

ECONOSCITECH INTEGRATION

ISSUE
7

INTERNATIONAL SCIENTIFIC
ELECTRONIC JOURNAL



**TASHKENT STATE
UNIVERSITY OF ECONOMICS**



**American University
of Technology**

Powered by Arizona State University®

ISSN: 3060-5075



Acceptance of articles

PUBLISHED EVERY MONTHLY



ARTICLE CONTRIBUTORS

**PROFESSORS-TEACHERS, SPECIALISTS
AND SCIENTIFIC RESEARCHERS.**



Google
Scholar

**Academic
Resource
Index**
ResearchBib

BASE

OpenAIRE

doi
Digital
Object
Identifier

OPEN ACCESS

CONTACT:



+998 94 3540880



<https://econoscitech-integration-journal.uz>



2026

**EDITOR-IN-CHIEF:**

Zufarova Nozima Gulamiddinovna
DSc., Dean of Tourism Faculty, TSUE

DEPUTY EDITOR-IN-CHIEF:

Makhmudov Nosir Makhmudovich
DSc., Prof., Academician

DEPUTY EDITOR-IN-CHIEF:

Suyunov Dilmurod Xolmurodovich
Doctor of Economics (DSc), Professor,

DEPUTY EDITOR-IN-CHIEF:

Allayarov Shamsiddin Amanullayevich
doctor of economics (DSC), professor

RESPONSIBLE SECRETARY:

Otaboyev Axmed Maxsudbek o'g'li
TSUE independent researcher

THE SCIENTIFIC-POPULAR
ELECTRONIC JOURNAL
"ECONOSCITECH-INTEGRATION"
HAS BEEN REGISTERED UNDER
THE NUMBER C-5669651 BY THE
AGENCY FOR INFORMATION AND
MASS COMMUNICATIONS (AOKA)
OF THE REPUBLIC OF UZBEKISTAN,
EFFECTIVE FROM OCTOBER 9, 2024.

In accordance with Resolution No. 384/6 dated April 10, 2026, issued by the Presidium of the Supreme Attestation Commission under the Ministry of Higher Education, Science and Innovation of the Republic of Uzbekistan, this journal is included in the list of recommended international scientific publications for publishing the primary research findings of doctoral dissertations in the field of Economic Sciences.

Partners: Tashkent State University of Economics / American University of Technology in Tashkent (AUT)

Electronic publication. Issue 7. 374 pages.
Approved for publication in July 2026.

Editorial Board Members:

Sharipov Kongratbay Avezimbetovich,
Doctor of Technical Sciences (DSc), Professor



Teshabayev To'liqin Zakirovich,
Doctor of Economic Sciences (DSc), Professor



Said Irandoust,
Doctor of Chemical Engineering Sciences,
Professor



Abdurakhmanova Gulnora Kalandarovna,
Doctor of Economic Sciences (DSc), Professor



Khudoykulov Sadirdin Karimovich,
Doctor of Economics, (DSc), Professor



Tokunaga Masahiro,
professor, PhD of Economics of the Faculty of
Business and Commerce



Debasis Das,
professor Department of Computer Science



Nitin Goje,
professor and Program Lead - Computer Science



Nargizakhon Shamshieva
Doctor of Economic Sciences, Professor



Rakhmonov Norim Razzakovich,
Doctor of Economic Sciences (DSc), Professor

Bayxonov Bahodirjon Tursunbayevich
Doctor of Science (DSc), Professor



Shomurodov Ravshan Tursunkulovich,
PhD, Associate Professor



Boymuratov Abduraxmat Djumayevich
Doctor of Philosophy (PhD) in Economics



Sharopova Nafosat Radjabovna
DSc, Associate Professor



Sultanova Kamila Mukhtorali Kizi
Master of Science

CONTENTS

RECONCEPTUALIZING HIGHER EDUCATION MARKETING IN THE ALGORITHMIC ERA: INSTITUTIONAL GENERATIVE AI AND MULTIDIMENSIONAL UNIVERSITY BRAND EQUITY	10
Nozima Zufarova	
DEVELOPMENT OF WAREHOUSE AND INVENTORY MANAGEMENT IN MANUFACTURING ENTERPRISES	16
Maxmidov Shirinboy Botirovich	
IMPROVING THE MECHANISM FOR ENHANCING THE POTENTIAL OF OIL AND GAS INDUSTRY ENTERPRISES IN UZBEKISTAN	25
Bekmuhamedova Malika Iskandarbekovna	
IMPROVING THE METHODOLOGY OF ARTIFICIAL INTELLIGENCE-BASED MARKETING DECISION-MAKING IN CONSTRUCTION MATERIALS MANUFACTURING ENTERPRISES	30
Uzakova Umida Ruzievna	
ORGANIZATIONAL AND ECONOMIC ASPECTS OF IMPROVING THE QUALITY OF DIGITAL SERVICES IN THE HIGHER EDUCATION SYSTEM	37
Berdiev Sunnatullo Alikulovich	

