

# INNOVATION SCIENCE AND TECHNOLOGY



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**ISSUE 4**

 Acceptance of papers **April, 2026**



**Acceptance of papers**  
Published monthly



**Topics**  
economics,  
technology, social  
sciences

**ISSN 3060-5229**

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JOURNAL **"INNOVATION SCIENCE AND  
TECHNOLOGY"** HAS BEEN REGISTERED  
UNDER THE NUMBER **C-5669633** BY THE  
AGENCY FOR INFORMATION AND MASS  
COMMUNICATIONS (AOKA) OF THE  
REPUBLIC OF UZBEKISTAN, EFFECTIVE  
FROM OCTOBER 9, 2024.

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# CONTENTS

THE IMPACT OF FINANCIAL RISKS ON THE DEVELOPMENT OF REGIONAL ECONOMIC GROWTH DRIVERS AND OPPORTUNITIES FOR THEIR MITIGATION .....	17
<b>Turopova Nigora Xolmurod qizi</b>	
UTILIZATION OF INTERNAL RESERVES FOR INCREASING THE EFFICIENCY OF REGIONAL TOURISM (CASE STUDY OF THE REPUBLIC OF KARAKALPAKSTAN) .....	20
<b>Naurizbaev Aliakbar Rustamovich</b>	
MATHEMATICAL MODELS AND ALGORITHMS FOR PROCESSING NOISE DATA .....	23
<b>Jovlieva Dilnoz Mustofa qizi</b>	
ASSESSMENT OF THE IMPACT OF ENVIRONMENTAL RISKS IN BUSINESS ACTIVITIES AND WAYS TO REDUCE THEM.....	28
<b>Abdukhamid Abdumalikovich Bektemirov</b>	
A MULTI-LEVEL SYSTEM OF STATISTICAL INDICATORS FOR REGIONAL TRANSPORT INFRASTRUCTURE ASSESSMENT: METHODOLOGY AND APPROBATION .....	34
<b>Keunimzhaev Mukhamedali Kuanyshaevich</b>	
THE IMPACT OF BANKS ON THE FINANCIAL STABILITY OF THE ECONOMY OF THE REPUBLIC OF UZBEKISTAN .....	39
<b>Usmonov Faridun Firdavsievich, Ishonkulova Feruza Asatovna</b>	
EMPIRICAL EVALUATION OF MACRO- AND MICROECONOMIC FACTORS AFFECTING THE EFFICIENCY OF INVESTMENT ACTIVITY AND THEIR RELATIONSHIP WITH ECONOMIC EFFICIENCY.....	43
<b>Aytmuratova Ulbike Jalgasovna</b>	
MECHANISMS FOR IMPROVING ECONOMIC EFFICIENCY THROUGH OPTIMIZATION OF PRODUCTION RESOURCE POTENTIAL IN UZBEKISTAN .....	47
<b>Sattarov Abdusamat Umirqulovich</b>	
PROMISING DIRECTIONS FOR APPLYING FOREIGN EXPERIENCE IN THE DEVELOPMENT OF GREEN TOURISM IN UZBEKISTAN .....	52
<b>Rakhimova Dilfuza Mirzakasimovna</b>	
PRIORITIES FOR REGULATING FINANCIAL RELATIONS IN PROVIDING HOUSING TO THE POPULATION IN UZBEKISTAN.....	58
<b>Khannarov Komiljon Karimovich</b>	
IMPROVING THE ORGANIZATION OF PRODUCTION COST ACCOUNTING IN FULL-SYSTEM FARMS SPECIALIZING IN THE CULTIVATION OF CYPRINID FISH.....	62
<b>Aitimbetov Amirbek Qoishibekovich</b>	
THE TRANSFORMATIONAL ROLE OF SMALL BUSINESS IN UZBEKISTAN'S ECONOMIC DEVELOPMENT: A COMPREHENSIVE ANALYSIS BASED ON 2025 NATIONAL STATISTICS.....	68
<b>Isakjanova Sabokhat Muhamedovna</b>	
AN INTEGRATED METHODOLOGICAL FRAMEWORK FOR ADVANCING GREEN TOURISM MODELS IN THE DIGITAL ECONOMY ERA.....	79
<b>Rasulova Nigora Yusupovna</b>	
FACTORS AFFECTING THE COMPETITIVENESS OF COMPANIES.....	83
<b>Kamoliddinov Ilhomjon Muhammadjonovich, Nosirov Eldor Nosirjon ugli</b>	
THE ROLE OF INDUSTRIAL ENTERPRISES IN INCREASING THE EXPORT POTENTIAL OF THE UZBEK ECONOMY.....	88
<b>Musayeva Shoira Azimovna</b>	
DEVELOPMENT OF MARKET FACTORS TO ENSURE THE GROWTH OF THE ECONOMIC POTENTIAL OF THE ENTERPRISE (USING THE EXAMPLE OF THE SAG EXPRESS BRAND STORES) .....	92
<b>Usmonova Dilfuza Ilkhomovna</b>	
THE CONCEPT OF REGIONAL IMAGE AND ITS ECONOMIC CONTENT (THE CASE OF THE KHOREZM REGION).....	99
<b>Dilshod Ibragimovich Ibdullayev</b>	

