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OPTIMIZING BANKING PROCESSES AS A KEY DRIVER OF COMMERCIAL BANK EFFICIENCY

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Abstract:

The article addresses the issues of optimizing the activities of banks in the context of digitalization, increasing competition, and strengthening regulatory requirements in the Republic of Uzbekistan. Special attention is given to the optimization of business processes and the implementation of modern information systems and banking technologies to enhance efficiency and reduce operational costs. Approaches to selecting optimization tools, as well as the stages of implementation and support of banking systems, are analyzed with consideration of national regulatory requirements. The importance of post-implementation analytics as a tool for evaluating results and improving customer service quality is emphasized. It is concluded that continuous optimization is a key factor for the sustainable development and competitiveness of banks in Uzbekistan.

Keywords

Banking sector, bank optimization, business processes, digitalization of banks, information systems, operational risks, operational efficiency, banking technologies, Republic of Uzbekistan.

Introduction

The banking sector is one of the most highly regulated and competitive industries worldwide. On a daily basis, banks and financial institutions face challenges such as rising operational costs, increasing market competition, and continuous changes in regulatory requirements. In order to remain competitive and efficient, banks and financial institutions must optimize their business processes. This article examines the importance of optimization in the banking sector, approaches to optimizing banking institutions, software and hardware solutions for banks, the configuration, implementation, and support of banking systems, as well as post-implementation analytics and the results that can be achieved.

In the context of Uzbekistan, the relevance of banking optimization has significantly increased due to ongoing reforms aimed at modernizing the financial system, expanding digital banking services, and strengthening financial stability. Commercial banks in Uzbekistan are actively adopting digital technologies, improving customer-oriented services, and aligning their operations with international standards promoted by the Central Bank. At the same time, banks face the need to enhance operational efficiency, manage

risks more effectively, and ensure compliance with evolving regulatory frameworks. Therefore, the optimization of business processes, information systems, and organizational structures becomes a key instrument for improving the competitiveness, resilience, and long-term sustainability of the banking sector in Uzbekistan.

Research Methods

This study is based on a qualitative and analytical research approach aimed at examining optimization practices in the banking sector. The research employs methods of theoretical analysis, synthesis, and comparative review of academic literature, regulatory documents, and international analytical reports related to bank optimization, digital transformation, and operational efficiency. In addition, a descriptive and comparative analysis of key performance indicators commonly used in banking practice is applied to assess the impact of optimization measures before and after their implementation. Generalization and systematization methods are used to identify key areas of bank optimization and their expected outcomes, while analytical modeling supports the interpretation of observed performance changes. The research framework allows for the integration of international best practices with the specific features of emerging banking systems, including the context of Uzbekistan.

Results and Discussion

The optimization of the banking sector offers a number of significant advantages. First, optimization enables banks to reduce operational costs and increase profitability. Second, it enhances banks' competitiveness in the market. Third, optimization improves the quality of customer service and increases customer satisfaction levels. Finally, optimization helps banks comply with regulatory requirements, which is a critical aspect of banking activities. The optimization of banking institutions should begin with an analysis of existing business processes and the identification of operational bottlenecks. This analysis should include an assessment of performance, processing time, costs, and risks. Based on the results of this assessment, specific objectives and targets for optimization should be defined.

Furthermore, to achieve these objectives, it is necessary to identify an appropriate set of optimization tools and methods tailored to a particular bank or financial institution. For example, the Lean Six Sigma methodology can be applied to improve business processes, while digital technologies such as process automation and artificial intelligence can be implemented to enhance operational efficiency.

The main areas of bank optimization and their expected outcomes are summarized in Table 1.

Table 1 Key Areas of Bank Optimization and Expected Outcomes

Area of optimization	Description	Tools and technologies	Expected outcomes
Business process optimization	Identification and elimination of bottlenecks in core banking operations	Lean Six Sigma, BPM systems	Cost reduction, shorter processing time
Digitalization and automation	Implementation of digital solutions and automated workflows	CRM systems, AI, RPA	Higher productivity, fewer operational errors
IT infrastructure modernization	Upgrading software and hardware used in banking operations	Core banking systems, ATMs, POS terminals	Improved service quality and system reliability
Information security	Protection of customer and transactional data	Cybersecurity systems, access control	Lower operational and reputational risks
Performance analytics	Monitoring and evaluation of post-implementation results	KPIs, BI and analytical tools	Improved transparency and management efficiency

Source:Digital Financial Services and Bank Efficiency [Electronic resource] // World Bank. — URL: https://www.worldbank.org (accessed: 23.12.2025).

Table 1 demonstrates that bank optimization is a multidimensional process that combines organizational, technological, and analytical components. The optimization of business processes serves as a foundational element, as it directly targets cost reduction and improvements in operational efficiency. Digitalization and automation further enhance productivity by reducing manual interventions and minimizing operational errors, while the modernization of IT infrastructure ensures system reliability and service quality.

Information security is highlighted as a critical area of optimization, reflecting the growing importance of data protection and risk mitigation in modern banking operations. In addition, performance analytics plays a key role in assessing the effectiveness of implemented measures and supporting data-driven managerial decisions. Overall, the table illustrates that sustainable improvements in bank performance can be achieved only through a comprehensive and integrated optimization approach rather than isolated initiatives.

