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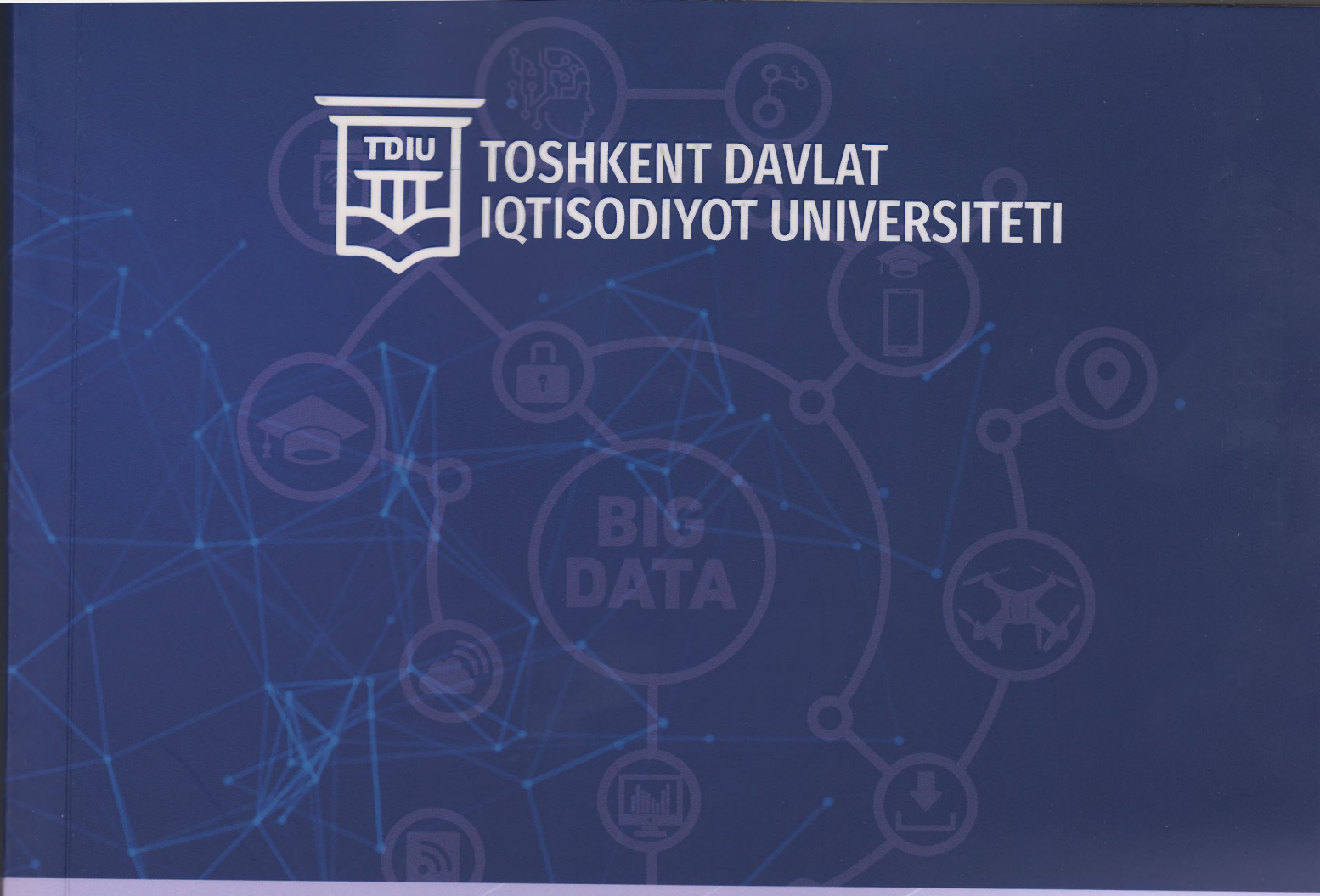