DEVELOPMENT OF QUALITY MANAGEMENT SYSTEMS IN THE CONTEXT OF DIGITAL TRANSFORMATION .....	106
<b>Shakhnoza Samandarovna Ziyadillayeva</b>	
ADVANCED APPROACHES TO THE ASSESSMENT AND MANAGEMENT OF CURRENT FINANCIAL STABILITY IN JOINT-STOCK COMPANIES USING CFAR (CASH FLOW AT RISK) AND 3 $\Sigma$ STATISTICAL RISK MODELS .....	114
<b>Kurbonov Xayrilla</b>	
DEVELOPMENT OF A PROGRAM FOR ANALYZING MEDICAL LABORATORY RESULTS USING ARTIFICIAL INTELLIGENCE MODELS.....	118
<b>Gofurjonov Muhammadali, Kamolov Shamsiddin</b>	
APPLICATION OF DIGITAL TRANSFORMATION IN IMPROVING MANAGEMENT STRATEGIES OF CONSTRUCTION MATERIALS INDUSTRY ENTERPRISES.....	122
<b>Ubaydullayev Mukhammadjon Abdusamad o'g'li</b>	
IMPROVING MECHANISMS FOR ENHANCING THE RESOURCE POTENTIAL OF ORGANIZATIONS IN THE EDUCATIONAL SERVICES SECTOR.....	125
<b>Ibrohim Meliboyev</b>	
ECONOMETRIC ANALYSIS OF THE RELATIONSHIP BETWEEN SERVICE QUALITY AND ECONOMIC EFFICIENCY.....	130
<b>Khudoyorov Lochinbek Bahromovich</b>	
MONETARY POLICY INSTRUMENTS IMPROVE USAGE PRACTICES .....	135
<b>A.A. Ismailov</b>	
E-COMMERCE ADOPTION IN TRADITIONAL STORES.....	140
<b>Nuserov Bakhtiyor</b>	
ENHANCING FINANCIAL SUSTAINABILITY AND OPERATIONAL EFFICIENCY OF JSC "HUDUDGAZTAMINOT": KEY FACTORS AND DIGITAL TRANSFORMATION STRATEGIES.....	146
<b>Ergashev Muhibbek Aslamovich</b>	
METHODS FOR IMPROVING AUTOMOTIVE FUEL QUALITY INDICATORS THROUGH THE USE OF ADDITIVES.....	151
<b>Xushnayev Obid, Sheraliyev Ulugbek, Astonov Alisher</b>	
MONETARY POLICY INSTRUMENTS.....	156
<b>A.A. Ismailov</b>	
THE ROLE OF STRATEGIC MANAGEMENT IN ENHANCING A COUNTRY'S INTERNATIONAL IMAGE: THE CASE OF SWITZERLAND.....	161
<b>Idirisbaeva Hurliman Amanbay qizi, Kurolov Maksud Obitovich</b>	
VOLUNTEER TOURISM: CURRENT IMPACTS AND FUTURE DIRECTIONS .....	170
<b>Ossama Moustafa Elsetouhy</b>	
COMPUTER GRAPHICS IN MODERN EDUCATION: PRACTICAL CAPABILITIES OF THE FIGMA PLATFORM.....	176
<b>Maxamadov Rustam Xabibullayevich, Djamatov Mustafa Xatamovich</b>	
DEVELOPING THE FINANCIAL SUSTAINABILITY OF HIGHER EDUCATION INSTITUTIONS BASED ON DIGITAL TECHNOLOGIES.....	182
<b>Abdurasulov Sardor Tolqin ugli</b>	
THE IMPORTANCE AND PROSPECTS OF TOURISM DEVELOPMENT .....	187
<b>Ibodova Dilsora Ibodovna, Qosimov Jahongir Ruziboyevich</b>	
STRATEGIES FOR OPTIMIZING THE STRUCTURE OF COMMERCIAL BANK ASSETS AND INCREASING EFFICIENCY IN UZBEKISTAN .....	194
<b>Ibrohimov Davronbek Muhammadi o'g'li</b>	
STRATEGIC DIRECTIONS FOR THE DEVELOPMENT OF EXPORTS OF PRODUCTS BASED ON ARTIFICIAL FIBERS.....	199
<b>Raximov Furqat Jalolovich</b>	
FUNDAMENTALS OF USING MARKETING RESEARCH TO IMPROVE SALES SYSTEM EFFECTIVENESS.....	206
<b>Abduxalilova Laylo Tuxtasinovna</b>	

