

DEVELOPMENT TRENDS OF INNOVATIVE BANKING PRODUCTS

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Introduction. In the era of information technologies, innovative products are created in the banking system, and the existing ones are further modernized from the perspective of improving banking services. This is especially important for increasing the competitiveness of banks.

Each country has its own features and characteristics of banking services. It depends on the level of social, economic and cultural development. In particular, the implementation of innovative banking in developed countries is at a much higher level than in developing countries. These differences are based on a number of key variables such as awareness, age, education level, computer and internet knowledge and skills.

Nowadays, innovation is a key factor in the stability, competitiveness and sustainable economic growth of banks. In addition, the deepening digitization of the economy, as well as increased environmental sustainability and cyber security, forces banks to constantly seek new ways of innovation to adapt to changing realities. Thus, the topic of banking innovation remains extremely relevant and will continue to attract the attention of both industry experts and the general public.

Methodology

Choosing the right methodology ensures the relevance of the research to the aims and objectives of the research. Choosing a methodology appropriate to the research objectives increases the reliability of the research results, as a systematic approach to data collection and analysis is ensured. We used the following methods in the article: method of scientific research, analytical method, data collection method.

Literature review

In today's globalization and integration, every bank strives to be in competition and face it. Especially with the development of innovations and digital technologies, the problem of competition for banks is becoming more acute. By innovation we mean a new method, a new invention, a new phenomenon [Baranov, 2013, 5].

One of the main factors for the successful development of banking activity is the policy of constant innovation, because the timely introduction of innovations ensures growth. That is why banks pay special attention to the development and implementation of innovative banking activities.

The idea of a banking product was first used by an English economist, a representative of the neo-Schumpeterian direction of economics, Christopher Freeman, studying the problem of the relationship between Japan's economic system and technological policy. According to his approach, an innovative banking product is a complex system of organizations that participates in the creation, modification, and dissemination of new banking knowledge, technologies, and services consumed by society [Darshini, 2019, 261].

The most complete and clear definition of innovation potential was given by a Russian economist of the Saratov State Technological University I. Zits [Zhic, 2008, 102], according to which innovation potential should be understood as the set of economic resources that can be used by organizations, societies and states at any moment of time and directed to its further development.

According to Stan Metcalf, an English economist and lecturer at the University of Manchester, each of the banks individually and simultaneously participates in the creation of new technologies, forming the basis that allows banks to influence innovative processes through certain policies. In that network, the result of the combination of knowledge and skill is created, coordinated and exchanged, which is characterized as a new technology [Metcalf, 1995, 25].

According to the definition given by Freeman, the innovative banking product is an element that, acting in banks through its activities and interconnected processes, creates an opportunity to introduce, modify and introduce new technologies [Shmonin, 2017, 30].

According to the Danish scientist B. Lundvall, the banking innovation system is defined as the interconnection of elements that are involved in the provision of services and are used in a new way, as well as being located within the borders of the state [Serikov, 2017, 17-20].

Classical economists P. Drucker and B. Santo have given a number of definitions regarding innovations. Thus, according to P. Drucker, "innovation is a special tool for entrepreneurs, a means that they use change as an opportunity to implement a new type of business or service." B. Santo defines innovation as a social, technical, economic process that, through the practical application of ideas, creates products and technologies that are better in their properties, and if the innovation is aimed at economic benefits and profit, then its appearance on the market can be additional bring income. Russian scientists also discuss the concept of "innovation" in their works. According to them, the origin and further development of innovation involves a combination of the innovative idea and its implementation process, and both aspects are equally important [Gricenko, 2017, 20–22].

Richard Nelson, a theorist of the modern evolutionary economics school, characterizes the innovative banking system as a set of banks, the interaction of which determines the innovative behavior of national firms [Fliginskih et al., 2016, 1157].

Analyzing the definitions of the innovative banking product proposed by various theorists, we may present a more generalized definition of banking. "An innovative banking product is a set of banks implementing innovative policies and activities within the borders of a given country for the purpose of integration into global and regional banking innovation systems, the results of which are invested in the national and global economy through commercialization, thanks to which a competitive innovative banking system is ensured and due to this in the future there is an increase in the standard of living of the population.

Scientific novelty

The research methodology and obtained results complete the scientific novelty:

- ✓ theoretical issues of innovative products in the banking system were identified,
- ✓ the experience of developing and developed countries in the development and application of banking innovations was studied,
- ✓ analysis of innovative banking products of RA was carried out,
- ✓ substantiating problems of introducing innovative products existing in RA commercial banks.

