

Management of a Credit Institution Using Strategic Innovation Policy

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Abstract: This paper deals with the peculiarities of bank innovations. The concepts of bank innovations, proposed by Russian and foreign authors are analyzed. The distinction between such terms as “innovation” and “novelty” is given. The experience of using innovative technologies by credit institutions of different countries is studied. In the course of the research, an interconnection between innovative and strategic management is traced. Our own model of formation of strategic innovation management is presented. A technique for estimating the efficiency of introduction of strategies (including innovation ones) in a commercial bank is proposed for use. The calculations of this technique are based on the optimal choice problem. The results of the research proved the applicability of the adapted formula for optimization of calculation processes in relation to the banking sphere. The classification of innovation banking strategies is given in conclusion.

Key words: Innovation • Banking innovation • Innovation management • Strategic innovation management

INTRODUCTION

The necessity to use innovation strategies was for the first time suggested in the works of D. Teece and G. Pisano [1, 2]. The representatives of the *resource approach* in strategic management considered the potential of organizations in providing competitive struggle via creation and introduction of innovations. From their point of view, the innovation strategy of a company is of particular importance. In addition, innovation strategies become a part of corporate strategies.

In our view, innovation process can be considered as an object of management. However, it is characterized by a high risk. There is no basic element underlying innovation strategic management, which can ensure a time-proved effect of innovation.

When analyzing innovation banking processes, most authors consider them only as a factor. However, after investigating the works on innovations in the banking sphere, we revealed a characteristic peculiar solely to banking innovations. The credit and financial sphere is characterized by a high dynamism, actually determining the fact that innovations act as a necessary element ensuring the competitiveness of credit institutions. At the same

time, the theoretical essence of an innovation implies the absence of the guarantee of the positive economical effect resulting from its introduction. Thus, the presence of innovations in the activity of a bank is not its competitive advantage, but a risky and dynamic opportunity.

The next peculiarity of innovations in the banking sphere is the legislative restriction. According to the laws “On the Central Bank of the Russian Federation (Bank of Russia)” and “On Banks and Banking Activities” [3, 4], a credit institution can introduce an innovative product or service only if it has a corresponding license of the Central Bank of the Russian Federation. This proposition, of course, considerably restricts the innovation capabilities of banks compared to commercial organizations. Credit institutions can essentially just improve already existing products, services, or business-processes.

It should not go unmentioned that innovation management in a credit institution is closely connected with strategic management. This circumstance allows us to interpret the innovation activity of a credit institution as a realization of managerial processes, such as: analysis of environment, determination of goals, choosing of a strategy, implementation of a strategy, estimation and control of its implementation.

Particular attention in the strategy development and the strategic management implementation is paid to the creation of new banking products and the realization of new business processes. The result is in ensuring the competitive advantages of a bank, leading to its economic development.

Thus, innovation strategic management, which ensures the innovation activity of a bank, is of particular urgency in the process of formation of a credit institution. The strategic management realization enables to solve the question, at what stage the innovation processes will be initiated and what will be the nature of the innovation activity of the credit institution.

Banking innovation is a final result of the innovation activity of a bank, which is realized in the form of a new banking product or operation [5].

I.T. Balabanov's interpretation of the term "banking activity" proceeds from the fact that banking innovation is a part of financial innovations (innovations functioning in the financial sphere).

A.V. Muravieva in her dissertation suggests the following definition of banking innovations. A banking innovation as a set fundamentally new banking products and services is a synthetic idea about a goal and a result of a bank's activity in the sphere of new technologies aimed at earning extra income in the process of creation of favorable conditions for the formation and distribution of the resource potential by introducing novelties which assist clients in profit-making [6].

Having studied the works of B. Santo [7] and M. Berezovskaya [8], we found a common feature characterizing banking innovations, i.e. the fact that all authors agree that banking innovation is a product, service or technology, the introduction of which results in qualitative changes in banking activity and, as a rule, bring profit to a bank, directly or indirectly.

