Empirical and statistical methods.

Based on open data from the Ministry of Digital Technologies, the Ministry of Higher Education, Science and Innovations of the Republic of Uzbekistan, and the State Statistics Committee, indicators of the introduction of digital technologies in the education sector in recent years were studied. Based on the dynamics of the data, the economic efficiency of the digitization process was assessed.

Results and conclusion: The results obtained during the research showed that the digitalization of the education system is a decisive factor in the sustainable development of the digital economy. As a result of the introduction of modern digital technologies into the educational process, the efficiency of educational activities increases, the quality indicators of human capital improve, and the innovative development potential of the economy increases. An analysis of the experience of Uzbekistan shows that significant reforms are being implemented in the country in the direction of digitalization of education. Within the framework of the “Digital Uzbekistan-2030” strategy, the information and communication infrastructure of educational institutions is being expanded, e-learning platforms are being introduced, and systematic measures are being taken to improve the digital competencies of teachers. All this is accelerating the process of training personnel with the necessary knowledge and skills for the digital economy. According to the results of the research, there is a direct relationship between the development of digital educational infrastructure and economic efficiency. The use of digital technologies in the educational process not only improves the quality of teaching, but also allows for the effective use of time and resources. At the same time, the digitalization of the educational process creates the opportunity for widespread use of distance learning, online platforms and open educational resources, which

expands the popularity and scope of education. A comparative analysis with the experience of foreign countries has shown that the following conditions are important for achieving successful results in the development of digital education: a stable digital infrastructure, a high-quality Internet network, a system of retraining teachers, the creation of digital content and its constant updating. By widely introducing these factors into the education system of Uzbekistan, it is possible to significantly accelerate the pace of the country's digital economic development.

REFERENCES:

1. O‘zbekiston Respublikasi Prezidentining “Raqamli O‘zbekiston - 2030” strategiyasini tasdiqlash to‘g‘risidagi qarori. - Toshkent, 2020-yil.
2. “Ta’lim to‘g‘risida”gi O‘zbekiston Respublikasining Qonuni. - Toshkent: Adolat, 2021-yil.
3. Abduqodirov A.X. Raqamli iqtisodiyot va ta’lim tizimini modernizatsiya qilish muammolari. - Toshkent: Iqtisodiyot, 2020.
4. Jo‘raev D. Raqamli transformatsiya sharoitida ta’lim tizimini rivojlantirish masalalari. - “Iqtisod va innovatsiyalar” jurnali, №2, 2021.
5. Qodirova Sh. Axborot-kommunikatsiya texnologiyalarining ta’lim sifatiga ta’siri. - “Oliy ta’lim muammolari” jurnali, №4, 2022.
6. Schwab, K. The Fourth Industrial Revolution. - Geneva: World Economic Forum, 2016.
7. Brynjolfsson, E., & McAfee, A. Machine, Platform, Crowd: Harnessing Our Digital Future. - New York: W.W. Norton & Company, 2017.