Analysis











In order to better understand the nature and efficiency of current banking activities in countries with a developed banking system, it is necessary to observe the relevant international experience in parallel and make comparisons. Let us present the experience of several developed countries in introducing innovative products.

USA There are more than 100 banks in the US that have introduced innovative products to their service menu. Innovative products are increasing in US banks with rapid development. Modern digital banks in the US offer financial services such as global payments, P2P transfers and cryptocurrency trading. Table 1 shows the latest research conducted by The Balance about the best innovative American banks. In the table, we see that the first is the largest American Bank of America, which has more than 3 million online customers¹. The following banks are Capital One, Charles Schwab bank, Simple bank, Axos Bank, Discover Bank, Chime Bank, TIAA Bank. Capital One Financial Corporation is an American banking holding that specializes in credit card and auto loan financing. The holding includes two main structures: Capital One Bank (USA) and Capital One, and is one of the ten leading banks in the United States. The bank's network includes 755 branches and 2,000 branches. In addition to the United States, it also operates in Canada and Great Britain. . The last one is Ally bank, which is perhaps the most famous online bank in the world. Ally Bank offers savings and cash, CD and IRA

¹ Razvitie internet-bankinga kak formy organizacii vzaimodejstviya bankov s klientami
//https://dt.bsuir.by/jour/article/view/560?locale=ru_RU

accounts, as well as credit cards, auto loans, mortgages and investments. Ally deposit account rates are very competitive and often the highest.

Table 1. The best online banks in 2023 according to the research conducted by The Balance¹

Bank	Country	Logo
1. Bank of America	America	
2. Capital One	America	
3. Charles Schwab bank	America	
4. Simple bank	America	
5. Axos Bank	America	
6. Discover Bank	America	
7. Chime Bank	America	
8. TIAA Bank	America	
9. JPMorgan Chase	America	
10. Ally Bank	America	

The first bank in the US to succeed in introducing innovative products is Bank of America. Bank of America is one of the world's leading banks serving individual consumers, small and medium-sized businesses with a full range of services. The bank provides convenience across the United States, serving approximately 66 million consumer and small business customers. The bank has 16,900 ATMs and approximately 39 million active users. According to the 2021 American Bank Technology Survey, two factors are driving the development of bank technology strategies: improving efficiency and improving the customer experience. Bank of America spent about \$8.7 billion on technology in 2020. Of this, approximately 40% went to new initiatives. These include projects like Balance Assist, Payday Loan Alternative, API, Life Plan, which launched in late 2020 and has delivered personalized insights to over 4 million customers. It took a lot of money and know-how to do all this. In the diagram below, we have presented the system of interaction between the bank and potential consumers.

Individual forms of communication between the bank and customers include personal communications (advice, service provision), telephone conversations and use of postal services for business relations. Personal mutual relations of bank representatives with clients are widely developed in the practice of the bank today. This type of relationship between bank managers and businesses is of great importance.

Greece. The banking sector in Greece is constantly evolving and innovating to improve services and meet customer needs. The use of contactless technologies is an inno-

¹ Pros And Cons Of Online Banks // <https://www.thebalance.com/best-online-banks-4165693>

vation in Greek banks in 2023. Contactless technologies in banking enable customers to carry out transactions without the need for physical contact with a payment device or card. A separate technology included in contactless technologies is NFC technology, allowing wireless data transfer over short distances (usually a few centimeters).

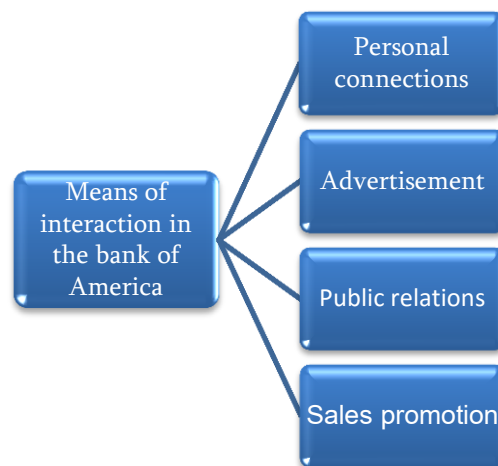


Figure 1. The system of interaction between the bank and customers at Bank of America¹

QR codes, as contactless technologies, are also very popular in Greek banks and represent a contactless payment method. Customers scan the QR code from their smartphone screen using their bank's mobile app or payment processor to complete the transaction.

