

Modern Trends in The Development of Digital Services in The Banking Sector

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Abstract: This article analyzes the theoretical and practical aspects of developing digital banking services in commercial banks. In the context of digital transformation, modern development trends in the banking sector, mobile banking, internet banking, remote identification, as well as the impact of artificial intelligence and blockchain technologies on banking activities have been studied. The article also examines the problems and prospects of improving digital services in Uzbekistan's commercial banks and develops scientific and practical recommendations for increasing their efficiency. The results of the study serve to improve the quality of banking services, create convenience for customers, and strengthen the competitiveness of banks.

Keywords: Digital bank, fintech, internet banking, mobile banking, artificial intelligence, blockchain, banking innovations, digital transformation, electronic payments, banking services.

Introduction: In the context of the digital transformation of the global economy, the banking and financial system is also undergoing fundamental changes. The rapid development of information and communication technologies, the improvement of internet infrastructure, the increase in the number of mobile devices, and the widespread use of artificial intelligence technologies have led to the emergence of new forms of banking services. This process requires a transition from the traditional model of providing banking services through branches to a model based on remote and digital platforms.

Today, competition among banks is intensifying due to changing customer needs and demands in the global banking system. Speed, convenience, security, and continuity of services have become the main criteria for customers. Therefore, commercial banks are striving to improve their activities by actively implementing innovative technologies, automating banking operations, and fully digitalizing services.

Digital banking services are one of the most important components of the modern banking system. Mobile banking, internet banking, electronic wallets, QR-code payments, biometric identification, remote lending, and digital payment systems have now become an

integral part of banking services. These services not only simplify the relationship between the bank and the customer but also play an important role in reducing operational costs, improving service quality, and ensuring the financial stability of banks.

In the Republic of Uzbekistan, large-scale reforms are also being implemented in recent years to digitalize the banking sector. Particular attention is being paid to the development of remote banking service systems, improvement of electronic payment infrastructure, introduction of fintech technologies, and increasing the share of cashless settlements. Decrees and resolutions of the President of the Republic of Uzbekistan on the development of the digital economy are creating a legal basis for the widespread introduction of innovative technologies in the banking system.

At the same time, there are certain problems hindering the development of digital services in commercial banks. These include the growing threat of cyberattacks, low levels of integration of information systems, shortage of IT specialists, underdeveloped internet infrastructure in some regions, and insufficient digital literacy among customers, which complicate the full digitalization of banking services.

The purpose of this study is to examine the theoretical

and practical foundations of improving digital banking services in commercial banks, identify existing problems, and develop scientific and practical recommendations for increasing the efficiency of banking services based on international experience.

The object of the study is the activity of commercial banks in providing digital services. The subject of the study is the mechanisms for organizing, managing, and developing digital banking services.

LITERATURE REVIEW

The issues of digitalization of the banking system and the development of digital banking services are among the urgent areas of economic science. In recent years, many foreign and local scholars have conducted scientific research on this topic.

The theoretical foundations of banking innovations are primarily based on the theory of innovative development developed by economist Joseph Schumpeter. The scholar emphasized that innovations are the main driving force of economic growth and substantiated that the introduction of new technologies and management methods serves to increase economic efficiency¹.

Brett King's scientific views are of particular importance in studying the digital transformation of the modern banking system. In his book "Bank 4.0", he emphasizes that future banks will abandon traditional branches and operate on the basis of a fully digital ecosystem. According to the scholar, banking services should be provided not according to the customer's location, but adapted to their daily needs².

Chris Skinner analyzed the role of fintech companies and innovative technologies in the banking sector. In his research, cooperation between banks and technology companies is assessed as an important factor in creating new forms of financial services³.

Mishkin's scientific works widely cover the role of the banking system in the economy, financial intermediation mechanisms, and the organization of modern banking services. The scholar emphasizes that digital technologies are one of the main tools for increasing the efficiency of the banking system⁴.

In recent years, studies conducted by international financial institutions such as the World Bank, the International Monetary Fund, and the Asian Development Bank have recognized digital financial services as the most effective tool for expanding financial inclusion. According to these studies, digital banking services expand the population's access to banking services and contribute to increasing economic activity.

