BSC AS CONTROL AND EVALUATION INSTRUMENT OF BANKS’ INNOVATION STRATEGIES

Abstract. Using the methodological principles of the Balanced Scorecard the author developed the foundations of a system for monitoring and evaluation of banking innovation strategy which is an important tool for its implementation. The elements of this system are the strategic innovation map built in terms of four perspectives that reflect the logic of the formation of bank’s innovation results, and a set of key performance indicators that measure the specific results of strategy’s implementation on certain check dates.

The Balanced Scorecard of Innovation (BSCI) includes criteria that reflect the following innovative objectives: in perspective of learning and growth – staff professional development, increasing of innovation activity, the creation of innovation culture, innovative leadership development; in perspective of internal business processes - creating a highly effective innovative process, improving the brainstorming, ensuring the efficient activities of cross-functional teams, formation of the optimal innovation portfolio; in customer perspective - increasing the number of customers, their satisfaction and loyalty, improving of serviceability; in financial perspective - creating innovation bonus by increasing benefits from innovations and reducing operating costs.

The proposed key performance indicators are the basis for creating individual maps for bank’s employees which are designed separately for each level of bank’s organizational structure and are used in the incentive system of staff’s innovation activity. To maximize the effectiveness of BSCI implementation it should be integrated with the whole system of bank management - planning, management accounting, reporting, and information support.

Keywords: bank, innovation strategy, innovation strategy implementation, balanced scorecard, balanced scorecard of innovation, strategic map of innovation, key performance indicators.

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ВСК КАК ИНСТРУМЕНТ КОНТРОЛЯ И ОЦЕНКИ РЕАЛИЗАЦИИ БАНКАМИ ИННОВАЦИОННЫХ СТРАТЕГИЙ

Аннотация. В статье доказывается возможность и необходимость использования сбалансированной системы показателей для контроля и оценки реализации банков инновационных стратегий. Разработана стратегическая карта инноваций для банка. Предложены ключевые показатели эффективности для всех проектов сбалансированной системы показателей инноваций. Обоснованы направления интеграции сбалансированной системы показателей инноваций с системой управления банком.

Ключевые слова: банк, инновационная стратегия, реализация инновационной стратегии, сбалансированная система показателей, сбалансированная система показателей инноваций, стратегическая карта инноваций, ключевые показатели эффективности.

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Introduction. In a complex macroeconomic environment, under conditions of constant changes of consumers’ needs and preferences and rapid development of IT-technologies innovations of banks are the basis to ensure their stability and competitiveness. The current financial performance of the banks, their immunity to unpredictable changes, maintaining the long-term competitive advantage, and after all implementation of their strategic goals and objectives depend on how reasonably and effectively they implement various innovations. Therefore, innovation strategy has to be an integral part of the bank’s corporate strategy that necessitates analyzing the conditions and mechanisms of its efficient implementation.

Assessment and control of strategy’s successfulness is an essential element of strategic management. The importance of formalized procedures for monitoring the implementation of the strategy was confirmed by a survey of nearly 150 top managers of different companies conducted by Palladium Group in the mid-2000s. During this study 54% of respondents indicated that their companies used formalized control instruments with 70 percent of them rated their performance as outstanding or better than similar companies in the group. And among 46% of companies that did not use such procedures, only 27 percent showed results that exceeded the average [1, p. 2].

Recently the most well-known tool for assessing and monitoring implementation of the strategy has become the Balanced Scorecard (BSC).

Research analysis and statement of problem. It should be noted that for a long time researches on the Balanced Scorecard content and implementation mechanism were related only to the companies of the real sector, but recently some studies concerning banking written by S. Andros [2], I. Baryliuk [3], V. Vovk [4], I. Didovets [5], I. Kliuev [6], O. Kravchenko [7], A. Tiutiunnik [8] have appeared.

Diversity and comprehensiveness of the BSC creating real opportunities for monitoring the performance of the bank’s corporate strategy provides, in our opinion, the reasons for its use as a tool for evaluating an innovation strategy. This problem both in domestic and foreign scientific literature is considered mainly as mere suggestion [9; 10; 11]. So it is necessary to adapt existing methodology to the needs of innovative development of banks and to work out a Balanced Scorecard of Innovation (BSCI) for them.