The point is that domination of this or that type of innovations determines the type and orientation of the innovation strategy of a bank (i.e., it is possible to realize the linkage of certain types of innovations to certain types of innovation strategies). The typology of banking innovations in its turn enables to create the corresponding economic and managerial mechanisms, as they are characterized by the very type of innovations under introduction and a chosen innovation strategy.

To our opinion, regarding the peculiarities of the banking sector, innovations can be considered as the creation of a banking product or service having more attractive consumer properties in comparison with the earlier offered ones. Innovations can be understood also

as the creation of a fundamentally new product or service, which can satisfy yet uncovered needs of a potential customer, or as the use of an improved technology.

Taking into consideration the works of A.V. Okhlopkov [9], P. Drucker [10], V.S. Vikulov [11] and other authors [12-18], we can note that the terms "innovation" and "novelty" do not have a clear distinction and many scientists put the equals sign between them. We hold the opinion that these terms are close in their definitions, but still have certain differences, i.e., an innovation is essentially a practical use of novelties. Not every novelty is an innovation since the latter presupposes improvement and not every novelty is positive. That is, innovation is a result of the successive introduction and application of a novelty.

The analysis of the development of the use of innovations in banking systems of different countries shows that the last decade has been marked by the activity in the application of innovations.

The leaders in the use of innovative technologies are the banks of the countries of Southeast Asia (Japan, Singapore and South Korea) and the United States. As far as European banks are concerned, more attention is paid to innovative solutions in such countries as Great Britain, Germany and France. In Russia, innovative elaborations in the banking sphere are not used just as actively, but here the gradual raising of their rate takes place.

Although the share of innovative products and services in the banking activities on the whole is not high and usually makes up approximately 20%, in a number of countries they produce the most part of the profit of credit institutions. The banks in Russia occupy the last place in this rating, which can be explained by a relatively young age of the development of innovations among Russian credit institutions and very often they require considerable financial expenses, whereas the main purpose of their introduction consists in the maintenance of competitiveness.

An essential difference of innovation management from strategic management is such a new stage as the formulation of innovative idea introduced in a credit institution. The subsequent stages are analogous to those in strategic management. At the second stage, the statement of goals and tasks on the innovation project takes place; the resource potential of the organization with respect to the innovation project is analyzed. Then, the measures on the introduction of the innovation are developed. At the last stages, the implementation of the tasks in hand and the control and estimation of the innovation project efficiency take place.

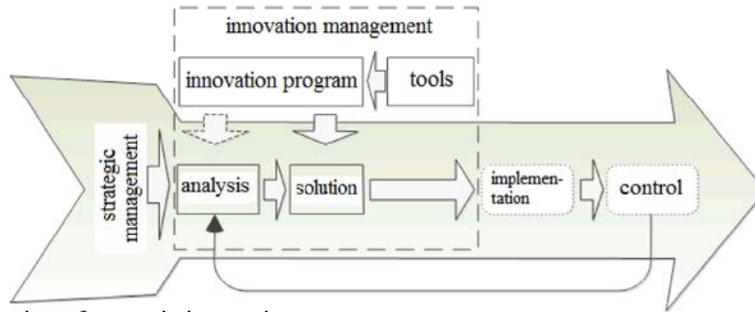


Fig. 1: Model of formation of strategic innovation management
 Source: According to the data from V.S. Prosalova's work [19]

From our perspective, the peculiarity of using innovations in the strategic management of a commercial bank is that innovation processes cannot be realized without an implementation of strategic management in a credit institution. However, to ensure competitiveness of a commercial bank, it is necessary to apply innovations at this or that stage of strategic management.

We developed a model of formation of strategic innovation management (Fig. 1). As a part of our research, we determined at what stage of strategic management the involvement of innovation programs, which will allow a credit institution to transform strategic management into strategic innovation management, is more efficient.

From our point of view, the technique for estimating the efficiency of introduction of strategies (including innovation ones) in a commercial bank is based on the optimal choice problem proposed by L.V. Dolyatovskii [20]. It was developed for the evaluation of introduction of innovation strategies in companies, taking into consideration the possible synergetic effect. We adapted this problem to the conditions of a credit institution.

