THE ROLE OF FINANCIAL TECHNOLOGIES IN THE DEVELOPMENT OF THE BANKING SECTOR

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ABSTRACT

In this article, we have discussed such an urgent issue of modern times as the role of financial technologies in the development of the credit system in general and the banking sector in particular. We reviewed the current literature and researches surrounding the issue, based on the analysis, we were given the opportunity to draw conclusions about the impact of the development of financial technologies in the last period on the sustainable and stable development of the banking sector in the developed countries of the world, what challenges existed and exist in this direction.

Based on familiarization and analysis of the world's best practices, we studied the role and importance of financial technologies in the development of Georgia as a constituent part of the world's banking system. Using proven research methods, we determined that one of the main factors in the successful development of banking activity is the policy of constant innovation, which is promoted by the National Bank of Georgia, which announced the creation of digital GEL last year.

The study of various studies allowed us to point out that technological progress is of the utmost importance for all countries that want to achieve economic development. The development of the global banking system in today's era is taking place under the conditions of increased competition in the financial markets. One of the main factors in the successful development of banking activity is the policy of continuous innovation. Currently, innovation is the main factor of banks' stability, competitiveness and sustainable economic growth. Banking activity in Georgia is going through a period of rapid changes caused by the introduction of new information technologies and the globalization of financial markets.

Keywords: digital economy, banking innovation, open banking, financial technology.
Introduction

Modern banks are noticeably different from their predecessors. Today, banks are at the center of digital innovation. They discuss e-commerce business models, offer customers innovative products and services, participate in fintech partnerships and financing of innovative startups, promote the development of the digital market, the formation of a fair competitive space, the protection of the rights of Internet users, the growth of trust and cyber security. More innovation ultimately means more effective new products and services that better respond to customer needs, making people's interactions with banks easier and more comfortable. Innovations also help companies make existing services cheaper and more accessible.

Companies and state structures operating in Georgia are at the stage of development when it becomes necessary to introduce the latest technologies and expand the existing ones. In this process, the management is faced with many difficult tasks: it is necessary to choose the right strategy, to select the right systems, to attract investments, to invest them effectively, to manage the projects of installing new systems, etc.

It should be noted that the Georgian banking sector is one of the advanced sectors in the process of assimilating technology innovations, which is manifested by the development of remote banking service channels, investment in modern banking technologies, presentation of diverse banking products and services, customer services based on the latest technologies, systems and processes, security and flexibility.

Thus, the effectiveness of the bank's work and its competitiveness in the market depend greatly on the introduction of new banking products and technologies (processes). New banking products and technologies sold in the market represent innovation. Innovation means "investment in innovation". An innovation operating in the financial field is a financial innovation. One part of financial innovation is created by banks in the form of a banking product or operation (technology). This is a banking innovation. Banking innovation is the final result of the bank's innovative activity, which is realized in the form of a new banking product or operation.

Georgia is one of the advanced countries in the region, with the rate of introduction of technological innovations, which, in itself, has a positive impact on the local economy, business environment, the growth of the startup ecosystem and, in general, the promotion of the field of entrepreneurship - this is evidenced by the fact that in the 2021 ranking of economic freedom, 45 of the European Among the states, Georgia takes the 7th place. It can be safely said that such a success was caused on the one hand by a kind of national readiness to adopt new technologies in our society, and on the other hand by the need for the emergence of a competitive internal...
market, the development of entrepreneurship, the pandemic and the e-commerce industry emerging in its bosom brought incredible results to the country: for example, with smartphone and Internet market penetration rates of 86% and 84% as of 2021, Georgia is one of the leading countries in the world.

The banking industry is particularly developed in Georgia - it can be said that the leading Georgian banks are not only financial institutions, but also technological companies that create the best innovative products and services in the region, which, on the one hand, develop business and economy, and on the other hand, significantly simplify people's daily lives. Today, many leading Georgian banks are actively using some modern methods in introducing innovations and trying to integrate into the world financial system. As you know, after JSC "Bank of Georgia" in 2014, the initial offer of shares of another commercial bank operating in Georgia - JSC "TBS Bank" was carried out on the London Stock Exchange, as a result of which almost half of the Georgian banking sector will be traded on the London Stock Exchange.