FASHION MARKETING AS AN INSTRUMENT FOR SHAPING CONSUMER-BASED BRAND VALUE.....	213
<b>Navruz-Zoda Bakhtiyor Negmatovich, Aripova Makhliyo Salakhiddinovna</b>	
ENSURING SUSTAINABLE GROWTH OF THE NATIONAL ECONOMY IN THE CONTEXT OF DIGITAL TRANSFORMATION, IMPROVING INNOVATIVE DEVELOPMENT STRATEGIES, AND ENHANCING THE EFFICIENCY OF IMPLEMENTING DIGITAL ECONOMY PRINCIPLES IN THE FINANCE, BANKING, AND TOURISM SECTORS .....	220
<b>Inatullayeva Intizor Jamshid qizi, Uroqov Uchqun Yunusovich</b>	
SOCIAL AND SECURITY PROBLEMS OF INNOVATIVE TOURISM DEVELOPMENT IN THE REGION.....	223
<b>Q.A. Musakhanov</b>	
DIGITAL ECONOMY AND INNOVATION AS FACTORS OF SOCIAL DEVELOPMENT IN UZBEKISTAN .....	228
<b>Ibragimova Saodat Abdumuminovna, Sadullayeva Sevara Uchqun qizi</b>	
THE SOCIAL INSURANCE SYSTEM OF THE UNITED STATES OF AMERICA .....	232
<b>Javliyev Nuriddin Bektemir o'g'li</b>	
DEVELOPMENT OF EFFECTIVE ORGANIZATIONAL-ECONOMIC MECHANISMS FOR TRANSITION TO THE INNOVATIVE MARKETING CONCEPT IN ENTERPRISES UNDER DIGITAL TRANSFORMATION .....	236
<b>Bobomurodov Qayimjon Homidovich</b>	
FOMO-DRIVEN PURCHASING IN E-COMMERCE FLASH SALES: AN INTEGRATIVE CONCEPTUAL FRAMEWORK .....	241
<b>Muhammadimov Abdukodir Bakhodirjon Ugli, Arciana Damayanti, Javliev Nuriddin Bektemir ugli</b>	
PHYSICO-MECHANICAL PROPERTIES OF COARSE FEEDS .....	250
<b>Yodgorov Jamoliddin Nomozovich, Yadgarov Sirojiddin Nomozovich</b>	
EVOLUTION AND STANDARDIZATION OF SI MEASUREMENT UNITS IN THE INTERNATIONAL SYSTEM .....	255
<b>Maxmudov Dostonbek Soyibjon o'g'li</b>	
PROCEDURE FOR ACCOUNTING OF ESTIMATED LIABILITIES BY BUDGETARY ORGANIZATIONS .....	259
<b>Jabbarova Charos Aminovna</b>	
FEATURES OF AUDIT IN DEVELOPING INVESTMENT LENDING PRACTICES IN COMMERCIAL BANKS.....	263
<b>Jamshid Mirzakhmedov</b>	
DIGITAL TRANSFORMATION OF THE DEVELOPMENT OF THE INSURANCE INSTITUTE .....	271
<b>Sherov Sanjar Radjabovich</b>	
PROSPECTS FOR THE DEVELOPMENT OF ASSET MANAGEMENT MECHANISMS IN THE NATIONAL BANK OF THE REPUBLIC OF UZBEKISTAN UNDER THE CONDITIONS OF THE DIGITAL ECONOMY.....	275
<b>Tuxtamisheva Gulnora Usmanovna</b>	

# PROSPECTS FOR THE DEVELOPMENT OF ASSET MANAGEMENT MECHANISMS IN THE NATIONAL BANK OF THE REPUBLIC OF UZBEKISTAN UNDER THE CONDITIONS OF THE DIGITAL ECONOMY

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**Abstract:** This article examines the prospects for improving asset management mechanisms in the National Bank of the Republic of Uzbekistan under the conditions of the digital economy. The study analyzes the impact of digital technologies, remote banking services, automated risk assessment systems, and digital financial platforms on the efficiency of bank asset management. Particular attention is paid to the structure and quality of bank assets, liquidity, profitability, customer funds, and the expansion of remote banking services. The research shows that the National Bank has strengthened its financial position through the growth of assets, customer funds, cash and cash equivalents, and net profit. At the same time, the study identifies the need to improve digital retail banking services, diversify assets, strengthen risk management, and introduce artificial intelligence technologies in banking operations. The article concludes that further development of asset management mechanisms should be closely connected with digital transformation, technological modernization, and the wider use of innovative financial tools.