Local economists have also deeply studied the issues of

digitalization of the banking system. In particular, the scientific works of A. Vakhobov, T. Malikov, B. Berkinov, and Sh. Mustafakulov highlight the development of banking innovations, increasing the efficiency of electronic payment systems, and ensuring the competitiveness of banking services.

The analysis of the studies shows that while most scientific works have extensively studied the advantages of digital banking services, their economic efficiency, and technological aspects, the practical mechanisms for improving digital services in commercial banks, ensuring cybersecurity, and enhancing customer-oriented digital service quality require deeper research.

RESULTS

World practice shows that digital transformation is one of the most important factors in increasing the efficiency of the banking sector. In recent years, a significant portion of banking service consumers have switched to using mobile applications and internet banking services.

According to McKinsey Global Institute data, the digitalization of banking services makes it possible to reduce operational costs by an average of 30–50 percent. In addition, the speed of customer service increases by 60–70 percent.

The analysis of the activities of Uzbekistan's commercial banks also demonstrates the positive impact of digitalizing banking services. In recent years, the number of mobile banking users has increased several times. The volume of transactions carried out through electronic payment systems is growing annually.

The analysis revealed the following problems in commercial banks:

Technological Problems Many banks still use outdated software platforms, which limit their ability to integrate with new technologies. In some cases, the lack of centralized databases negatively affects the speed of service delivery.

Cybersecurity Problems As digital services expand, the number of cybercrimes is also increasing. Phishing attacks, malware, theft of identification data, and fraud cases pose serious risks to banks.

Human Capital Problems There is a shortage of modern IT specialists and data analysts in the banking system. This slows down the process of introducing new technologies.

Customer-Related Problems The low level of digital literacy among certain segments of the population negatively affects the usage indicators of digital services. In particular, the underdeveloped internet

infrastructure in rural areas is one of the significant problems.

As a result of the analysis, the following positive outcomes have been observed in banks actively developing digital services:

- Increase in the number of transactions;
- Reduction in operational costs;
- Expansion of the customer base;
- Improvement in the quality of service;
- Growth in bank profits;
- Increase in customer satisfaction levels.

These results confirm that digital transformation is a key factor in enhancing the efficiency of commercial banks' activities.

A comprehensive approach is necessary for the further development of digital services in commercial banks. In this process, technological, organizational, and institutional factors must be developed in harmony with each other.

RECOMMENDATIONS

- First, it is advisable to widely implement artificial intelligence technologies. AI provides high efficiency in credit risk assessment, predicting customer behavior, and detecting fraudulent transactions.
- Second, it is necessary to expand the use of Big Data technologies. By processing large volumes of data, banks can offer personalized services to customers.
- Third, the introduction of blockchain technology will increase transaction security and accelerate international payments.
- Fourth, the development of Open Banking systems will strengthen cooperation between banks and fintech companies and contribute to the creation of new financial products.
- Fifth, the following measures should be taken to ensure cybersecurity:
 - o Implementation of biometric authentication;
 - o Application of multi-level protection systems;
 - o Organization of real-time monitoring systems;
 - o Increasing knowledge of cybersecurity among employees and customers.
- Sixth, improving the financial and digital literacy of the population regarding the use of digital banking services is of great importance. For this purpose, awareness-raising activities should be intensified through mass media, social networks, and educational institutions.

CONCLUSION

The results of the study show that improving digital banking services in commercial banks is one of the priority directions for the development of the modern banking system. The introduction of digital technologies contributes to reducing operational costs, improving the quality of services, and strengthening the competitiveness of banks.

The study identified the main problems hindering the development of digital services in commercial banks as technological limitations, cybersecurity threats, shortage of qualified specialists, and low levels of digital literacy.

To overcome these problems, it is necessary to widely introduce artificial intelligence, Big Data, blockchain, and Open Banking technologies, improve cybersecurity systems, and develop digital infrastructure.

The practical implementation of these recommendations will increase the efficiency of commercial banks' activities, improve the quality of services provided to customers, and strengthen the competitiveness of Uzbekistan's banking system in the international financial market.

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