ORGANIZATIONAL AND ECONOMIC ASPECTS OF IMPROVING THE QUALITY OF DIGITAL SERVICES IN THE HIGHER EDUCATION SYSTEM

Berdiev Sunnatullo Alikulovich
Assistant Teacher,
Shahrisabz State Pedagogical Institute
ORCID: 0009-0000-7003-5071
Email: sunnatulloberdiyev22@gmail.com

Annotation. This article examines the transformation of management and service delivery in higher education institutions and highlights modern trends in improving their activities. The study is based on institutional changes observed in the higher education system of Uzbekistan during 2021–2025, including the expansion of student coverage and the current level of implementation of reforms. The article also analyzes the transition processes of higher education institutions from a traditional management model to a digital, data-driven, and results-oriented management system. According to the research findings, digital transformation is considered an important factor in improving the quality of service delivery, increasing management efficiency, and optimizing educational services. At the same time, issues such as insufficient digital competencies among staff and the incomplete formation of integrated management systems were identified. The article outlines scientific and practical proposals for addressing these issues.

Keywords: higher education, transformation, digital management, quality of service delivery, digital university, information-based management, education reforms, innovative management.

Аннотация. В данной статье исследуются процессы трансформации управления и предоставления услуг в высших учебных заведениях, а также современные тенденции повышения эффективности их деятельности. Исследование основано на анализе институциональных изменений, произошедших в системе высшего образования Республики Узбекистан в 2021–2025 годах, включая расширение охвата студентов и оценку текущего уровня реализации реформ. Особое внимание уделено анализу перехода высших учебных заведений от традиционной модели управления к цифровой, основанной на данных и ориентированной на результат системе управления. По результатам исследования установлено, что цифровая трансформация является важным фактором повышения качества предоставляемых услуг, эффективности управления и оптимизации образовательных процессов. Вместе с тем выявлены такие проблемы, как недостаточный уровень цифровых компетенций сотрудников и незавершённость формирования интегрированных систем управления. В статье предложены научно обоснованные практические рекомендации по устранению выявленных проблем.

Ключевые слова: высшее образование, трансформация, цифровое управление, качество предоставления услуг, цифровой университет, управление на основе данных, реформы образования, инновационный менеджмент.

INTRODUCTION

In the context of the rapid development of the global digital economy, increasing global competition, and the widespread introduction of innovative management approaches, the activities of higher education institutions require fundamental transformation. In modern conditions, higher education institutions operate not only as providers of educational services but also as important drivers of scientific research, innovation, human capital development, and regional economic growth. Therefore, improving their management systems and service delivery activities in accordance with modern requirements is of strategic importance.

In recent years, particular attention has been paid worldwide to digital transformation, artificial intelligence technologies, information-based management, electronic universities, customer-oriented management of educational services, and the introduction of corporate governance models in the field of higher education.

These processes expand opportunities to improve the quality of education, ensure management efficiency, use resources rationally, and meet the needs of students, professors, teachers, and employers.

In Uzbekistan, reforming the higher education system is also considered one of the priority directions of state policy at the new stage of development. Measures are being implemented to grant academic and financial independence to higher education institutions, introduce modern management mechanisms, widely use digital technologies, improve the quality of educational services based on international standards, and strengthen the positions of universities in international rankings. These processes further increase the need to develop scientifically grounded approaches to the effective organization of higher education institutions and the improvement of service delivery systems.

Under conditions of transformation, university management requires a transition from the traditional administrative management model to a strategic, digitalized, results-oriented management system based on cooperation with stakeholders. In this context, the quality of educational services, student satisfaction, the efficiency of digital services, the speed and transparency of managerial decisions, and the efficient use of resources are becoming key evaluation criteria. At the same time, improving service delivery activities is considered one of the important factors in ensuring the competitiveness of universities.