**Key words:** digital economy, bank assets, asset management, National Bank of Uzbekistan, liquidity, profitability, remote banking services, digital banking, risk management, artificial intelligence.

## INTRODUCTION

In recent years, the rapid development of the digital economy has significantly changed the operating environment of commercial banks and increased the importance of effective asset management. The growing use of digital technologies, online banking services, artificial intelligence, big data, and automated financial platforms has created new opportunities for improving banking efficiency, reducing operational costs, and strengthening financial stability. At the same time, these changes require banks to modernize their asset management mechanisms in order to respond more effectively to market risks, liquidity challenges, and the increasing competition in the financial sector.

For the National Bank of the Republic of Uzbekistan, the issue of improving asset management mechanisms is particularly important because of its significant role in financing large investment projects, supporting business activity, and ensuring the stability of the national banking system. In the context of the digital economy, the bank needs to strengthen the quality of its assets, improve liquidity management, diversify its income-generating operations, and expand digital banking services. In particular, the growing importance of remote banking systems, digital payment platforms, and automated risk assessment tools requires the bank to develop more flexible and technologically advanced approaches to asset management.

The relevance of the research is determined by the need to study the current state of asset management mechanisms in the National Bank of the Republic of Uzbekistan and identify the main directions for their further development under the conditions of digital transformation. The object of the research is the asset management system of the National Bank of the Republic of Uzbekistan, while the subject of the research is the organizational, financial, and digital mechanisms influencing the effectiveness of bank asset management.

The purpose of the study is to analyze the existing asset management mechanisms in the National Bank of the Republic of Uzbekistan and develop recommendations for improving them in the context of the digital

economy. To achieve this goal, the study examines the theoretical foundations of bank asset management, analyzes the impact of digital technologies on banking operations, evaluates the current financial indicators of the National Bank, and identifies the main opportunities for increasing the efficiency of asset management.

The scientific novelty of the research lies in the identification of modern digital factors influencing asset management efficiency in the National Bank and in the development of practical recommendations related to the use of remote banking services, digital analytical systems, artificial intelligence, and automated risk management tools. The practical significance of the study is that its conclusions and recommendations may be used to improve the financial stability, competitiveness, and long-term development of the National Bank under the conditions of the digital economy.

## LITERATURE REVIEW

In the context of the digital economy, the development of bank asset management mechanisms is closely linked to the introduction of digital technologies and remote banking services. An important regulatory basis for this process in Uzbekistan is the Presidential Decree “On Approval of the Digital Uzbekistan – 2030 Strategy and Measures for Its Effective Implementation” [1]. The document emphasizes the need to modernize banking activities through online services, digital infrastructure, cloud technologies, and electronic payment systems.

An important regulatory basis for studying the prospects of improving asset management mechanisms in the National Bank of the Republic of Uzbekistan is the Presidential Decree No. PF-21 dated February 16, 2026 [2]. This document emphasizes that the implementation of the “Uzbekistan – 2030” Strategy should be aligned with new global challenges, strategic planning principles, and fully digitalized monitoring mechanisms. In this regard, the decree highlights the role of digital platforms, integrated data sources, and performance indicators in strengthening the effectiveness of public and sectoral management.

According to the Resolution of the Board of the Central Bank of the Republic of Uzbekistan on the approval of the Regulation “On the Procedure for Classifying Asset Quality in Commercial Banks and Forming and Using Reserves to Cover Potential Losses on Assets” [3], effective asset management should be based on the assessment of asset quality, risk level, collateral sufficiency, and reserve adequacy. The regulation classifies bank assets into standard, substandard, unsatisfactory, doubtful, and loss categories, which allows banks to strengthen monitoring and improve the management of problematic assets. This approach is particularly important for the National Bank in the context of the digital economy, where asset management increasingly depends on automated risk assessment and digital monitoring systems.