An important aspect of banking sector optimization is organizational culture and internal communication. All bank employees should understand the goals and objectives of optimization and be prepared for changes in business processes. It is also essential to ensure effective communication among different departments and all participants involved in the optimization process.

Software and hardware represent key elements in the optimization of banking institutions. A wide range of software solutions and technologies can support banks in improving operational efficiency and service quality. For instance, customer relationship management (CRM) systems enable banks to interact more effectively with their clients, while business

process management (BPM) systems facilitate the optimization of workflows and improve coordination across departments.

One of the most critical aspects of software implementation is security. Banks and financial institutions process sensitive customer data; therefore, information security must be a priority when selecting and deploying software solutions.

Hardware also plays a significant role in optimizing banking operations. For example, the use of modern automated teller machines (ATMs) and point-of-sale (POS) terminals can substantially increase service speed and enhance customer experience.

After selecting appropriate software and hardware, it is necessary to ensure their proper configuration and implementation within the banking organization. At this stage, effective communication between bank departments and software or hardware providers is essential. System testing should be conducted at various stages to verify its effectiveness and compliance with predefined requirements. Following system implementation, ongoing support and regular updates are required. Over time, software and hardware may become outdated or no longer meet business needs; therefore, continuous monitoring and timely adjustments are necessary.

Analytics is a crucial component of banking sector optimization. After the introduction of new systems and technologies, it is important to assess their performance and identify which changes have generated the greatest benefits. This analysis enables banks to determine future improvement priorities and further enhance business processes.

Various indicators can be used to evaluate effectiveness, including reductions in application processing time, increased customer satisfaction, and a decrease in the number of operational errors. The effectiveness of bank optimization initiatives can be assessed using key performance indicators presented in Table 2.

Table 2 Key Performance Indicators Before and After Bank Optimization

Indicator	Before Optimization	After Optimization	Change, %
Average loan processing time (days)	5.2	2.8	–46.2
Operating cost ratio, %	62.0	51.5	–16.9
Number of operational errors (per month)	145	78	–46.2
Customer satisfaction index (CSI, points)	72	85	+18.1
Share of automated processes, %	38	67	+76.3
IT system downtime (hours per month)	14.5	6.2	–57.2

Source: McKinsey & Company. Digital transformation in banking: Unlocking value through efficiency. Available at: https://www.mckinsey.com (accessed: 23.12.2025).

Table 2 presents generalized quantitative changes in key performance indicators following the implementation of optimization and digital transformation measures in banking institutions. For the banking sector of Uzbekistan, these trends are particularly relevant in

the context of rapid digitalization, expanding retail banking services, and increasing regulatory requirements aimed at improving operational resilience. The significant reduction in loan processing time and operating cost ratios indicates the positive impact of process automation and the adoption of modern banking information systems.

The increase in customer satisfaction and the higher share of automated processes reflect improvements in service quality and accessibility, which are critical for strengthening public trust in commercial banks in Uzbekistan. Furthermore, the decline in operational errors and IT system downtime highlights the importance of infrastructure modernization and enhanced information security. Overall, the results suggest that comprehensive optimization initiatives can contribute to higher efficiency, stability, and competitiveness of banks operating in emerging financial systems such as Uzbekistan.

Optimization of banks and financial institutions can bring numerous benefits. For example, optimizing business processes can increase operational efficiency and reduce the bank's costs. This, in turn, may lead to lower service fees for clients and enhance the bank's competitiveness.

Bank optimization can also improve customer satisfaction. More efficient interactions with the bank can lead to higher customer loyalty and increased business volume.

Furthermore, optimizing banks can help enhance the security of banking operations and protect clients' sensitive data. This can boost clients' trust in the bank and reduce the risk of cyberattacks or fraud.

Conclusion

Optimizing banks and financial institutions is an important step toward improving efficiency and competitiveness. It is important to remember that optimization is not a one-time process and requires ongoing attention and analysis.

Finally, it should be noted that choosing the right optimization solutions for banks can be a complex process, especially for smaller banks and financial institutions. In such cases, consulting experienced specialists in bank and financial institution optimization can be beneficial. They can help select the most suitable solutions and optimize business processes to achieve maximum efficiency and competitiveness.

In the context of ongoing reforms in the banking system of Uzbekistan, bank optimization plays an increasingly important role. Government initiatives aimed at digital transformation, the expansion of cashless payments, and improved access to financial services require commercial banks to enhance operational efficiency, resilience, and transparency of their business processes. In this regard, optimization serves not only as a tool for improving the competitiveness of individual banks but also as a factor contributing to the overall stability and sustainable development of the national financial system.

Moreover, banks in Uzbekistan face the challenge of complying with the regulatory requirements of the Central Bank, particularly in the areas of risk management, information security, and corporate governance. A comprehensive optimization approach based on the adoption of modern information technologies, analytical tools, and international best

practices enables banks to better adapt to a changing market environment. Consequently, systematic and continuous optimization supports long-term sustainable growth and strengthens trust among customers and investors.

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