



PROSPECTS FOR APPLICATION OF FINANCIAL INNOVATIONS IN BANKING PRODUCTS AND SERVICES

KHUJAMURATOV ABBOS MARDONOVICH

Independent researcher,

Tashkent State University of Economics,

Tashkent, Uzbekistan

<https://orcid.org/0009-0001-8697-2112>

e-mail: abboshukjamuratov@gmail.com

Abstract

The article analyzes innovations used in improving banking products and services, comments on financial innovations in improving banking services, bringing them to a new level of quality.

Keywords: commercial banking, banking products and services, quality of banking products, financial technologies and innovations, digital technologies

Introduction

The current stage of development of the Uzbek economy is characterized by a constant increase in the demand for banking services from society, as well as increased competition in the banking services market. Despite the fact that at present the majority of domestic commercial banks are focused on serving corporate clients, retail banking services are also one of the promising areas of the banking business. Operating in conditions of strong competition forces commercial banks to constantly improve, expand the list of services and operations provided, search for the most effective methods of their provision, as well as improve the quality of banking services provided to legal entities and individuals, which requires financial credit institutions to raise their work in this area to a qualitatively new level.

The problem of introducing new banking products and services has always been relevant in the banking sector for several reasons. Firstly, this is the relationship between the bank and the client, built on the principle of mutual cooperation, secondly, the strong competition in the market between banks and non-banking organizations, and thirdly, dynamic changes in scientific and technological progress. All this forces banks to use innovative banking products and services.

Literature review.

Kudinova (2021) emphasizes the following in her research: before analyzing innovations in banks, it is necessary to clarify innovative banking services. An innovative banking service is a new service introduced by a bank, accompanying banking operations and aimed at meeting customer needs .

According to Pryzhantseva and Chernysheva (2022), the topic of innovation in the banking sector is more relevant than ever. This is because in a rapidly developing world, banks are constantly changing their scope of activities and methods of operation. They strive to maintain their position in the market and respond to the demands of a technological society and modern models of financial development.



Basco (2019) emphasizes in his scientific work that due to the digitalization of banking services, the current epidemiological situation - the Covid-19 pandemic, the greatest attention of innovative banking activities is focused on providing services remotely. This process is carried out through "Home Banking". This involves using banking services "at home" in a convenient place for the client, using a computer or mobile device.

Gubarkov and Egoshin (2021) emphasize in their research that the essence of banking, which consists in providing various financial services to the population and organizations, requires constant development. The development of new banking products is one of the most important directions of banking development, since new offers and products of a commercial bank allow to increase the customer base and, as a result, to obtain maximum profit. In addition, the developed competition in the banking market also stimulates the development of new banking products - it is commercial banks that provide the widest range of products and develop new offers that have a stable, competitive position in the modern market.

According to Gubarkov et al. (2021), the creation of new banking products is a pressing issue in the activities of modern commercial banks and is often considered as part of innovative activities, that is, activities aimed at searching for and introducing innovations in order to expand the range of products and improve their quality. In this regard, it is necessary to pay attention to technologies for creating new banking products, assessing existing shortcomings and developing ways to eliminate them.

According to Rudenko and Svinolupova (2019), any bank faces a number of problems when introducing innovative services:

- 1) Due to the lack of financial literacy, people become distrustful of anything new and untested.
- 2) Information may be misrepresented to the customer through communication (written and verbal).
- 3) Prices of innovative services.
- 4) The problem of information protection and privacy.

Khafizova (2013) emphasizes that the introduction of a new banking product to the market should be carried out in cases where it fully satisfies the needs of consumers, in addition, this product should be based on the strengths of the bank or its division, as well as have qualitative offers compared to competitors. In the conditions of increasing competition in the banking services market, banks can only achieve high profits when a bank enters the market with a completely new product that other banks have not yet used .

According to Zaitsev (2004), banking services are technical, technological, financial, intellectual and professional activities of the bank that are provided to customers, which accompany and optimize the implementation of banking operations. The essence of banking services is to understand them as professional intellectual products created on the basis of marketing research, in order to sell them on the market and make a profit.