According to *Bank Management and Financial Services* by Peter S. Rose and Sylvia C. Hudgins [4], effective asset management in commercial banks is based on the optimal allocation of resources among loans, investment securities, cash reserves, and other earning assets. The authors emphasize that the quality of the loan portfolio, the diversification of investment assets, and the balance between profitability and liquidity are among the key factors determining a bank’s financial stability. In addition, they note that modern banks should apply advanced asset-liability management techniques, risk assessment models, and digital technologies to improve operational efficiency and maximize returns on assets.

According to *Risk Management and Financial Institutions* by John C. Hull [5], effective asset management in commercial banks requires an integrated approach to risk management, liquidity regulation, and asset-liability balance. The author emphasizes that modern banks should not only focus on profitability, but also ensure financial stability through the proper management of credit risk, market risk, operational risk, and liquidity risk. Hull also highlights the importance of complying with Basel III requirements, particularly regarding capital adequacy, liquidity coverage ratio (LCR), and net stable funding ratio (NSFR). These principles are especially relevant for the National Bank of the Republic of Uzbekistan in the context of the digital economy, where the growing use of financial technologies, digital platforms, and automated banking services increases both opportunities and risks in asset management.

Recent studies show that digital transformation has become one of the main factors influencing the efficiency of banking management. In particular, Allaberdiev [6] notes that the automation of risk management systems, optimization of capital and liquidity, and the introduction of innovative financial instruments increase the competitiveness and financial stability of commercial banks. The author also emphasizes that effective financial management is closely related to the proper allocation of assets, maintenance of liquidity, and improvement of profitability.

According to N. M. Nayimova [7], the widespread introduction of information technologies into the banking system and the national payment system has created broad opportunities for the development of digital banking services and payment systems in Uzbekistan. The author argues that, in order to analyze the development of digital banking and the regulatory framework supporting this process, it is first necessary to examine the stages of development of the national payment system, since it forms the institutional and technological basis for modern digital banking services.

Ю. Г. Швецов [8] notes that the development of digital banking is based on cloud technologies, big data, artificial intelligence, remote transactions, and online financial services. According to the author, these technologies reduce operating costs, increase service speed, and improve the efficiency of banking operations.

For the National Bank of the Republic of Uzbekistan, these ideas are important because they show that effective asset management in the digital economy should rely on automated risk assessment, digital monitoring systems, and online banking platforms. Therefore, the future development of asset management mechanisms is closely linked with technological modernization and the expansion of digital services.

Е. С. Матерова, И. Ю. Орлов and П. П. Гайзатуллин emphasize that the digital transformation of the banking sector has become one of the key directions of modern financial development. The authors note that digital technologies not only expand remote banking services and improve customer accessibility, but also help banks reduce operating costs, strengthen competitiveness, and preserve their assets through more efficient business processes. At the same time, the study points out that digital transformation requires an integrated approach, staff readiness, and the improvement of financial literacy among the population.

These conclusions are important for the National Bank of the Republic of Uzbekistan, since they show that the improvement of asset management mechanisms in the digital economy should rely on digital banking services, automated management systems, and modern technological solutions that increase efficiency and support financial stability. The article also highlights that investments in information technologies produce delayed but significant positive effects on banking performance, which confirms the strategic importance of digital modernization for the future development of bank asset management.

## RESEARCH METHODOLOGY

The research is based on the use of comparative analysis, statistical analysis, and logical generalization methods. In the process of the study, the financial indicators of the National Bank of the Republic of Uzbekistan were analyzed, including the structure of assets, liquidity, profitability, customer funds, and the use of remote banking services. Particular attention was paid to changes in loans, investment securities, cash and cash equivalents, and net financial results.

The study also uses official data from the Central Bank of the Republic of Uzbekistan, the interim consolidated financial statements of the National Bank for the first half of 2025, regulatory documents, and scientific literature related to banking asset management and digital transformation. Based on these sources, the research evaluates the current state of asset management mechanisms in the National Bank and identifies the main directions for their improvement under the conditions of the digital economy.

## ANALYSIS AND RESULTS

This section analyzes the current state of asset management mechanisms in the National Bank of the Republic of Uzbekistan under the conditions of the digital economy and evaluates the main directions for their further improvement. Particular attention is paid to the structure and quality of bank assets, the balance between profitability and liquidity, the management of credit and investment portfolios, and the role of digital technologies in increasing the efficiency of banking operations. In the modern banking system, effective asset management is not limited to the simple allocation of financial resources, but increasingly depends on the speed of information processing, the accuracy of risk assessment, the flexibility of management decisions, and the level of digital integration in internal banking processes.

