

Implementation of Financial Technologies in Banking and Disadvantages of their Use

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Abstract: This article examines the issues of implementing financial technologies in the activities of commercial banks. It analyzes the areas of banking in which modern financial technologies are used. Based on the research conducted, practical proposals and scientific recommendations were developed.

Keywords: banking, financial technologies, financial popularity, banking, deposit, credit, online microloan, digital transformation, client, financial literacy, mobile technologies.



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Introduction. In banking, high-tech production, economic activity, financial services - information and communication technologies in the Internet format and personal computing devices, the business model and consumers in today's economy have not only changed, but also the concepts and standards of education, entertainment and leisure, electronic interaction are the basis for a wide transformation of social processes, this is a new vector of development of the global economy with a digital status of infrastructure, economic activity based on digital technologies.

Analysis of literature on the topic. Uzbekistan's banks are on the verge of major transformations: the system is gradually transitioning from the state to the private sector. One of the most important stages in this direction is changing the approach to customer service. In this regard, the introduction of financial technologies into banking is a pressing issue. By timely eliminating shortcomings arising in this process, it will serve as a lever in the implementation of the bank's reputation, profitability, and client-oriented strategy in today's competitive environment.

According to the foreign economist J.Cronk, digital transformation is the "life cycle" of the financial system and plays a special role in solving the problem of bank clients' dissatisfaction with banking services.

A number of economists, including T.I. Boboqulov, I.R. Toymukhamedov, B.T. Berdiyarov, and M.M. Abdurahmanova, have studied the issues of introducing new banking services into the banking sector and expanding the range of services provided by commercial banks to clients.

The head of our state, Sh. M. Mirziyoyev, emphasized that "New Uzbekistan will have a new

banking system. By 2025, we must reduce the state share from 70 percent to 40 percent" [5].

Within the framework of the research topic, Toimukhamedov I.R. [6] defined that the expansion of the range of banking services should correspond to the demand for financial services by the population and the supply of financial institutions.

At the same time, in the context of today's digital transformation, the problem of timely identification and elimination of shortcomings arising from the introduction and use of financial technologies in banking activities is one of the pressing issues.

Research Methodology.

As the theoretical and methodological basis of this article, conclusions, proposals, and recommendations are given in the relevant areas through analysis of general economic literature and scientific articles, scientific works of economists, economic views of scientists and representatives of the sphere in improving the transformation and development of the banking sector at the present stage, their opinions, expert evaluation, observation of processes, a systematic approach to economic phenomena and processes, and conducting a comparative analysis with the author's experience.

Analysis and Results.

A typical banking product or service intended for a wide range of consumers has become a thing of the past. A modern client needs individual conditions for loans, fees, and other services. This cannot be done without an individual approach.

Every innovation increases and complicates banking risks, reduces the reliability and stability of banks. The development of information technologies and network methods in the banking sector will lead to qualitative changes in the management of credit institutions' capital from the point of view of risk allocation.

As a result of the state's dominant position in the banking system, the active involvement of banks as intermediaries in financing various state programs and enterprises, problems arise in the banking system, such as the lag of large commercial banks in the transformation processes in accordance with modern requirements in the industry, the high level of corporate governance standards, information technology products, asset and liability management, problem loans, a low level of loan portfolio diversification, and delays in implementing modern methods of customer relations.

In order to eliminate existing problems, the Strategy for Reforming the Banking System of the Republic of Uzbekistan for 2020-2025 has been adopted[7], according to which several key measures have been identified, the main goal of which is to increase clients' interest in banking products, including by focusing on clients. Among these measures:

Restructuring of the banking sector, including the phased removal of a number of banks from state control;

Increasing the availability of services and customer service;

development, together with international consultants, of a bank transformation program;

Automation of processes; expansion of databases and the volume of services provided. For example, individuals will have the opportunity to pay taxes and housing and communal services;

Implementation of a system for assessing the quality of banking services based on the Consumer Satisfaction Index (CSI), as well as the Consumer Loyalty Index (NPS).

In the world, an unfavorable and weak competition has developed between many banks. The slowness of most financial institutions in implementing innovations is affecting efficiency.

Consequently, in today's era of rapid technological development, digital services and fintech companies are emerging as an alternative to the traditional system, that is, as competitors.