Research results. In the early 1990s several models of evaluation of the corporate strategies’ implementation were elaborated. All of them were based on the hypothesis that the use of only financial indicators to determine the overall performance of the company did not fully ensure the growth of its future economic value. Of course, this did not mean that the financial indices began to be considered less important, but it was deemed reasonable to complement and to balance them with others - non-financial ones.

In terms of the potential for adaptation to the needs of innovation strategy, the following models are worthy of attention:
- Efficiency Pyramid of C. McNair, R. Lunch, K. Cross (1990), which shows how the objectives and performance indicators of organization connect its strategy with operational activities. The goals are directed from top to bottom, and indicators which are based on such functions as quality, delivery time, turnaround time and costs of defective products, are going upwards. Thus, the system can show what really affects summarized financial indicators and how they are formed;

- BSC - model by D. Norton and R. Kaplan (1992), which allows to transfer implementation of the strategy in a fairly complete set of indicators that actually form a system of strategic control and management. Its main feature is that it is closely linked to the business processes that are designed to meet the needs of consumers and involve most of the people in the organization. Thus, it directs managers toward long-term strategic development as opposed to traditional management, which is usually too focused on financial performance;

- BSC - model by L. Maisel (1992), which is very similar to the previous one, but pays the special heed to the development of human resources;

- EP2M model by K. Adams and P. Roberts (1993), which aims to assess effectively the strategy implementation and change management. This model defines how the company performs in the following areas: customer and markets service, internal business processes improvement, change management, ensuring property rights and freedom of action. The goal of this system is not only to support the strategy implementation, but also to create a culture of constant positive changes.

However, Balanced Scorecard model (BSC) by D. Norton and R. Kaplan [12] was developed the most, had general acceptance and implementation in practice.

Balanced Scorecard for bank based on the methodology of D. Norton and R. Kaplan, must include four perspectives of its activities as the lines of achieving the objectives of the corporate strategy - financial, external customers, internal business processes, learning and growth. Financial perspective reflects the bank’s effectiveness through a variety of financial indicators such as profitability, asset quality, interest margin, and volume indicators dynamics as well. Customer perspective (marketing) assesses the consumer utility of banking services and includes the indicators of clients’ acquisition, their satisfaction, loyalty, market share in target segments etc. The perspective of internal business processes reflects the efficiency of processes taking place inside the bank. The perspective of learning and growth defines quality performance of human resources which the bank must have for growth in the long run.

Indispensable condition for obtaining the effect of the BSC implementation, according to its creators, is the involvement of different levels of management: employees of all departments are informed through relevant mechanisms about the strategic goals and tasks, and are motivated to achieve defined indicators. This model is considered to be a kind of language for senior management to communicate with the employees about lines and priorities of company’s development.

The strategic goals, their indicators, latter’s target rates and policy measures are interrelated in this system. It is clear that the bank wishes to achieve financial goals expressed in efficiency indices for owners, profitability, cash flow, etc., but for this financial institution should get some results in the work with its customers. This, in turn, requires the optimization of internal business processes, which requires building the capacity of the staff.

We think that the balanced scorecard can be the best in reflecting the impact of innovation strategies on the bank as their implementation not only increases the profitability of business, but also increases customer loyalty and satisfaction, improves bank’s image, strengthens its competitive position, improves business processes, increases competence of employees. Consequently, financial results here must be important, but not absolute.

Most scientists who study banking innovations agree with this statement [13, p. 30; 14, p. 28-29]. They consider that it is difficult and not always correct to apply the traditional
indicators of investment projects’ efficiency (ROI, NPV, IRR, etc.) to the analysis of the performance of innovation strategies. Confirmation of these conclusions we can find in the experience of Danish «Jyske Bank» to determine the results of the implementation of strategy for complete technological upgrading and redesigning of 119 branches under the general title "Xtreme". To evaluate strategy’s performance banking experts, in addition to standard ROI, used information about customers’ acquisition and their satisfaction, and took into account the extremely positive feedback from the staff about new work opportunities [15].