In this regard, the analysis focuses on how the introduction of automated monitoring systems, digital platforms, remote banking services, and modern risk management tools affects the efficiency of asset management in the National Bank. The study also considers the extent to which digital transformation contributes to improving asset quality, strengthening financial stability, optimizing liquidity, and increasing the overall return on banking operations. Based on this approach, the results of the analysis make it possible to identify the most significant trends, existing problems, and practical opportunities for the development of asset management mechanisms in the bank within the framework of the digital economy.

The rapid expansion of remote banking services has become one of the key indicators of digital transformation in the banking sector of Uzbekistan. The growing number of users of mobile applications, internet banking, online payments, and дистанционные банковские сервисы reflects the increasing demand for convenient, fast, and accessible financial services among both individuals and business entities. In particular, the active use of remote banking systems contributes to reducing operating costs, expanding customer coverage, accelerating financial transactions, and improving the overall efficiency of bank asset management.

As of October 1, 2025, more than 74.1 million customers in Uzbekistan used remote banking systems, of which 72.5 million were individuals and 1.68 million were legal entities and individual entrepreneurs. These

figures indicate that individuals remain the main driver of digital banking growth, while banks with advanced digital platforms and mobile ecosystems have achieved the highest level of customer involvement in remote services (Figure 1).

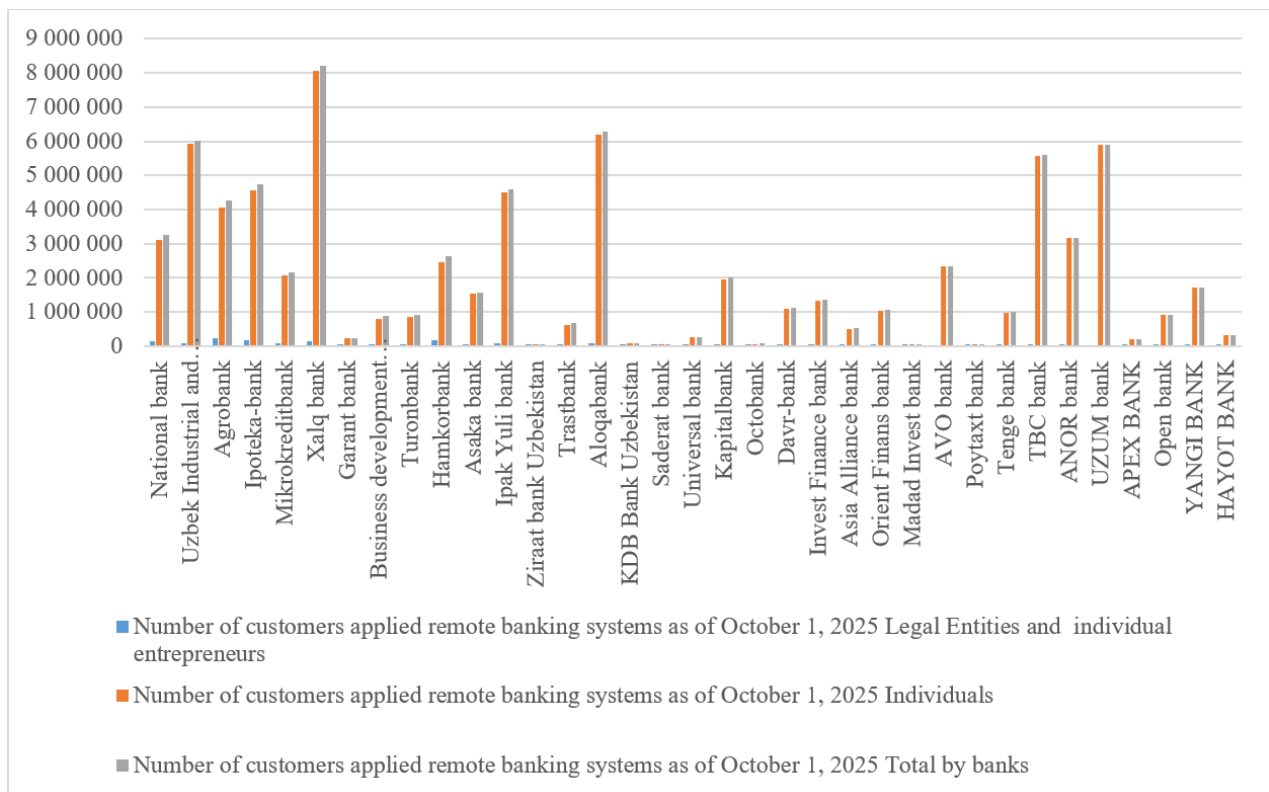


Figure 1. Number of Customers Using Remote Banking Systems in Commercial Banks of Uzbekistan as of October 1, 2025<sup>1</sup>

The data show that remote banking services have become one of the main channels of interaction between commercial banks and customers in Uzbekistan. As of October 1, 2025, the total number of users of remote banking systems reached 74.18 million, including 72.49 million individuals and 1.68 million legal entities and individual entrepreneurs. This indicates that the main growth in digital banking services is driven by retail customers, while business entities also increasingly use online banking platforms for financial transactions and account management.