The transformation of banking business models can be carried out in accordance with the following areas:

- 1) Transformation of the bank into an ecosystem. Many foreign commercial banks and credit institutions (Spain's BBVA Bank, Singapore's DBS Bank, and others) are implementing measures aimed at expanding their activities and creating client-oriented ecosystems.
- 2) Creation of a financial supermarket (marketplace). This model allows clients to have universal access to financial products and satisfy various financial needs within a single integrated channel.
- 3) Transition of banks to a non-banking direction. Most banks, when the main goal is the acquisition of real estate, pay attention only to individual, traditional aspects of interaction with the client, such as the provision of mortgage loans.

There are also security and administrative problems in the banking system. In particular, cyberattacks and other issues related to information security are becoming a serious problem for banks. Because of the digitalization of financial services, the demand for security will increase. It is no coincidence that banks bear a great responsibility for ensuring the security of financial operations and maintaining confidentiality.

In the "Global Cybersecurity Index 2024" ranking, published by the International Telecommunication Union (ITU), countries are evaluated based on the new methodology, and Uzbekistan, with an indicator of 89.2 points, took a place in the "Tier 2 Advanced" (T2: Advancing) group together with such countries as Canada, Switzerland, Hungary, Kazakhstan, and Azerbaijan.

For reference: in the 2020 International Cybersecurity Index, Uzbekistan ranked 70th out of 182 countries with a score of 71.11.

Currently, the Central Bank, in cooperation with commercial banks, payment system operators, and payment organizations, as well as internal affairs bodies, is taking measures to block bank cards involved in fraud and prevent the transfer of funds from these bank cards to foreign accounts through mobile applications. At the same time, in order to prevent fraudulent operations related to bank cards, additional security requirements have been introduced for biometric identification of clients when transferring funds through mobile applications, confirmation of money transfers, and use of mobile accounts.

In our republic, the expansion of payment system infrastructure and the preference for cashless payments by users are reflected in the increase in the volume of operations of individuals using bank cards, the volume of which, as of January 1, 2024, increased by 470.8 trillion soums or 42.7 percent compared to 2022, reaching 1,574.2 trillion soums. At the same time, the amount of funds received on bank cards amounted to 789.5 trillion soums, and the amount of payments made from bank cards (including cash transfers) - 784.7 trillion soums. In 2023, the share of funds transferred for the payment of pensions, benefits, scholarships, and wages in the structure of funds received on bank cards amounted to 29.2 percent, funds received on bank cards and from deposit accounts in cash - 20.4 percent, funds received through remote transfers (R2R) - 35.3 percent.



Figure 1. Dynamics of turnover through bank cards. [9]

As of January 1, 2025, commercial banks of Uzbekistan issued 50.51 million bank cards..

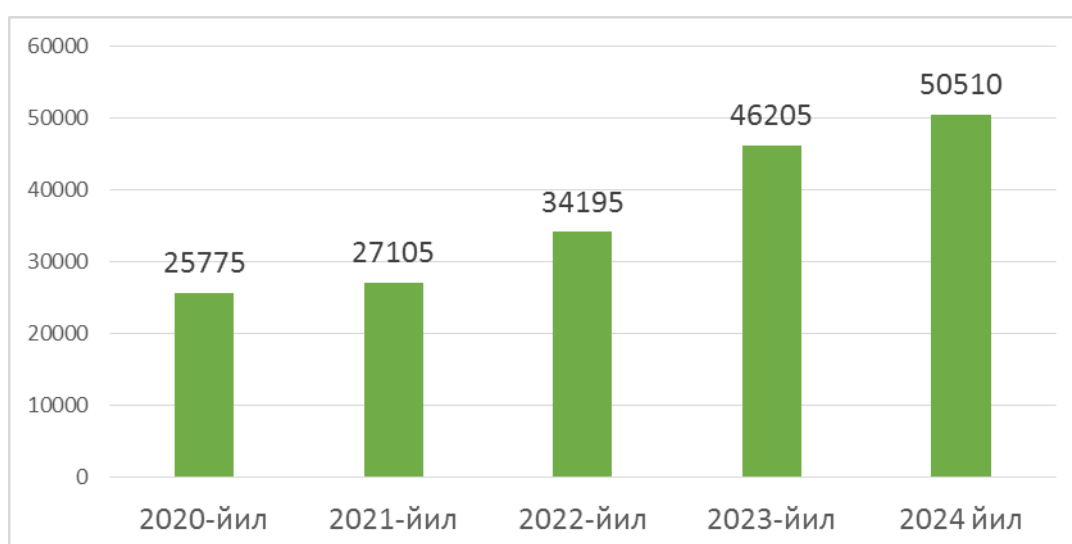


Fig. 2. Information on the number of bank cards (million)

Banks have installed 426.22 thousand payment terminals, as well as 29.9 thousand ATMs and infokiosks. In 2024, the turnover of bank cards through payment terminals exceeded 326.73 trillion soums.