Luxembourg. The development of digital banking services and fintech innovations such as mobile banking applications, digital wallets and blockchain technologies are being prioritized by the banking system in Luxembourg. Banks are also actively implementing innovative authentication and data security methods to ensure the safety of on-line transactions. As part of this innovation, Luxembourg banks have begun to actively use modern biometric identification technologies, such as fingerprint scanning, facial and voice recognition. These methods allow customers to quickly and securely verify their identity when performing online transactions, such as transfers, loans and paying various mandatory fees, opening new accounts, etc. Digital identity also helps Luxembourg banks comply with strict customer identification requirements set by regulators such as the European Banking Council. This helps fight fraud and improves the level of protection of customers' financial data.

Latvia. In recent years, the banking market of Latvia has been distinguished by a variety of innovative products and year-by-year development. One of the famous banking products, which were considered the innovation of 2023 in Latvia, is the cashback card.

¹ Bank of America // <https://about.bankofamerica.com/en>

Typically, this is a credit or debit card that offers cash back for a portion of the amount spent. The principle of operation is quite simple: the customer uses the card for purchases, and for each transaction he is awarded a certain percentage of the amount spent. Along with the cashback card, Latvian banks also provide spending analysis tools for their customers, allowing them to track where and how they spend their money. It is considered a useful tool for budget planning and financial management. Currently, there are many cashback cards offered by different banks on the Latvian market. Customers can choose the card according to their needs and preferences, taking into account the percentage of the cashback card, additional bonuses, annual fee and other conditions.

Romania. In recent years, Romanian banks have started installing contactless payment systems in metro stations. Contactless payment terminals provide passengers with a convenient way to pay for travel without the need to use cash or physical tickets. These terminals typically operate without contact card technologies or mobile wallets such as Apple Pay, Google Pay or Samsung Pay. Passengers can simply swipe their card or smartphone at the terminal to pay their fare. They can also be integrated with other public transport systems to provide a single way of paying fares across the city. Overall, all this contributed to the increase of customers and the strengthening of the competitiveness of the Romanian banking sector.

We have also examined the innovations of Armenian banks. Macroeconomic stability, financial sector reforms and active government support for the development of financial infrastructure are important factors for the development of innovations in the RA banking system. Commercial banks continue to introduce innovations in the list of their services.

"Evokabank" CJSC. In 2023, Evokabank took an important step in the field of digitalization, introducing a new e-Sign system and making the transition from the basic paper document circulation to electronic¹: from now on, when signing a document in the bank, customers will put an electronic signature using a special tablet. Evocabank uses a device for electronic signature that allows customers to review contracts directly from the device before signing.

"Ameriabank" CJSC. In 2023, Ameriabank also stood out with its innovations. Ameriabank's impressive numbers include a significant 46% year-over-year increase in online banking and mobile app users, with active users across all channels also up sharply by 67%. In addition, Ameriabank recorded about 12 million electronic transactions through its channels, setting a new record in the market. It is noteworthy that the usage rate of Ameriabank's internet banking system was 71%, which is 9 percentage points higher than in 2022 compared to the registered index. The popularity of the bank's mobile app, My-Ameria, is gradually increasing, both in terms of the app's features and customer base.

¹ Electronic signature system e-Sign in Evocabank, www.evoca.am/hy/news/innovations/e-sign

One of the important events of the current year is the launch of the online investment platform MyInvest by Ameriabank. The platform is integrated into the bank's mobile application. MyInvest allows users to open brokerage accounts online and allows them to choose from over 20,000 securities in over 30 markets.

"Ardshinbank" CJSC. Continuously improving service conditions and expanding the range of services, Ardshinbank presents its customers with a new digital payment option - digiPOS digital terminal¹. It is an application thanks to which devices with Android operating system and NFC system (smartphone, tablet) become a POS payment terminal. Ardshinbank's digiPOS accepts cashless and contactless payments with debit and credit cards, including Apple Pay, Google Pay, anytime anywhere. To use the digiPOS digital terminal, it is necessary to download the Ardshinbank digiPOS application, register and activate users with a smartphone with Android 8.1 or newer operating system and NFC technology. The digital terminal allows SME business owners and individual entrepreneurs to receive payments quickly, conveniently and securely anywhere and anytime. It's portable, and there's no need to charge or buy a paper receipt, and is especially suitable for mobile business owners. The process of activating digiPOS is shorter than when activating a traditional POS terminal.