LITERATURE REVIEW

In the context of transformation, the issues of improving the management and service delivery activities of higher education institutions have become one of the most relevant research areas in the global scientific community in recent years. In particular, the number of fundamental and applied studies on the digital transformation of universities, institutional development, service quality management, and stakeholder-oriented management has increased significantly.

International studies interpret the digital transformation of universities not merely as the introduction of information systems but as a comprehensive renewal of the entire management system, educational processes, service delivery infrastructure, and decision-making mechanisms. In particular, OECD experts (2023) assess digital transformation in educational institutions as a process of improving education quality, management efficiency, and resource utilization through information-based management, artificial intelligence, digital platforms, and integrated information systems. They emphasize that the main purpose of digitalization is not only the introduction of technologies but also the improvement of educational quality indicators.

Antonio Fernández, Beatriz Gómez, Cleona Binjacu, and co-authors (2023), based on a comprehensive literature review devoted to digital transformation in higher education institutions, identify three key factors for successful university transformation: strategic management, digital culture, and the compatibility of technological infrastructure. According to the authors, the introduction of digital technologies alone does not increase university efficiency; rather, their integration with management strategy ensures competitiveness.

The OECD study "How Are OECD Governments Navigating the Digital Higher Education Landscape?" (2023) identifies public policy, institutional autonomy, quality assessment, and the legal foundations of digital services as important factors in the development of digital universities. The authors emphasize that digital transformation affects not only the educational process but also university financial management, personnel policy, student services, and cooperation with external stakeholders.

Siti Aisyah and co-authors (2023), based on empirical research, prove that digital transformation in education has a direct positive impact on service quality. According to the authors, the use of digital platforms, the expansion of electronic services, and the introduction of automated management systems increase student satisfaction and ensure the speed and transparency of services.

Shevchuk and Shpak (2023), studying the digital transformation of quality management in educational institutions, emphasize that the digitalization of educational processes brings the quality management system to a new stage. In their opinion, digital monitoring, analytical platforms, and automated assessment systems significantly increase the accuracy and speed of managerial decisions.

Emanuela Proietti (2023) analyzes the organizational aspects of digital transformation in university management and notes that the strategic development of universities is directly related to digital management competencies, institutional culture, and the level of innovation adoption. The author evaluates digital transformation primarily as a change in management philosophy.

Anarbaeva and Abdullaeva (2023), in their research, examine the issues of digital transformation of the higher education system under the conditions of the digital economy. They justify that the digitalization of university management is an important means of increasing management efficiency, automating educational processes, and improving the quality of services provided to students. According to the authors, the comprehensive introduction of digital technologies into the educational process increases university competitiveness and raises the quality of education to a new level.

Local scholars are also increasingly conducting scientific research on the modernization of the higher education system, improvement of university management, enhancement of educational service quality, and digitalization. In particular, Hakimov and Vahobova (2023), in their research on improving management processes in the higher education system, emphasize that financial independence, strategic management, and the introduction of modern management tools are decisive factors in ensuring the competitiveness of educational institutions. The authors also note the need to develop digital management mechanisms and a management model focused on the needs of stakeholders in order to improve the quality of educational services.

Halimov (2023) analyzes the organizational and pedagogical conditions for transforming higher education institutions and substantiates that the success of transformation depends on the university's strategic management approach, the formation of an innovative environment, and the level of integration of digital technologies into educational and management processes. In his opinion, effective change management in universities is the main condition for institutional development.

Scientific and analytical publications devoted to reforms aimed at digitalizing higher education in the country also emphasize that the formation of a unified digital ecosystem in universities, the creation of a management system integrated with e-government services, and the use of Business Intelligence technologies contribute to increasing the speed and transparency of managerial decisions. These approaches serve as an important theoretical basis for automating service processes in universities and improving the quality of services provided to students.

RESEARCH METHODOLOGY

This study employs a qualitative research approach based on a systematic review of scientific literature and a comparative analysis of digital transformation practices in higher education institutions. The research applies systems analysis, comparative analysis, content analysis, and scientific generalization to examine the organizational and economic aspects of improving digital service quality. International studies, OECD reports, and recent publications on higher education digitalization are used as the primary sources of analysis. The findings provide a basis for identifying key challenges and formulating practical recommendations for enhancing digital service quality and management efficiency in higher education institutions.