**Activities of the National Bank of Georgia**

In addition to commercial banks, the transparency of the country's banking information is determined by the National Bank of Georgia - a large financial institution that announced the creation of a digital GEL last year. Digitization of the Georgian currency was caused by the emergence of new technologies and their active development, because it is through the development of the currency that it is possible to adapt the Georgian lari to the digital economy and increase the effectiveness of economic policy. It is expected that the digital currency of the National Bank will become an important tool for the financial ecosystem and will greatly influence the creation of private innovations and new financial technologies.

The goal of any commercial bank, especially in the conditions of digitalization of the economy, is to meet customer needs as much as possible with lower costs, improve the quality of banking services for legal entities and expand the range, which is possible primarily with the development of the fintech industry and the active use of innovations in the banking sector. Financial innovation, as a method used by organizations to perform operations with new types or existing assets, will allow us to use the resources of credit institutions more efficiently.

The development of banking innovations and the digital economy as a whole have contributed to the emergence of virtual banks that do not have branches or physical offices. The active use of digital technologies has contributed to the unfolding of classic products in separate operations, with their subsequent combination in the form of new structures and forms.

Digital banks include banks whose main part of activity does not stray from the digital environment. We also refer to them as online banks, neo-bakkas, Direct-banks. In Great Britain
they are also called "Challanger" banks. "Banks of the future" - are formed as fully digital banks, where all banking operations are performed remotely. Fintech startups that are actively developing digital technologies that can lead to faster customer service and lower transaction costs are in high demand among banks. It is for these purposes that neo-banks are created, which are one of the important driving forces of the fintech industry.

It should be emphasized the role of those companies that, instead of merging with global companies, want to promote Georgian innovativeness and for which, after entering the international market, they conduct their business mostly from Georgia. A prominent example of this trend is one of the largest banks in Georgia - TBC, which created the first fully digital bank in Georgia and the region - Space. What is interesting is that the Space team is in Georgia and from there it leads two geographical units - Georgia and Uzbekistan. This kind of approach and management style makes the activity platform more effective and much larger, and along with the accumulation of foreign capital, it also contributes to the development of the country's economy, which indicates the innovative, modern approach of the Georgian company.

Open Banking Standard

It is clear that with the development of technology, the banking and financial market has changed significantly. The era of open banking has begun, and with it, the growth of the fintech ecosystem. Georgia did not lag behind world trends either - the National Bank and the Georgian Banking Association started working on the development of common open banking standards in 2020. According to their developed framework, the introduction of open banking is planned in several stages. Allegedly, from March 31, 2021, the service was available to customers of commercial banks. And in the next stages, it will be possible to include non-banking institutions and expand their functions, including initiating payments.

Open banking refers to the instantaneous exchange of information between financial organizations through electronic technology and at the initiative of the user. Through it, the user can use his banking services on the desired application or websites.

To better understand the essence of open banking, it will help us to look at the history of the origin of open banking. About 10 years ago, banking was considered a closed activity - going to the branch and managing finances from there, that is, the need for direct physical contact. Along with the development of technologies, Internet banks were created, which contributed to the formation of a new concept - banking services can be received remotely. After that, the screen scraping approach was developed, when the internet bank was transferred to a third party to receive various services. This was followed by considerable passion on the part of some banks.
Since 2015, the existing problem has been solved by the new regulation of the European Union and Open API has appeared. Today's open banking is built on the basis of Open API.

Open banking involves the exchange of customer information, the sharing of transactions, and the ability to initiate payments. It creates new opportunities both for banks and for the rapid development of the fintech ecosystem.

Banking services and products, such as the mobile banking application, connect to the bank's server through an API, where our personal financial information is stored, and transfer this information to the mobile application. For example, when performing a payment operation with mobile banking, an SMS message is sent to us about a code that should be used to confirm the operation, it is through API integration that it is possible to connect Mobile Bank to the SMS provider in order to receive a message.

