

Role of Innovations in Increase in Efficiency of Bank Activity

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Abstract—Financial innovations should be considered from the point of view of their financial nature and potential uses: banks and non-bank credit organizations. In our opinion, financial innovations, according to their financial nature, are the result of innovation activity, which is based on money and its movement, as well as monetary relations. Banking innovation activity is understood as the degree of innovative banking products diffusion into the daily activities of economic entities in the region. At the same time, we believe that the higher the rate of diffusion of innovations in the banking sector of the region's economy, that is, the faster innovations in the banking services market are adopted, assimilated and distributed, the more stable and competitive the banking system of the region in the long term. Financial innovations should be considered from the point of view of their financial nature and potential uses: banks and non-bank credit organizations. Financial innovations, following their economic nature, are the result of innovation, which is based on money and its movement, as well as monetary relations. The role of credit institutions, and directly banks in the innovation services market, should be assessed highly enough, as banks not only fund innovation activities in the Russian Federation, but also work as active partner in the innovation services market, by means of offering their own innovative products that are in high demand among individuals and businesses. Banks credit products serve as the basis for innovative growth, and provide prospects for the development of the economy, which suggests their active role in stimulating innovative projects of clients.

Keywords—innovations, banking services, credit organizations, diffusion, scoring, financial product, resource, customer, risks, credit

I. INTRODUCTION

Banking is all types of activities, banking operations, as well as other actions of a credit institution that are directly aimed at developing efficiency and improving the security of banking services. Banking has a large number of aspects. It is necessary to distinguish between and support banking. Substantive banking includes banking and transactions. Support banking is aimed at providing favorable and safe conditions for the main banking activities implementation. This activity is indirectly related to the final results of the main banking activities.

The innovation process covers various aspects of the banking system, for example, there is a change in the banking structure and internal control system, the introduction of new products, and new methods are implemented to attract customers via competent marketing. However, the credibility to

banks and their structures falls; they try to solve this problem by introducing innovations.

The banking development is growing rapidly because of emergence of new ideas and opportunities for their implementation in banks. Formerly, banks performed only the function of providing loans to customers, and then with the advent of new technologies and the introduction of innovations, credit organizations began to implement a number of modified functions. There are several key stages in the world experience of creating new banking products and services:

- the search for new product and technology solutions in existing markets has led to the emergence of such innovations as savings and investment certificates, credit and deposit instruments with floating rates, various types of bonds, safe-deposit boxes, financial transactions with precious metals, the practice of guaranteeing mortgage and other credit transactions and many others. Banks also began to provide information and consulting services.

- at a certain point, credit organizations began to enter fundamentally new market segments, discovering the insurance business, financial leasing, asset management and real estate investing.

Under modern conditions, the role of banks is experiencing change. Today they are not just intermediaries in the capital market. Retaining its main functions - accumulation of funds, regulation of money circulation, mediation in lending, creation of credit money, credit organizations, by mastering new types of services, are actively expanding the boundaries of their activities. This gives them the opportunity not only to increase their own profits, but to increase the role of the banking sector in the economy development. One of the important factors in the competitive environment in the banking market is their quality. Russian and foreign banks research and practice a variety of methods and technologies for studying and developing programs to improve the quality of services provided. Methods range from complex statistical analysis to simple corporate programs.

II. BANKING INNOVATIONS AS A FACTOR OF DEVELOPMENT OF BANKING ACTIVITIES

In Russia, the formation of an innovative banking system is just beginning. Therefore, in order to make it to a high level in

terms of innovative development type, it is necessary to determine the priority directions of banking technique development. It is necessary to formulate the strategic plans for the banking innovations introduction.

They targeting at achieving an optimal level of competitiveness on the basis of a set of agreed technological and facilitating activities [1]. Rapidly changing customer needs made banks to focus on the constant introduction of new, more advanced technologies, products and organizational structures.

The modern understanding of the innovation and innovation activity essence has polemical character and is viewed from different perspectives. The term "innovation" was used for the first time in cultural studies and meant the introduction of one culture individual elements into another. In the process of the social structures development technical, technological, organizational and economic innovations began to emerge, which formed the basis of the modern classification of innovations.