Chernoruk (2016) in his research puts forward the following ideas, namely, the creation of new banking products is an independent area of commercial bank activity, and it is also considered as a whole range of activities. The created products must meet a number of basic requirements:

- meeting the existing and potential needs of bank customers;



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- ensure that the bank receives income;
 - to have high quality parameters compared to products available on the market, that is, to have a certain level of competitiveness ;
 - compliance with the development strategy of the bank .

Research methodology.

In the course of the research, the financial and economic tariffs given to the concept of financial innovations in the field of banking services and the provision of products by domestic and foreign economists, many theoretical literatures related to the topic, logical thinking based on empirical research, scientific observation, systematic approach methods were widely used.

Analysis and discussion of results.

Improvement of innovative sectors of the economy is a priority in the life of every country's economy, and providing support for innovations is one of the strategic tasks of its economic policy.

The introduction of innovations in all spheres of activity of economic entities serves the economic growth of our country, increasing its competitiveness in world markets, and structural changes in the economy, including the financial sector.

The widespread introduction of digital products and services in the financial market of our country is leading to a large-scale growth of the financial sector. Modern financial technologies are not only leading to the emergence of new financial products, but also changing the forms in which they are offered. Such changes cannot be ignored in the banking sector.

The introduction of financial innovations and technologies directly requires the use of information technologies. Also, the introduction of modern financial products serves as the basis for the creation of new financial technologies. Therefore, financial innovations include both financial transactions and new technologies and financial products.

Financial innovation refers to the creation and use of new or improved financial technologies, institutions, and markets, the main goal of which is the efficient redistribution of financial resources, profitability, asset liquidity, and risk minimization.

Based on the above, financial innovations can be divided into several groups, including

- financial instruments;
- financial technologies;
- financial institutions;
- financial markets.

It also applies to banking innovations, which are currently being developed and implemented, in the form of banking services and products. Financial innovation is a broad concept of innovation by banks. The reason is that it covers all areas of society and economy.

Based on the above empirical analysis, the innovations used in banks can be divided into the following, including:

- a new banking product that has attractive features for consumers compared to previously offered products;



– a qualitatively new product capable of satisfying previously unmet needs of a potential buyer;

– using advanced technologies to create banking products.

Also, in international practice, it is accepted to divide banking innovations into the following types, including:

– banking products in new segments (investments and insurance, leasing, trust operations, etc.);

– innovations in new areas of finance and money markets (securities markets, futures, options, etc.);

– money management and use of new information technologies;

– financial intermediation services;

– new products in traditional segments of the debt capital market (instruments with variable interest rates);

– other money market instruments .

In the current state of the local banking sector, we can highlight the influence of a set of main factors on the innovative activity:

– Increased competition between commercial banks and other financial credit institutions;

– unstable situations in international financial markets;

– mutual transformation of financial institutions;

– globalization of banking products and services market.

The implementation of modern innovations and digital technologies in all operational processes of the bank will undoubtedly bring many positive results, namely:

– Reduction of transaction and operational costs;

– increase the bank's income and profit;

– increase in the number of consumers of banking services and products;

– leads to an expansion of its share in the services market.

As in the fields of finance and economics, we can distinguish the following main types of financial innovations in the banking sector:

– service and product innovation;

– technological innovations;

– market innovations;

– marketing innovations;

– management innovation.

A brief description of them is given in Table 1.

Table 1

Classification of innovations in the banking sector¹

Product and service innovation	Newly developed and introduced banking products or services for an existing market
Technological (process) innovations	New technologies introduced to reduce costs, simplify operations or processes, and lower the price of products and services
Market innovations	Creating a fundamentally new market for products and services
Marketing innovations	This is about developing new ways of working in the market, new forms of business and operations.
Management innovations	It is the change in the management structure of an organization or process to improve business efficiency.

Analyzing the positive trends in the field, the following can be included among the innovative banking products and services that are currently in high demand in the financial market:

- all types of card-to-card money transfer services (P2P money transfers);
- cloud technologies;
- innovative product management applications;
- robo -advising ;
- digitized sales ;
- innovative software for managing trade accounts;
- continuous and wireless communications;
- financial planning and others .