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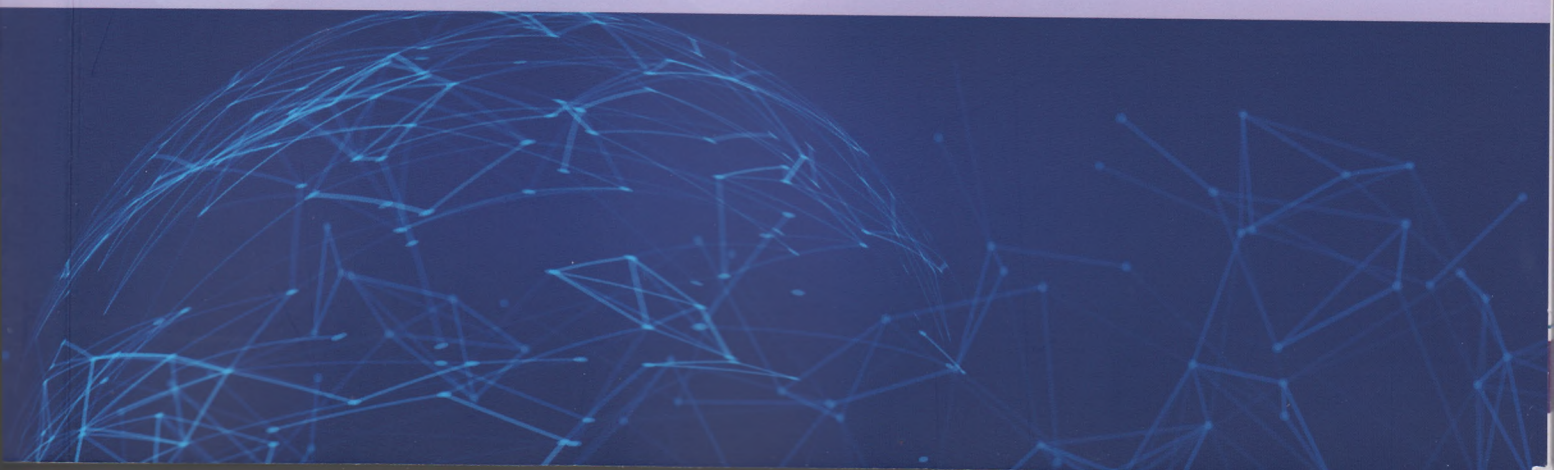

РАҚАМЛИ ИҚТИСОДИЁТ ВА АХБОРОТ ТЕХНОЛОГИЯЛАРИ
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МУНДАРИЖА

THE MAIN DIRECTIONS FOR IMPROVING THE QUALITY OF HIGHER EDUCATION IN THE CONTEXT OF DIGITAL TRANSFORMATION

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Annotation
The article analyzes the main directions for improving the activities of higher educational institutions in the context of the digital transformation of the world economic system. This publication analyzes literary and Internet sources on the problem of optimizing educational, upbringing and scientific activities in a higher educational institution based on improving the digital infrastructure, as well as methods and forms of education. In this article, the authors present the experience of using digital technologies in universities of the Russian Federation and the Republic of Uzbekistan. In addition, the article states that innovative technologies help students to participate in scientific developments, start-up projects together with students from other universities and practitioners. The authors also noted that the use of digital technologies contributes to the formation of a digital economy, the development of a digital infrastructure of a university, an increase in the level of digital competence of all participants in the educational process at a university, which in turn serves as a guarantee of training highly qualified specialists for various industries and spheres of the national economy and, as a result, growth competitiveness of the country in the world economic market.

Keywords
digital technologies, teaching methods and tools, higher education, management, optimization, professionalism, innovative teaching technologies, highly qualified specialists, education quality, efficiency

Introduction

The formation of the digital economy on a global scale has an impact on the development of all aspects of society. Under the influence of digital technological solutions, production and business processes, the social sphere of society are changing. Digital development also has a huge impact on the education sector, including the improvement of the activities of higher educational institutions.

In the modern period, it is no longer possible to imagine the activities of a higher educational institution without the integrated use of computer networks, digital platforms, virtual libraries, electronic courses and educational publications, advanced technological and pedagogical solutions based on the use of advanced information and communication technologies.

The experience of developed countries such as the USA, Japan, Canada, South Korea, Austria, Denmark, Great Britain, Germany, Israel, Norway, etc. shows that digital technologies not only have a significant impact on the process of teaching students in higher education institutions, but also are the key to the successful implementation of socio-economic development programs that contribute to the growth of the welfare of the population and the country's competitiveness in the world economic market.

As experience shows, digital technologies in the modern period have a positive impact on the development of academic mobility programs, attracting leading scientists and practitioners to improve the quality of education.

Digital technologies provide access to information that a few years ago was available only to scientists and experts in a certain field of knowledge. Comprehensive studies by scientists from various countries show that the development of the digital space of higher education goes in several directions at once: the digitalization of the educational process, the introduction of digital solutions in the management processes of

universities, the development of online education, the formation of a virtual educational environment and the stimulation of modern scientific research, etc.

Moreover, each university is unique in the field of introducing modern digital technologies. In this article, we will focus on examples of digital solutions at the Financial University under the Government of the Russian Federation and experience in this area at the Tashkent State University of Economics.

Research Methodology

When writing this article, the scientific basic method of theoretical and empirical research was used: comparison of cognitive operations underlying judgments about the similarity or difference of objects, questionnaire survey methods, methods of working with specialized software products, Internet sources, methods of analysis, synthesis, comparison, induction, deduction.