In the case of financial services, the situation is a bit more complicated, because the user's personal information is strictly confidential and the bank is obliged to take care of its protection. Accordingly, before opening access to our personal information, the first step is the exchange of security settings (eg: user, password, fingerprint, face recognition) API, so that financial information is protected and safe. Using an API reduces the likelihood of human error, which in turn ensures the integrity and security of information.

Thus, it is possible to place any type of information in an application or on a website, the main thing is that the owner of the information provides its API, software code. A very good example of this is the world's most famous payment provider Paypal, which allows us to make payments through it in almost any online store or application. It is recognized in more than 200 countries of the world. Paypal, on the other hand, integrates debit and credit cards of almost all banks in the world, in order to be able to carry out payment operations with these cards. The functionalities provided by Paypal are: customer crediting in online stores, virtual terminal, integration with POS terminal and many other interesting functionalities.

API development has a great potential, even though API is a software code of one specific information, it may become a prerequisite for creating a very large software ecosystem, where many different financial and companies will be involved, access to different types of information will be opened, and in this regard, companies and developers They will have unlimited opportunities to process this information based on data analysis, create and develop new and innovative products, create completely different categories of products and services, digitize existing ones and many other opportunities to meet the growing demands of customers.

In terms of the development of API services, Georgia is also a part of the world map. Of course, this approach is actively used in our country to exchange information, although at a rather local
level. Financial institutions worked only within their own ecosystem and did not have the ability to make available customer information to third parties. This very issue was resolved with the advent of Open Banking, which involves the provision of information by commercial banks to users through an API, which enables the user to see and manage his complete financial information from different banks in one application.

At the initiative of the National Bank of Georgia, consultations with the banking sector regarding the introduction of open banking in Georgia and regular meetings of the working group began already in the summer of 2019. The Open Banking Working Group consisted of representatives of the National Bank of Georgia, the Georgian Banking Association and commercial banks. Later, within the framework of the banking association, an open banking committee was also created, the purpose of which was to develop the necessary standards for the introduction of open banking in Georgia and to promote the further development of the project.

Thus, we can summarize the advantages of open banking as follows:

One of the benefits of open banking is the ability to combine services - a user who uses the services of several banks, with the technology of open banking, combines the services offered to him in one space, easily compares the offered conditions and chooses the one that is favorable for him.

Another advantage of open banking is the ability to manage finances. In current practice, companies providing financial technologies offer users the ability to analyze the finances of various organizations. More specifically, the user has the opportunity to receive information about their total income and expenses. In the case of a number of offers, the user is given the opportunity to see the structure of his expenses, to observe what he spends the most money on, how his income is distributed, what part of his income goes to servicing his obligations, and more. Customers will no longer need to use the internet banking of each bank or visit a branch to get financial information. Open banking creates an opportunity to gather this information in one space.

Open banking also increases the speed of service - for example, if a user decides to take a loan in a bank where his income is not fixed, by default he will have to find the information of account deposits from the servicing bank and bring it to the lending bank. Open banking makes this process much more flexible. Based on the user's permission, it becomes possible to send data from one bank to another bank automatically.

Integrating artificial intelligence into financial institutions was not so easy before the pandemic. However, the need for remote work has significantly accelerated this process. Financial
institutions and their partners are committed to automating banking services and making them more customer-centric.

Conclusion

In modern times, the main problem of people in general is free time, so each of them tries to implement and receive the desired banking operation in a short period of time. Consumers are no longer visiting the bank without necessary and necessary reasons, which is a clear example of the increase in the adoption of mobile banking and chatbots, as well as the use of personal bankers by banks, who advise and offer banking products and news to customers using remote channels, thereby measuring customer satisfaction. Time and comfort is created.

Information technology has influenced the bank in two ways: firstly, it has provided a reduction in costs for the bank and the client, and secondly, it has enabled the banking product to be more easily accessible to the customer of banking services. It should be noted that despite the privilege of innovative technologies, of course, it also has its shortcomings. The most prominent among them is the lack of interaction between clients and banks, because the services provided through the Internet have taken its place.

That is why it is important to note that open banking can bring positive results both for customers and for the entire financial sector. Open banking creates a fertile ground for effective use of new technology opportunities, significantly improves access to finance, increases healthy competition and is an alternative basis for the development of data-based fintech business models.

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REFERENCES