Let's take a look at the financial technologies that are currently experiencing rapid development of digital technologies and that may impact the development of banking products and services in the coming years.

First, modern technologies for identifying bank customers.

Their role in identifying consumers who are bank clients is important. Especially identifying clients who apply for a loan, this type of activity carries many risks. The existence of such risks requires any company to develop measures to eliminate them and spend sufficient funds on them. In some cases, this is required by the legislation itself, and the companies themselves have a vested interest in identifying their clients.

It uses modern technologies such as fingerprints, facial geometry, voice recognition, and retina. The use of such identification technologies provides commercial banks with the following advantages, namely: firstly, efficiency, qualitative improvement of the loan portfolio; secondly, convenience, correct and effective identification of clients frees commercial banks from excessive operational costs, and limits the collection of unnecessary documents; thirdly, efficiency, i.e. Increased confidence of clients in the safety of their assets and their data will lead to their remaining clients of a commercial bank for many years. Fourth, the short-term payback of the funds spent, i.e. taking into account the conducted analyses and negative trends in practice, it can

¹ Prepared by the author as a result of empirical literature.



be noted that one loan It is necessary to spend a lot of money on preventing fraud and eliminating its consequences, as well as to ensure that such situations do not recur in the future, as the existence of such situations cannot but negatively affect the image of a commercial bank and the trust of customers.

Second, biometric control for data privacy and security.

The widespread development of digital technologies is becoming increasingly important in ensuring the security and confidentiality of information, and here the issue is not only the security of the client's data, but also the bank's. Not only are commercial banks improving their security systems, but fraudsters are also using many methods to bypass such systems. In this situation, it is appropriate to present biometric identification technologies that have proven themselves to be the most effective in their application today.

The widespread development of digital and information technologies, as well as their introduction into the activities of commercial banks, naturally leads to a significant increase in the risks that may arise in their activities. As noted above, banks are responsible not only for their own data, but also for the data of their clients who have entrusted them with their data. Accordingly, banks are taking serious measures to ensure the integrity of the data they provide, its non-disclosure, and its non-disclosure to third parties with malicious intent.

Such biometric security systems allow the identification of a client (person) based on their physiological or behavioral characteristics. This is mainly based on many years of observation, which determine the characteristics of each person, that is, their individual characteristics. We can cite the following, namely fingerprints and palm veins, hand and face geometry, iris structure, and others.

The application of biometric identification in the banking system is based on scanning these features and adding them to the digital space. Banks that use such a system will have several advantages, including:

- Competitive product offering – access to preferential loans, reduced number and time of document submission;
- reduction of operating costs, i.e. equipping it with biometric ATMs that replace the work performed by traditional cash registers;
- The effectiveness of the bank in preventing crimes related to money and credit operations.

We should also not forget that modern methods of customer identification and biometric technologies have developed rapidly and are increasingly being used in the activities of commercial banks, and over time they will become commonplace.

Thirdly, the Internet of Things (IoT – Internet of Things).

The Internet of Things is gradually entering the financial markets. Their role in practice can be seen in the following examples: for example, JSCB Bradesco (Brazil) allows customers to automatically pay for toll roads by linking their bank account to their car . JSCB US Bank (USA) uses API systems to make payments using smart light bulbs, and many other examples can be cited. Most importantly, all this is a transformation of financial innovations beyond the banking sector into the real sector of the economy.

Fourth, artificial intelligence technologies.

The main goal of using artificial intelligence in the banking sector of the economy is to



identify customer preferences, their level of satisfaction with banking services, new financial products, and promising directions in modern technologies.

The banking industry is currently making extensive use of artificial intelligence in the following areas, including:

A) Customer satisfaction. Artificial intelligence will help increase revenue, make effective decisions based on various analyses and factors in a short time, as well as establish effective relationships with potential customers. Most importantly, the presence of artificial intelligence will not only ensure customer satisfaction, but will also help banks' branches work more efficiently.