The essence of innovation is comprehensively explored by foreign and domestic scientists who are considering various aspects of innovation. In particular, J. Schumpeter, for the first time, considered issues that presented innovations as new combinations of changes in their development (that is, innovation issues) and gave a full description of the innovation process. Other scientists, for example, R. Muller, F. Nixon, B. Santo, B. Twiss, explain this concept depending on the object and subject of research. R. Muller explains the concept of innovation as "a particular system changing relatively to the external environment" [2]. B. Twiss presents this term as "a process in which an invention or idea acquires an economic content". At the same time, this process lies in obtaining of something new, passes through different levels of development (from the idea to its commercial realization) and covers the complex of reproduction relations (production, exchange, consumption). K. Knight believes that "innovation is the introduction of something new in relation to the organization or its immediate environment."

Another approach defines innovation as the result of a creative process in the form of a new technology, product (technique), method, etc. Such scientists as R. Farkhutdinov, A. Iakovlev, A. Medynskii, A. Plekhanov, and others advocate this approach.

Financial innovations should be considered from the point of view of their financial nature and potential uses: banks and non-bank credit organizations. [3].

Financial innovations, following their economic nature, are the result of innovation, which is based on money and its movement, as well as monetary relations. In this case, the object of study would be financial assets, techniques, tools, methods, technologies, etc. Thus, express lending is an example of innovation that is financial in nature (is a financial service). Financial innovations will include any new types of loans, for example, mortgage loans, consumer loans, etc., since they are based on monetary relations [4].

At the present time, there are innovative changes in the global banking practice related to the transformation of the bank's image, which is possible due to the Internet technologies

development, in particular, the transition to self-service and automated self-service systems (self-service offices, mobile platforms, ATMs with the ability to open accounts, transfer funds on accounts, etc.); telephone "call centers"; private-banking and individual customer consulting; use of Internet technologies and related financial products, such as electronic currencies, mobile terminals; virtual financial and banking technologies - electronic signature, online bank account management; new forms and methods of dealing with banking risks (securitization, credit derivatives as hedging instruments, secured debt, etc.) [5].

According to many authors, the main features of the modern innovation process are:

- firstly, the establishment, dissemination and use of innovations and their transfer to the center of qualitative, quantitative and structural changes;
- secondly, the innovation process is a permanent factor;
- thirdly, the high rate of innovation change.

Under banking innovation activity it is commonly understood the degree of diffusion of innovative banking products (services and technologies) into the economic entities daily activities. Moreover, the higher the diffusion rate of innovation in the banking sector, the more stable in the long term and competitive the banking system is [6].

Modern services of credit institutions connects with the development of new technologies and communication tools for servicing transactions in the financial markets (trading in securities online, mobile banking, Internet banking). It is necessary for the customer service boost, remote service is relevant. Credit scoring is quite new financial processes. It determines the borrower's status and is most often used in consumer lending for small amounts, given the retail nature of these services. However, the use of scoring is possible when lending to legal entities, including small and medium enterprises. Credit scoring implementation primarily involves risk management [7].

Generally, there are three types:

- statements scoring;
- behavioral scoring;
- collection scoring.

The first type involves the credit surveillance, the second type describes the process of using credit resources, the third one - assessing the repayment risk and determining actions to return the loan provided. The development of innovation in the banking sector contributes to the achievement of key goals such as:

- increasing the competitiveness of the Russian banking system;
- creation of a dynamic development model of the banking sector, based on knowledge;

- cut back staff in the front offices due to the intensification of innovative forms of service.

III. REASONS FOR THE COMPETITIVENESS OF BANKING PRODUCTS

Nowadays, innovations are the key factors of banks stability, competitiveness and sustainable economic growth [11]. The modern market requires from credit organizations new products, thus forcing banks to develop new operations in which the client is interested. However, the innovation policy of banks must contain an acceptable level of risk and maximum profitability. Hence, the study of innovation has emerged full blown. Basic innovations have already formed a modern technological structure of the beginning of the 21st century in the most developed countries of the world. In order to earn customer loyalty, credit organizations need to change the forms and methods of service, expand service capabilities, provide comprehensive banking services. Currently, the main factor in high banking activity is the policy of constant innovations. This comes out of the assumptions that characterize the current state of the economy [8].