The research methodology is also based on the study of the works of world scientists on this topic. For example, the works of such foreign scientists as R. Barro, D. Weil, J. Kendrick and others reflect the conceptual foundations of the relationship between education and economic growth based on the use of innovative technologies.

The theory of the economy of modern education has been studied in the works of scientists from near and far abroad. These include such scientists as B.A. Burnyashov [1], Allison DeeAnn [2], Owusu Boateng R., A. Amankwaa [3], A.A. Auzan, G.I. Abdrakhmanova, K.O. Vishnevsky, L.M. Gokhberg [4], J.M. Van Rienen, S.Yu. Glaziev [5], M. Dhonson [6], A.V. Keshelava [7], O. Kivinen, B. Clark, A. Arutyunova, I.E. Zolin [8], S.L. Kostanyan, A. Maddison, Novoseltseva G.B., N.V. Rasskazova, T.N. Savina [9], A.S. Slavyanov, S.S. Feshin [10], K. Errow and others.

Such domestic scientists as R.Kh. Alimov, B.A. Begalov [11], S.S. Gulyamov, R.A. Dadabaeva, I.E. Zhukovskaya [12], Sh.I. Xashimxodjayev [15], A.T. Shermukhamedov and others also comprehensively explore the problem of using digital technologies in various sectors and areas of the national economy of the Republic of Uzbekistan, including the country's higher economic education.

A large range of works by modern scientists is devoted to the implementation of artificial intelligence in the activities of higher educational institutions [13,14]. Studies show that in the classical sense, artificial intelligence is defined by scientists as a certain property of intelligent systems to perform creative functions inherent in man. The technology of creating intelligent machines using special software is based on the application of this property.

For example, the authors of the study “Artificial Intelligence in Higher Education. Current Uses and Future Applications” (Learning House, 2018) state that artificial intelligence systems in universities are most often used in the following aspects:

- Identification and testing of applicants for admission to the university;
- acceleration of learning;
- complex tasks in the process of teaching students at the university;
- optimization and comprehensive adaptation of educational programs in the areas of study at the university.

Scientists emphasize that chatbots are applicable when recruiting students to a university. For example, an AI-enabled chatbot like AdmitHub is very effective in advising US applicants on admissions, as well as on university tuition fees.

In addition, foreign researchers note that artificial intelligence has received its recognition when using various simulators. As an example, they cite the ShadowHealth medical system, which simulates the symptoms of various diseases, training future diagnosticians. The M-Write digital platform teaches users the rules of academic writing and allows students to evaluate the acquired knowledge of students in the learning process. In addition, foreign scientists note that many foreign universities use a machine tutor in the MATHiaU project, which helps students learn the basics of mathematics. According to foreign scientists, in the field of application of artificial intelligence systems in higher education, the developments of EdTech startups of universities, or software products developed by scientists in collaboration with students and practitioners in the field of artificial intelligence systems, are very successful.

But, despite all the positive and multidimensional properties of artificial intelligence systems, scientists note that artificial intelligence, however, will never be able to completely replace human labor. Because such human qualities as intuition, creative thinking, critical judgment, cognitive flexibility, empathy, goodwill cannot be reproduced by any technical and technological innovations. An analysis of the views of foreign and domestic scientists in the field of digital technologies in the field of higher education made it possible to identify the following provisions: the publications in question reflect global trends in the introduction of digital technologies in the educational and managerial process of universities; all authors note the importance of

digitalization of the basic activities of the university, and also pay close attention to teaching the teaching staff modern digital solutions.

In addition, the analysis of literary sources showed that higher education institutions in the modern period are increasingly using in their activities such components of digital education as operational communication systems, digital platforms, digital file archives, educational computer programs, actively use digital technological solutions in holding webinars, online contests, conferences, etc. Despite a solid number of projects and implemented developments on the use of digital technologies in the activities of higher scientific institutions, to date, a universal solution that allows to perform all the tasks of optimizing the activities of a university through the use of digital technologies has not yet been developed. In this regard, the relevance of this article is beyond doubt.

Research results

In the modern period of the development of the world economy, digital technologies are firmly entering all educational institutions, contributing to the improvement of management processes and improving the quality of training.

Both in the Russian Federation and in the Republic of Uzbekistan, today the digitalization of education in general and higher education in particular is one of the strategic priorities for the development of the country.

The research conducted by the authors in the course of writing this article showed that digital technologies such as big data, blockchain, artificial intelligence, the Internet of Things, robotization, 3D modeling are today an effective tool for transferring knowledge and skills to students, serve as the basis for building a new educational environment, a reliable assistant in the professional development of the teaching staff.