B) Virtual consultant. Artificial intelligence helps customers determine the details of the transaction and the content of additional services offered. With the help of artificial intelligence-powered chatbots, banks can understand the requirements of each customer, formulate the right commercial offers and provide practical help in building the spirit of loyalty, programs and inclinations.

B) Fraud and embezzlement detection. Bank fraud is one of the biggest problems in the industry. On the one hand, new innovative technologies have taken the activities of banks to a new level, on the other hand, they have created problems associated with them. Artificial intelligence is one of the effective digital technologies that can detect and minimize the risk of bank fraud. One of the methods for detecting bank fraud is to scan extensive transaction data and monitor any suspicious activity.

G) Digitization. Through digitization technologies, data is converted into digital format. Data digitization provides banks with the following advantages, including:

- several times increase the quality of customer service;
- reducing service costs for both the client and the bank;
- reducing the human factor and possible errors associated with it;
- formation of customer loyalty and inclination;
- of funds ;
- organization of cashless settlements.

When artificial intelligence technologies are implemented in banking practice, they will help banks to effectively research the database and make recommendations, forecasts and effectively provide specialized financial advice to customers.

Thus, the introduction of artificial intelligence into the banking sector is to create customer-oriented activities (personalized offers).

Fifth, working with Big Data .

Commercial banks, insurance companies and other microfinance organizations, as well as state regulatory authorities, face a number of problems associated with the collection, storage and analysis of data. Financial organizations consist of many departments responsible for the development and implementation of new products, their operational activities, customer service, methodological foundations, risk management, product sales, financial control and monitoring, security, etc. Each of them may have its own tools for digitizing operational processes. Also, financial institutions are owners of a huge amount of data of various types obtained from completely different sources. The most interesting thing is that such data is sometimes duplicated, for example, information about one client may be in different forms in the information systems



of several departments.

Today, banks are actively implementing Big Data technologies. When assessing a client's solvency, all their data on social networks is analyzed, and they also use big data technologies to analyze the actions of bank website users. These technologies are also used to segment clients, organize mutual trade, manage risks, and prevent fraudulent activities. Commercial banks also analyze the actions of plastic cardholders, which allows them to identify unusual transactions for a particular client and prevent theft of money from plastic cards.

The financial sector's interest in big data is driven by market saturation and increased competition. Big data not only accelerates information processing and allows for greater value, but also increases the accuracy of analysis and the complexity of the tasks being solved.

Nowadays, commercial banks should pay more attention to creating new banking products that meet the modern needs of customers. Such activities will strengthen customers' trust in banks, strengthen the most important competitive positions in the development of sales networks and customer base, and improve interaction between the bank and the customer.

It follows that the introduction and development of new technologies in the industry requires the creation of new technological platforms and architectures that meet serious technical requirements, including data integration, high-performance processing, and scalability.

Conclusions

As a result of the research conducted, the following conclusions were drawn, including:

First, financial innovations play an effective role in the formation and rapid development of the national financial market. Financial innovations allow domestic commercial banks to improve and refine the quality of banking services provided, and their application creates competitive advantages not only for an individual bank, but also for the entire banking system.

Secondly, the active use of financial innovations leads to the strengthening of the position of credit institutions in the financial market, which is important in the conditions of competition for clients between different types of financial institutions.

Thirdly, implementing innovative transformations in the banking sector will lead to the achievement of the following goals:

- To increase the competitiveness of the local banking system;
- to create a dynamic model of banking industry development based on advanced knowledge;
- to reduce the employment of employees in front offices;
- to ensure the optimization of bank operations;
- to improve the state of services provided by banks;
- serves to increase the profitability and efficiency of banking products.

Fourth, improving banking operations, including expanding the range of innovative financial products and services, improving their quality and developing methods of delivery, increasing long-term efficiency, and implementing a business sustainability and customer-centric approach, should be the main content of the new stage of improving banking operations and developing the industry.

Fifth, the introduction of financial innovations at the level of ordinary users of banking services and products saves their time, avoids many unnecessary processes, and provides



economic security of information.

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