First of all, the relations between credit organizations and customers based on the partnership principles. This means that banks constantly care not only to preserve, but also to increase the capital of their customers, offering them new services that contribute to the expansion of financial and economic activities, lower costs, and business development and increase its profitability [9].

The second reason for the new banking services types emergence is the competition between banking institutions under the market relations conditions. In order to exist in modern conditions, it is necessary to have alternate motivation and non-standard business decisions, the introduction of innovations in all areas of the bank's activities [10].

Thirdly, the new expensive banking technologies development leads to changes in the interaction between bank customers and the credit institution itself. It is scientific and technical progress that is most often associated with the concept of the innovation process [11]. However, the introduction of innovations in the banking sector means not only technical or technological development, but also the introduction of new business forms, methods of work in the market, new products and services, new financial instruments. These implementations are characterized by higher technology level, higher consumer product or service qualities in comparison with the preceding product.

There are a lot of banking innovations areas that banks should determine when innovating their work (Table 1). They should be guided not only by the need of the client, but also consider the costs and risks that credit organizations may incur when creating an innovation.

Innovations are a major factor in the competitiveness of credit institutions and ensure their economic growth. The efficiency of the bank and its competitiveness in the market is largely dependent on the introduction of new banking products, technologies or processes [12]. Changes in the banking management sphere, related to organizational, are most often

considered in conjunction with changes in the conducting banking business technique. The main methodological task of modern research in this area is the development of such a methodology for analyzing banking innovation activity, which made would allow assessing the financial innovations development degree in a particular commercial bank [13]. Moreover, modern researches have to calculate external and internal factors of banking innovation activity development in a particular region and the country in general and to contribute to the development of an innovative strategy for the credit institution development.

TABLE I. BANKING INNOVATIONS DIRECTIONS

Banking innovations directions	Features
Personalization	Providing services to the client in the demanded form.
Twenty-four-hour and omni-channel banks work	Banks are 24 x 7. Some of them offer round-the-clock service, using offshore customer service centers (it allow them transferring the job to those service points where is the working day).
Banking of things	Appeared with the emergence of the Internet of things. US Bank offers an API for smart light bulbs, allowing them to turn on when changes are made to a client account. Bradesco allows you to link a bank account to a car and automatically pay for using toll roads and similar infrastructure.
Use of robots and artificial intelligence.	Real-time portfolio analysis services for high-turnover customers that are provided using IBM's Watson supercomputer, UBS and DBS banks.
Co-branding	joint placement on products of business partners trademarks, logos and promotion of brands; it allows realizing the partnership benefits.

Financial innovation can also be considered as the result of an innovative credit process, where the entire consistent chain of actions is aimed at achieving a certain positive result in the strategic effect form. As a strategic innovation activity effect we can consider the following parameters of a bank's sustainable development:

- marginal income increase;
- market share expansion;
- operating costs reduction.

The ability for long-term retention of bridgehead in the market and further development ensure that commercial banks have customer relationships and reliable service channels. It determines the level of competitiveness [14]. At the same time, it is important to consider the capabilities of competitors, using their innovations, to provide cheaper and quality banking products.

IV. CONCLUSION

Thus, the main purpose of increasing the credit organization innovative activity is improving competitiveness in the market for the range of services provided in the context of growing

competition, which is especially important now in the Russian banking sector [15]. The role of credit institutions, and directly banks in the innovation services market, should be assessed highly enough, as banks not only fund innovation activities in the Russian Federation, but also work as active partner in the innovation services market, by means of offering their own innovative products that are in high demand among individuals and businesses. Banks credit products serve as the basis for innovative growth, and provide prospects for the development of the economy, which suggests their active role in stimulating innovative projects of clients. [16].

Active use of different innovative financial products, services and technologies contributes to greater financial market stability, improves market capitalization and banking institutions operational efficiency, contributes to the sustainable dynamic development of the bank in the long term, thereby deepening the innovative component of the economic growth of the country in general.

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