The leading banks in terms of card issuance are People's Bank (12.4 million cards), Agrobank (5.38 million), and Ipoteka Bank (4.66 million).

In terms of the number of payment terminals, the People's Bank (45,663) ranks second, followed by the National Bank (40121) and Agrobank (36,462).

The top three in terms of the number of ATMs and information kiosks are: Payment organizations (13,598), People's Bank (3,075), and Agrobank (2,153).

[10]

In response to the profound changes in demand for financial services as a result of digitalization in the current environment, the need for banks to adopt various approaches to transform their

business models has increased.

An information society is rapidly forming, and the concept of state borders is disappearing in the information world. According to the data, more than 500 million cyberattacks are carried out annually around the world. Every second, one in twelve people in the world becomes a victim of cyberattacks. In particular, in such countries as the USA, France, England, Belgium, Germany, Luxembourg, the rate of cybercrime is 60-65 percent of the total crime.

According to experts, the main part of cyberattacks is aimed at obtaining, modifying, or losing confidential information, demanding money from users, or disrupting business processes.

As a result, the global economy loses an average of more than 20 billion US dollars a year. In Uzbekistan, cybercrimes have also increased 8.3 times over the past three years, accounting for 5 percent of the total crime. For example, cases of fraud in cyberspace have increased 13 times, theft - 20 times, and crimes related to extortion, slander, and insult - 4.9 times.

According to analytical data, there is an increase in certain types of cybercrime in the republic, including embezzlement of funds from others' plastic cards through illegal banking and financial operations, entering someone's trust and obtaining an online microloan in their name, organizing attacks on computers through virus programs, disseminating others' personal data, information attacks, and fraud in online trading platforms.

State policy in the field of informatization is aimed at creating a national information system, taking into account modern global trends in the development and improvement of information resources, information technologies, and information systems. In this regard, the adoption of the Law of the Republic of Uzbekistan "On Cybersecurity" on April 15, 2022, is of great importance.

Also, on January 20, 2025, Shavkat Mirziyoyev signed a decree on the establishment of the Cyber university state university.

The new university has been tasked with training personnel in information protection, information and cybersecurity, digital technologies and the digital economy, the creation of automated information-analytical systems based on artificial intelligence, robotics, and other related fields.

By strengthening cybersecurity and data protection, new security solutions will be developed in the banking system of our republic, including biometric authentication and zero-trust architecture.

The Central Bank, in order to prevent suspicious (fraudulent) operations related to bank cards and reduce the involvement of accounts and bank cards belonging to individuals in fraudulent schemes, has temporarily set the number of cards (taking into account virtual and copying cards) for one individual (for one PPP) at up to 5 in one bank and up to 20 in all banks.

Conclusion.

In general, today it is necessary to take measures to meet the population's demand for financial services by reforming the banking system, introducing a mechanism for supporting investment projects, and eliminating the administrative burden by freeing credit institutions from excessive workloads that are not characteristic of them;

It is necessary to increase the necessary conditions for automating the business processes of commercial banks, the widespread introduction of modern information and communication technologies in this process, and the expansion of the range of remote banking services;

Reduction of the state's share in a number of commercial banks with the involvement of strategic investors with sufficient experience, knowledge, and reputation in banking;

Despite the fact that bank employees still have few skills in using artificial intelligence, the use of modern information technologies allows financial and credit institutions to solve very complex tasks that only human resources cannot solve.

In order to ensure improved and affordable living conditions for the population of environmentally friendly regions of Uzbekistan, green lending should be introduced. As a result, this will lead to an increase in demand for energy-efficient and low-carbon housing among the population of Uzbekistan.

In general, increasing the popularity of banking services and expanding the possibilities of their use through the introduction of financial technologies into banking activities, strengthening public confidence in credit and payment organizations by timely identification and elimination of shortcomings arising from the use of financial technologies in banking activities, ultimately ensuring the well-being of the population, the stability of the financial system and economic growth, as well as reducing the share of the shadow economy in the country.

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