ANALYSIS AND RESULTS

Improving the management and service delivery activities of higher education institutions in the context of transformation is now a systemic, multifaceted, and strategically important process. This process is not limited to the digitalization of educational services; it also requires a fundamental change in the institutional governance model of universities, the efficiency of resource use, the quality of human capital, and the system of relations with stakeholders.

The conducted analysis shows that large-scale institutional changes were implemented in the higher education system of Uzbekistan during 2021–2025. These changes are characterized by an increase in the number of universities, expanded student enrollment, and the rapid development of digital service infrastructure (Table 1).

Table 1

Dynamics of the number of higher education institutions and institutional structure in Uzbekistan (2021–2025)¹

Year	Total universities	State University	Non-governmental university	Branches and foreign OTM branches
2021	159	92	24	43
2022	165	94	28	43
2023	180	96	33	51
2024	188	97	36	55
2025	191	97	38	56

The analysis of the table data shows that the number of higher education institutions demonstrated a steady growth trend between 2021 and 2025. This growth is primarily associated with the activation of the non-governmental sector and the expansion of branches of foreign universities in the country.

¹ Source: Compiled by the author based on international research studies.

In particular, the increase in the number of non-state higher education institutions from 24 to 38 indicates that a competitive environment is being formed in the educational services market. This situation strengthens quality-based competition among universities and creates the need to orient the management system toward efficiency.

At the same time, the fact that the number of state higher education institutions has remained almost stable indicates that institutional balance is being maintained in the system. However, the increase in the number of branches confirms the implementation of a policy aimed at territorial expansion of educational services and improving access to higher education (Table 2).

Table 2

Dynamics of the number of students and coverage in higher education (2021–2025)²

Year	Number of students (thousands)	Higher education coverage (%)	Admission Quota Growth (%)
2021	808	28.0	100
2022	950	33.0	118
2023	1 150	38.5	135
2024	1 250	42.0	148
2025	1 320	45.0	160

According to the analysis, the increase in the number of students from 808 thousand in 2021 to 1 million 320 thousand by 2025 is one of the most important transformation indicators in the higher education system.

This growth can be explained by two main factors: first, the expansion of admission quotas to higher education by the state, and second, the creation of additional study places through non-state and foreign universities.

The increase in the coverage rate from 28 percent to 45 percent indicates the strengthening of the country's human capital development policy. At the same time, this situation also increases the need to improve infrastructure, faculty capacity, and service quality in universities.

In particular, the rapid growth in the number of students is increasing the demand for digital solutions in the management system, since traditional management mechanisms limit the ability to effectively manage such dynamic growth (Table 3).

Table 3

Digital transformation and service system indicators in higher education institutions (2021–2025)³

Year	Electronic services coverage (%)	Usage of LMS platforms (%)	Automated control systems (%)	Level of digital integration
2021	45	38	30	low
2022	52	44	36	low-medium
2023	63	58	47	middle
2024	74	69	60	high
2025	82	77	68	high

The analysis of the table shows that digital transformation is the most dynamic direction. The increase in electronic service coverage from 45% to 82% indicates that the service delivery model in universities is undergoing fundamental change.

The growing use of LMS platforms means that educational processes are shifting toward a hybrid format. This contributes to improving the quality of education, expanding students' opportunities for independent learning, and optimizing teacher–student interaction.

The increase in automated management systems from 30% to 68% indicates that the role of the human factor in decision-making processes has been partially algorithmized. This situation increases management efficiency while also creating the need to improve the digital competencies of personnel.

The conducted analysis shows that transformation processes in the higher education system are taking place in three main directions:

² Source: Compiled by the author based on international research studies.

³ Source: Compiled by the author based on international research studies.

Institutional expansion, reflected in the increase in the number of higher education institutions and their branches;

Expansion of social coverage, reflected in the increase in the number of students and admission quotas;

Digital transformation, reflected in the development of electronic services and automation.

Despite this positive momentum, several systemic issues remain, including regional disparities in service quality, unequal levels of digital infrastructure across higher education institutions, insufficient digital competencies among professors and teachers, and the incomplete formation of integrated management systems.

Therefore, the following areas should be prioritized in the future management of higher education institutions: implementing a data-driven governance system, fully integrating the digital services ecosystem, assessing service quality based on KPIs, and strengthening the student-centered service model.