The example given in an article of Harvard University lecturer R.M. Kanter shows the insufficiency of traditional performance indicators to assess bank’s innovative activities. When in the early 1990s, American «Bank of Boston» was the first to establish innovative unit «First Community Bank» for serving the poor urban population, they tried to assess its performance by standard indicators - profits earned from one client, and the time spent for his servicing. It is clear that such a system in an absolutely new area of activity aimed at the future could not provide the planned results that caused senior management’s dissatisfaction. And only the adoption of new indicators, which reflected an increase in the customer base, in loyalty and customer satisfaction allowed to look in a different way on the work of FCB, consider it strategically expedient that was confirmed by the stable profitable activities of the unit in future [16, p. 50].

Thus, the measurement of innovation strategies’ performance should be carried out at a much wider and diversified system of indicators than just financial ones, as they guide the bank primarily on short-term results. To create such a system it is necessary, after the formalization of innovation strategy, to identify the main objectives in this area of bank’s activities in terms of four perspectives, to convert outlined goals into specific sets of indicators divided by the levels of bank structure, and to determine the methods of indicators’ calculation, their criterion rates and the control period.

Taking into consideration that the main objective of a Balanced Scorecard of Innovation is to monitor the implementation of innovation strategies, it must enable top management of the bank to carry out the following functions on a regular basis:
- Controlling the strategy’s implementation;
- Monitoring the carrying out of innovation projects;
- Monitoring the degree of staff involvement in the implementation of the strategy;
- Monitoring the degree of achieving defined goals.

The general methodology for formulating bank’s goals for Balanced Scorecard which should meet the strategic guidelines, is the principle of their forming "from top to down", i.e. from the financial goals as most synthetic to the goals of other perspectives that are seen as a means of achieving a higher level benchmarks. Intended purposes create the so-called strategic map. It should be noted that their formulation should have a general character. At the same time, projects (such as implementation of budgeting) or processes (functions) performed in the bank (including intra control) cannot be specified as targets in the strategic map.

Our version of a strategic innovation map of the bank is shown in Fig. 1.

The following logic relationship between innovation objectives and assessment perspectives was taken as a basis for its creation:
- Innovative leadership will facilitate the development of innovative culture of the bank, innovation activity and employees’ qualification will increase in this environment;
- Creative and competent staff will organize effective innovation process where cross-functional and project teams will run optimal portfolio of innovation projects resulting in a variety of product, process, service, marketing and other kinds of innovations;
- These innovations will help to increase the quality of service that will attract new customers, increase the level of satisfaction and loyalty of existing ones;
- All above-mentioned ultimately will increase the bank's profit from innovation by increasing revenues and reducing costs.

![Strategic innovation map of the bank](source: author’s elaboration)

Fig. 1. Strategic innovation map of the bank

After forming of the strategic map, the next BSCI development phase is to determine the specific indicators that could characterize the achieving of defined goals. International
experience of managing innovations shows that any figures related to their evaluation must meet the following requirements:

- Be measured today but positively impact future outcomes;
- Do not depend on factors that are beyond the competence of employees;
- Be quite easily controlled;
- Be really aimed at implementing strategic objectives of the bank;
- Assess the current activities of employees but not extraordinary efforts that require additional compensation;
- Not to be too narrow and superficial [17].

It is also important to note that the criteria which are set may have different characteristics depending on what kind of innovation – predominantly radical or incremental - innovation strategy of the bank is based on. According to foreign experts, indicators corresponding to strategies’ focus on radical innovation should be defined as a broad, qualitative, flexible and aimed to success, while in the case of incremental innovation indicators should be specific, quantitative, achievable and directed to prevent losses [18, p. 156-160].

Within BSC these criteria are called key performance indicators - KPIs and are entered in the maps which are designed separately for the staff of each level of bank’s organizational structure. These maps indicate perspectives and strategic objectives, indicators that measure the achieving of these objectives, target criteria for their implementation, and may determine the dynamics of results.

These individual KPIs maps are a mechanism of firsthand acquaintance of the employees with bank’s innovation strategy and their engagement into the process of its practical implementation.