"Inecobank" CJSC. Inecobank has launched the paylater service, introducing the new format for making purchases in Armenia known as BNPL (buy now, pay later). Due to this, the bank's clients will have the flexibility to manage their financial resources, which allows them to effectively manage their own funds and freely plan the necessary purchases without additional effort and loss of time². Paylater is a modern payment option popular in the international market, which provides users with a limit of up to 5,000,000 AMD, allowing them to make purchases at the same time and pay in installments over 3 or 6 months without any additional fees. Moreover, the user chooses to make the payment in full or in part through paylater, also using his own funds. A simple, fast, contactless payment solution paylater not only promotes the freedom and flexibility of customers to shop, but also helps businesses keep up with the times, introduce a new payment culture and attract new customers.

*"Acba Bank" OJSC*³. Acba Bank introduced the unique Acba Max multi-functional ATM in Armenia, which is also a payment terminal, a currency exchange point and even provides an opportunity to pay off loans from other banks. The bank also widely uses robots, which are several times more efficient than humans, never make mistakes, and work

¹ "Ardshinbank" CJSC, digiPOS digital terminal from Ardshinbank. the cash register on your phone, www.ardshinbank.am/news/digipos

² "Inecobank" CJSC, What is paylater?// <https://www.inecobank.am/hy/Individual/paylater>

³ "Acba Bank", OJSC, at "DigiTec" Akba Bank presented unique fintech solutions // <https://www.acba.am/hy/news/digitec-22>

24 hours a day. They give the bank an opportunity for the bank's employees to engage in creative work. The Acba Max platform is revolutionary in the market of banking terminals, because the bank managed to integrate the payment system into the ATM and get a multi-functional system on one device, and in order to provide innovative and faster digital services, the questions sent by customers, which cannot be answered by artificial intelligence robots, on the spot are directed to the employees of the bank's telephone center, who answer all the customers' questions. With the Acba Max multi-functional ATM, it is possible to pay off loans from other banks, it is possible to make utility payments, internet payments, government payments, and it is also possible to exchange foreign currency. Acba Bank has also issued cards in a new way, Acba Digital is the first in Armenia through which it became possible to activate the Visa Digital card type. The following types of digital technologies are used in "ACBA BANK" OJSC:

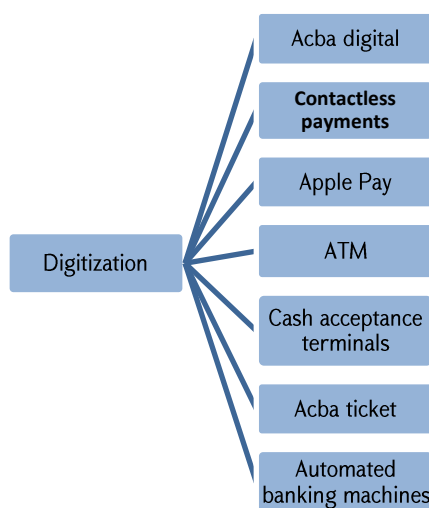


Figure 2. Types of remote service in "ACBA BANK" OJSC¹

Conclusions

Thus, new technologies play a dual role in the banking system. On the one hand, they allow solving business efficiency problems by reducing cost and opening up new opportunities, on the other hand, they force banks to keep up with the times. As customer behavior and lifestyles change, banks simply have no choice but to change the ways and means of service. If we compare the technologies of Armenian banks with the banking systems of the countries discussed in the article, we will notice that on the one hand, our banks are trying to keep up with international standards, and on the other hand, they still have a long way to go. Of course, there were cases when certain products entered Armenia earlier than Russia, for example, the ArCa online service, virtual card payments, but

¹ "Acba Bank", OJSC <https://www.acba.am/>

in general, technologically, we are lagging behind. The most important competitive advantage will be the bank that provides serious and advanced IT solutions. At the moment, according to our observation, such banks are "Ameriabank", "Evokaban", "Akba Bank".

From the above it can be concluded that it is very important that innovations in the banking system are not perceived only in the context of customer service. According to our observation, the development trends of banking innovations in Armenia include several main areas.

Digitization of banking services. Banks are actively implementing digital technologies to improve service availability and customer convenience. Mobile applications, Internet banking, online platforms for conducting transactions - all this is becoming standard for Armenian banks.

Development of online payments and electronic wallets. With the development of e-commerce and the growing interest in online payments, banks are offering new services in the field of e-wallets and online transfers. This includes services such as mobile payments, NFC technologies, etc.

Security and data protection. With cyber security threats on the rise, banks are actively investing in developing new data protection and authentication methods to ensure the security of their customers' financial transactions.

These trends reflect global trends in the development of banking innovations in Armenia, but specific features and emphasis may vary depending on the characteristics of the Armenian market and customer needs.

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