Among the banks, Xalq bank recorded the highest number of remote banking users, with 8.19 million customers. It was followed by Aloqabank with 6.28 million users, Uzbek Industrial and Construction Bank with 6.01 million users, and UZUM bank with 5.90 million users. These figures demonstrate that banks with highly developed digital ecosystems, mobile applications, and online payment services have gained a stronger position in the market.

The results also show that newly established digital banks such as TBC bank, ANOR bank, and UZUM bank have achieved rapid growth in customer numbers despite having relatively small networks of physical branches. This confirms that the use of modern digital platforms, simplified customer onboarding, and mobile financial services has become one of the key factors of competitiveness in the banking sector.

For National bank, the number of customers using remote banking systems amounted to 3.24 million, including 139.3 thousand legal entities and individual entrepreneurs and 3.10 million individuals. Compared to many other large commercial banks, the National Bank demonstrates relatively strong positions in servicing corporate clients, as the number of legal entities using its remote banking services is higher than in many private and digital banks. This reflects the bank's traditionally strong role in financing large enterprises, state projects, and business entities.

At the same time, the National Bank's total number of remote banking users remains lower than that of leading retail-oriented banks such as Xalq bank, Aloqabank, and Uz sanoat qurilish bank. This suggests

<sup>1</sup> Source: Prepared by the author based on data from the Central Bank of the Republic of Uzbekistan statistical bulletin on remote banking services as of October 1, 2025.

that the bank still has significant potential to expand its digital retail services, mobile banking applications, online payment systems, and remote customer support tools. Strengthening these directions would allow the National Bank to increase its competitiveness, broaden its customer base, and improve the efficiency of asset management in the context of the digital economy.

To assess the effectiveness of asset management mechanisms in the National Bank of Uzbekistan under the conditions of the digital economy, it is important to analyze the main financial indicators reflecting the structure, quality, liquidity, and profitability of bank assets. In particular, changes in the volume of total assets, loans, investment securities, customer funds, and financial results make it possible to evaluate the bank's current position and identify the key directions of its further development. The following table presents the main indicators characterizing the dynamics of asset management performance in the National Bank based on its interim consolidated financial statements for the first half of 2025 (Table 1).

**Table 1. Key indicators characterizing the asset management performance of the National Bank of Uzbekistan<sup>2</sup>**

Indicator	30 June 2025	Comparative period	Change (+/-)	Change, %
Total assets	145,433,781	136,803,388*	+8,630,393	+6.3
Cash and cash equivalents	27,829,851	18,422,741*	+9,407,110	+51.1
Amounts due from credit institutions	3,686,146	2,569,389*	+1,116,757	+43.5
Loans to customers	104,338,981	102,570,837*	+1,768,144	+1.7
Investment securities	3,855,223	7,441,674*	-3,586,451	-48.2
Other assets	5,364,078	4,538,320*	+825,758	+18.2
Total liabilities	124,336,296	116,757,168*	+7,579,128	+6.5
Amounts due to customers	54,072,274	27,530,426*	+26,541,848	+96.4
Other borrowed funds	8,437,457	13,085,129*	-4,647,672	-35.5
Total equity	21,097,485	20,046,220*	+1,051,265	+5.2
Interest income	6,717,285	5,950,284**	+767,001	+12.9
Net interest income	3,258,831	3,007,249**	+251,582	+8.4
Net fee and commission income	421,254	344,871**	+76,383	+22.1
Profit before income tax	2,163,705	1,932,828**	+230,877	+11.9
Profit for the period	1,653,121	1,514,659**	+138,462	+9.1
Net cash generated from operating activities	8,367,478	-122,156**	+8,489,634	n/a
Net increase in cash and cash equivalents	9,407,110	1,471,211**	+7,935,899	+539.4

Note: figures are presented in million Uzbek soums.

\* Comparative data as of 31 December 2024.

\*\* Comparative data for the six months ended 30 June 2024.