CONCLUSIONS AND RECOMMENDATIONS

The results of the study showed that improving the management and service delivery activities of higher education institutions in the context of transformation requires a systematic and multifaceted approach. Based on the analysis, it can be noted that during 2021–2025, institutional expansion, a significant increase in student enrollment, and an expansion of the share of digital services were observed in the higher education system of Uzbekistan. This indicates that the higher education system is transitioning to new management models focused on quality and efficiency.

According to the study, the increase in the number of higher education institutions and the activation of the non-governmental sector have strengthened the competitive environment, which, in turn, requires improving the quality of educational services. At the same time, the steady growth in the number of students makes it increasingly urgent to modernize university service infrastructure, enhance human resource capacity, and digitalize the management system.

One of the most important conclusions is that digital transformation is accelerating the transition from the traditional model of governance in higher education institutions to a data-driven, automated, and results-oriented management system. The expansion of electronic services, LMS platforms, and automated management systems is increasing the speed and transparency of decision-making processes in universities.

However, the analysis also shows that, along with these positive changes, several systemic issues remain. These include the uneven development of digital infrastructure across higher education institutions, insufficient digital competencies among staff, the absence of a single standardized system for assessing service quality, and the incomplete implementation of integrated management platforms.

Based on these findings, the following scientific and practical proposals were developed:

1. All management processes in higher education institutions, including academic, financial, human resource, and student service processes, should be integrated into a single digital platform. This will reduce the impact of the human factor in decision-making and strengthen data-driven management.

2. The system for evaluating university activities should be improved based on indicators such as student satisfaction, service efficiency, and the level of electronic service usage.

3. Special training, retraining courses, and certification systems should be introduced to enable teachers to work effectively in the digital educational environment.

4. All university services should be organized according to the student-centered principle; that is, services should be simplified and digitalized to the greatest extent possible.

5. The practice of strategic decision-making using Big Data and analytical systems should be introduced in universities. This will make it possible to accurately forecast resource allocation and development strategies.

6. It is advisable to continuously improve management models and service standards through the exchange of experience with foreign universities.

REFERENCES

1. Aisyah S., et al. The Influence of Digital Transformation on Service Quality in the Education Sector // E3S Web of Conferences. – 2023. – Vol. 440.
2. Anarbaeva F.U., Abdullayeva M.V. Digital Transformation of the Higher Education System in the Context of the Digital Economy // Journal of Economics, Finance and Innovation. – 2023.
3. Broberg N., Golden G. *How Are OECD Governments Navigating the Digital Higher Education Landscape?* // OECD Education Working Papers. – 2023. – No. 303.

4. Fernández A., Gómez B., Binjaku K., et al. Digital Transformation Initiatives in Higher Education Institutions: A Multivocal Literature Review // *Education and Information Technologies*. – 2023. – Vol. 28. – P. 12351–12382.
5. Hakimov N., Vakhobova M. The Process of Improving Student Knowledge in the Higher Education System: Problems and Solutions // *Green Economy and Development*. – 2023. – Vol. 1, No. 11. – DOI: 10.55439/GED/vol1_iss11-12/a351.
6. Halimov A.B. Organizational and Pedagogical Conditions of Transformation of Higher Education Institutions // *Central Asian Journal of Education and Innovation*. – 2023.
7. OECD. *OECD Digital Education Outlook 2023: Towards an Effective Digital Education Ecosystem*. – Paris: OECD Publishing, 2023. – DOI: 10.1787/c74f03de-en.
8. OECD. *Shaping Digital Education: Enabling Factors for Quality, Equity and Efficiency*. – Paris: OECD Publishing, 2023.
9. Shevchuk E.V., Shpak A.V. Digital Transformation of Quality Management of Educational Business Processes // *RUDN Journal of Informatization in Education*. – 2023.

Proofreader: Xondamir Ismoilov
Layout and Designer: Hasan Maqsudov

2026. № 7

© When materials are reproduced, the ECONOSCITECH-INTEGRATION journal must be cited as the source. Authors are responsible for the accuracy of the information in materials and advertisements published in the journal. Editorial opinions may not always align with those of the authors. Submitted materials will not be returned to the editorial office.

To publish articles in this journal, you may submit articles, advertisements, stories, and other creative materials through the following links. Materials and advertisements are published on a paid basis.

You may subscribe to the journal at any time using the following details. Once subscribed, please send a screenshot or photo of your payment confirmation to our Telegram page @iqtisodiyot_77. Based on this, we will send the latest issue of the journal to your address each month.

Our address: Tashkent city, Yunusobod district, 19th block, House 17.