Speaking about the use of digital technologies in universities, it should be noted that along with positive trends in their implementation, such as innovation, accessibility, mobility, simplicity, uniqueness, usefulness, time savings, reliability and simplification of thought processes, there are also difficulties. For example, technical and technological training of universities, the availability of special software systems, resource consumption, special training of teaching staff.

Experience of using digital solutions in the activities of the Tashkent State University of Economics and the Financial University under the Government of the Russian Federation.

In the modern period, scientific and pedagogical teams of universities are working to achieve the highest results in educational, educational, scientific and international activities in order to occupy high positions in national and international rankings. Organizations such as “Quacquarelli Symonds World University Rankings”, “Times Higher Education” or “Academic Ranking of World Universities”.

The teaching staff of universities, when conducting classroom classes, professional seminars and other types of educational and scientific activities, effectively uses the technologies of joint experimental research of a teacher and a student, multimedia technologies, “Panoramic Images” technologies, electronic content, 3D modeling using special software and hardware.

Currently, a digital platform based on the Moodle web application operates at Tashkent State University, and at the Financial University under the Government of the Russian Federation, all digital solutions are implemented based on the implementation of the Galaxy system. Platform technologies allow teaching staff to develop various web courses. The main elements of these courses are text and graphic pages, various interactive tasks, e-mail newsletters, glossaries, dictionaries, references to literary sources, etc.

Platform solutions are very mobile, they allow educators to create all kinds of web courses and fill them with educational content. The elements of online courses are various interactive tasks, text pages, dictionaries, links, files and much more.

Digital platforms allow not only a teacher-student dialogue on all components of the educational process, but also serve as a reliable assistant to the university management in monitoring the quality of the educational process, as well as during international conferences.

Modern reality shows that the use of digital platforms in higher education already has many positive aspects. But, at the same time, research and practical recommendations are still needed for their effective implementation and optimal functioning in the field of higher education.

Summing up the above, it should be noted that the following models of education are currently used in universities:

- blended learning, combining elements of traditional education and the introduction of digital mechanisms in certain stages of the educational process;
- continuous development of online education;
- formation of a virtual educational environment;

- introduction of digital technologies in education management.

Currently, many students, teachers and university staff are well aware of the Modular Object-Oriented Dynamic Learning Environment (MOODLE) training system, which was developed back in 1999. It was developed by a student at the Australian University Curtin Martin Dugiamas in order to consolidate and test knowledge in the disciplines studied. Currently, this system has been significantly improved and translated into more than 100 languages of the world. The great advantage of this system is the fact that it is free, but at the same time it can be used by a wide range of users [13,15].

Unique courses for online education allows you to create a platform solution such as Skillshare. Course authors can post video images, projects, tutorials, and more. This platform provides a full range for the manifestation of their creativity in the development of courses. And when registering in the so-called premium environment, any author can receive a fee for minutes of viewing the lessons posted on the platform.

The Teachable platform is one of the most popular in the formation of the digital economy. It is used not only for standard training, but also when studying tools for organizing e-commerce.

Simplicity and ease of use in business characterize such a platform tool as Thinkific.

More and more users of the Teachery online platform note that with its ease of use, it allows you to effectively conduct online sales of developed courses.

Today, you can list many more platforms for developing training courses, online learning, testing. For example, Mooc, Udacity, Docebo, etc., which not only actively offer their services for learning, but are also constantly improved through the use of artificial intelligence systems and modern learning technologies [15].

The integrated use of all the above models contributes to the effective organization of the university and decent employment of graduates in the modern labor market.

More and more, when organizing the educational process, the so-called VR technology is used - virtual reality technology. This technology allows you to generate images, that is, to represent a particular process in a three-dimensional image or sound iPhone, etc.

Speaking about the application of digital technologies, it is necessary to pay attention to blockchain technology, which can be used, for example, for student portfolios, document storage, examination papers, etc.

Digital technologies in the activities of the university contribute to the quality of training of highly qualified specialists for industries and spheres of the national economy.

Conclusion and suggestions

Experience shows that in the modern period, digital technological solutions are increasingly used in the activities of universities, which allow for the transition to personalized learning, which is necessary to achieve the highest results of educational activities.

Digital technologies effectively influence the development of the digital infrastructure of universities. This aspect implies the development of communication channels, the acquisition of new devices for the use of digital educational materials in the educational process.

It should be noted that with the development of the material and technical base of the university, it becomes possible to use machine learning technologies, robotics, and artificial intelligence.

In addition, the development of digital technologies requires the faculty to constantly improve their qualifications in the use of advanced innovative technologies.

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