The data indicate that in the first half of 2025 the National Bank of Uzbekistan strengthened its financial position and improved several key indicators of asset management. Total assets increased by 6.3%, reaching UZS 145.4 trillion, while the loan portfolio remained the dominant component of assets and rose to UZS 104.3 trillion. At the same time, cash and cash equivalents grew by 51.1%, which reflects a significant strengthening of the bank's liquidity position. A noticeable decline in investment securities by 48.2% may indicate a reallocation of resources toward more liquid and income-generating assets, primarily customer lending and cash positions.

The results also show positive dynamics in profitability and operational efficiency. Interest income increased by 12.9%, net interest income by 8.4%, and profit for the period by 9.1%. In addition, net cash generated from operating activities amounted to UZS 8.37 trillion, compared with a negative result in the corresponding period of 2024, which confirms a substantial improvement in the quality of banking operations and internal cash flow generation. Overall, these changes suggest that under the conditions of the digital economy, the National Bank is gradually improving its asset management mechanisms through better liquidity management, growth in customer-related operations, and stronger financial performance.

<sup>2</sup> author's development

In general, the analysis confirms that the National Bank of Uzbekistan has maintained positive dynamics in asset growth, liquidity strengthening, profitability, and customer activity under the conditions of the digital economy. The expansion of remote banking services, growth in customer funds, increase in cash and cash equivalents, and improvement in net financial results indicate that the bank is gradually adapting its asset management mechanisms to the requirements of a modern digital financial environment. At the same time, the dominant role of the loan portfolio in the structure of assets confirms that lending operations remain the key source of income generation and asset growth for the bank.

However, the analysis also shows that the National Bank still faces several challenges related to the efficiency of digital transformation. In particular, compared with the leading retail-oriented and digital banks, the bank has a relatively lower level of remote banking penetration among individuals, which limits its ability to expand its customer base and increase fee-based income. In addition, the reduction in investment securities and the high concentration of assets in loans require the bank to strengthen diversification mechanisms, improve risk management tools, and increase the use of digital analytical systems in monitoring asset quality and liquidity.

Therefore, in the future, the National Bank should focus on further expanding mobile banking services, improving online customer platforms, introducing artificial intelligence technologies in risk assessment, and strengthening automated asset-liability management systems. These measures would allow the bank not only to improve the efficiency of asset management, but also to enhance competitiveness, ensure long-term financial stability, and strengthen its position in the banking sector of Uzbekistan under the conditions of digital transformation.

## CONCLUSION AND RECOMMENDATIONS

The results of the study show that under the conditions of the digital economy, the improvement of asset management mechanisms has become one of the main factors determining the financial stability and competitiveness of the National Bank of the Republic of Uzbekistan. The analysis demonstrates that the bank has achieved positive changes in the structure and quality of its assets, strengthened its liquidity position, increased profitability, and expanded the use of remote banking services. In particular, the growth of total assets, cash and cash equivalents, customer funds, and net profit confirms that the National Bank is gradually adapting its asset management system to the requirements of the modern digital financial environment.

The study also shows that digital technologies play an increasingly important role in improving the efficiency of banking operations. The expansion of mobile banking, internet banking, online payment services, and remote customer support tools contributes to reducing operating costs, accelerating financial transactions, and improving the overall quality of banking services. At the same time, the increase in the number of customers using remote banking systems indicates that digital channels are becoming one of the main sources of future growth in the banking sector.

Based on the findings of the study, the following recommendations can be proposed:

1. Expand the use of digital banking services, including mobile applications, internet banking, online lending, and дистанционные платёжные сервисы, in order to increase the number of retail customers and improve the accessibility of banking services.
2. Strengthen the diversification of assets by increasing the share of investment securities, digital financial instruments, and alternative income-generating assets in the bank's portfolio.
3. Introduce modern technologies such as artificial intelligence, big data analytics, and automated scoring systems for more effective credit risk assessment and asset quality monitoring.
4. Improve asset-liability management mechanisms through the wider use of digital analytical platforms and real-time monitoring systems for liquidity, profitability, and risk indicators.
5. Increase investments in cybersecurity and information protection systems in order to ensure the safety of digital banking operations and maintain customer trust.
6. Develop staff competencies in digital banking, fintech solutions, and risk management through continuous training and professional development programs.
7. Strengthen cooperation with fintech companies and digital payment providers in order to expand innovative financial products and improve the bank's competitiveness in the market.

The future development of asset management mechanisms in the National Bank of the Republic of Uzbekistan should be closely connected with digital transformation, technological modernization, and the introduction of innovative management tools. These measures will allow the bank to strengthen its financial stability, improve the efficiency of its asset portfolio, and ensure sustainable long-term development in the context of the digital economy.

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**Proofreader:** Zokir ALIBEKOV  
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## 2026. № 4

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