When forming a strategy of a commercial bank, it is possible to realize various innovation strategies E_i ($i = 1, m$). A combination of some of them can result in the synergetic effect measured by the synergy coefficient K_{cij} . Moreover, the synergetic effect can be admitted also under cost optimization, since a complex introduction of innovation measures can lead to a logical reduction of both labor and material resources. In this case, if the effect of the innovation strategy will have the duration T_n , the optimal choice problem can be formulated in the form:

$$E(I, T) = \left[\int_0^{T_n} K_{cij} \cdot (\sum_i \vartheta_i(t) dt - \int_0^{T_n} \sum_i l_i H dt) \right] - \max \quad (1)$$

with the limitations:

$$\begin{aligned} T_n &\leq T_{per} \\ \vartheta_i(t) &\geq \vartheta_{cr}, \end{aligned}$$

where $\vartheta_i(t)$ is economy (result) of innovation strategy i at the time moment t ; $C_i(t)$ is costs for i -factor at t ; C_{per} , T_{per} are the permissible costs and the introduction time of an innovation strategy; ϑ_{cr} is the critical level of the effect, which determines the applicability of the innovation strategy introduction.

As a result of testing of the optimal choice problem in the banking sphere, we developed an algorithm for calculation of efficiency of innovation strategies. For the Vladivostok Primorskii lending and cash services office of Alfa-Bank OJSC, we developed several innovation programs within our research, which include innovation changes in the offered services and in the customer service (for private persons).

Based on the list of the offered innovations, we formed a matrix consisting of 17 innovation programs. Each matrix includes two or more programs. For each matrix, we calculated the synergetic effect, which in its turn enabled to determine the cumulative effect of the innovation program. As a result, we chose an innovation program with the highest value of economic effect, including the innovation elaborations in the following spheres: functional responsibilities of employers, organizational structure, premise equipment, interior outfitting.

In addition, using the indices of economic added value and net present value, we calculated the efficiency of introduction of this innovation program. We additionally calculated the synergetic effect coefficient and the calculation results were the same. The index of performance of the innovation program, calculated by traditional methods, made up 40 502 standard units, which is practically coincides with the previous calculations.

The results of this study demonstrate the feasibility of using the adapted formula of the optimal choice problem to optimize calculation processes in relation to the banking sector.

Innovation developments to a greater or lesser degree are used in the activities of credit institutions. We propose a classification of innovation banking strategies.

According to the development method, innovation banking strategies can be divided into planned and unforeseen. Planned strategies are drawn up as a result of the above-described process of banking strategic planning, including the development of the mission and goals of a credit institution. As part of this strategy, it is supposed to introduce the planned innovations no less than once in three years, which implies their systematization and enables to relate the bank to the status of innovation one.

Unforeseen strategies are developed by a credit institution as a necessary measure aimed at changing the economic environment to ensure the competitiveness of the bank.

Planned innovation strategies in their turn are divided into two large groups: process and technological. Process innovation strategies involve systematic introduction of innovations in the process management of the credit institution for the purpose of their optimization, which can also include changes in the organizational structure of the bank. Technological innovation strategies involve the introduction of innovation measures directly into the process of the organization and the conceptual component of the services provided by the bank and into the offered banking products.

Credit institutions using technological innovation strategies can use primary strategies and offer their customers fundamentally new banking products and services and secondary strategies, which deal with innovations already successfully used by other banks.

Of course, primary strategies can be used only by large credit institutions with sufficient capital to fund new technical ideas, research and development works and implementation of marketing programs. Moreover, there is a high degree of risk that a new service or a new product will turn out to be unprofitable. Credit market may not be ready to the offered innovative elaborations. Not a single credit institution can be sure that the consumers will perceive innovations positively. The preferences of credit market are changing rapidly and even the most professional marketing research cannot guarantee the success of an innovation banking strategy. Nevertheless, in the case of a favorable result, a credit institution has an opportunity to earn superprofit, take a monopoly position in the sphere of the provided innovative services or the disposable innovative products and to get the image of a bank-innovator.

Thus, we see that innovations are an integral part of the strategic management of a commercial bank, ensuring its competitiveness in credit market and allowing it to adapt in the immanent environment.

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