However, for some indicators target criteria can’t be immediately set because of the lack of actual information for prior periods. Therefore, at first it is necessary to collect and analyze the necessary data. It should also be taken into account that objective, measurable indicators are not always sufficiently clear in the case of the evaluation of the innovation goals’ achievement. But subjective assessment may still be considered better than the complete lack of any evaluation.

The total number of indicators should not be large. As a rule, it is recommended to limit it to twenty. In consideration of the known statement that the company in the long run becomes what it measures, the selection of these criteria must be very thorough to most accurately reflecting the strategic innovative objectives of the bank.

Recall that, in financial terms, the goal of the innovation strategy implementation is to get the so-called innovation bonus, achieved by income growth in selling the innovation products and by reducing the operation costs. Thus, we suggest the following indicators evaluating financial perspective of BSCI:

- Return on innovation investment (ROI);
- Additional income earned from the sale of new or significantly improved products;
- Share of income from the sale of innovations implemented in the last two or three years in the total income of the bank;
- Income from commercialization of new products per one person employed in the innovation process;
- Income from penetration of bank’s products in new markets;
- Reducing costs on a certain transaction etc.

The customer perspective is to create unique offerings that can increase the market share of the bank, its image and customer loyalty. We suggest to measure it with the following indicators:
- The percentage of customers who use innovative services;
- The percentage of customers who have been acquired as a result of innovation;
- The level of customer satisfaction from the use of new products and services;
- The level of "survival" of innovation products which is defined as the ratio of introduced products and the share of them which still exist on the market;
- Measure of innovation success, calculated as the ratio of the most successful products (with introduction revenue exceeding expectations) and the total number of innovative products for a certain period of time (2-3 years) etc.

With respect to internal business processes BSCI goal is defined as efficiency of innovation process - from searching of innovative ideas to their commercialization. The indicators may be the following:
- Share of implemented innovative ideas in the total number of proposals received;
- Time that passes since the initiation of innovation to its full implementation, and the trend of its duration in the last three years;
- Total waste of time and money to introduce innovative products/services/technologies;
- Stability of introduced innovations’ flow that is their amount’s evolution for a certain period of time;
- The number of cross-functional groups and the number of innovations developed by them;
- The number of products/services created in collaboration with clients etc.

Learning and growth provides the focusing of staff on customer needs, its ability to formulate innovative ideas and implement innovative services that may be reflected in:
- The number of innovative ideas that have been proposed by employees;
- Percentage of staff whose income depends on the results of innovation;
- Percentage of staff whose bonuses depend on improved customer satisfaction;
- Number of employees trained to ensure the implementation of innovations;
- Amount of time devoted to training new technologies and processes;
- Percentage of bank employees involved in the cross-functional teams etc.

For maximum effect of the introduction of the Balanced Scorecard of Innovation it should be organically integrated into the system of bank management. The integration with the planning system is provided by: description and justification of the target values of key performance indicators; planning of resources to implement the measures necessary to achieve the strategic goals that at the operational level means identifying budgets and control dates; establishing priorities in the implementation of innovative projects.

It is important to ensure interoperability with the bank reporting system, which is designed to provide the necessary information for plan-fact analysis of BSCI indicators achievement. Thus, it appears necessary to adapt bank’s management accounting to the purposes and key aspects of the innovation strategy.

However, a prerequisite for any system of evaluation of innovation strategy implementation is the creation of an adequate structure of information support for providing operative search, analysis and synthesis of data you need. Different perspectives of Balanced Scorecard of Innovation should be filled with actual data from various departments of bank: financial performance - obtained from properly organized management accounting; data on customers - from the front office and marketing division, accumulating in the archives of Client Relationship Management system; information on staff development - from HR-department and the innovation unit. At the same time the latter is the main supplier of data on the functioning of innovation processes. Information flows must meet the following requirements: continuity, timeliness, adequacy, the actual filling and clear chronology.
Integrating of BSCI with the staff stimulation system allows to concentrate employees and managers on achieving specific goals that are expressed through the target values of indicators and to create conditions for a positive perception of innovative settings that form the content of corporate culture. The individual strategic maps of employees are becoming the basis for their financial incentives thus achieving synergistic motivation effect when corporate goals are balanced with personal goals of employees.

Therefore, taken into account the magnitude of the tasks undertaken by this system, an essential element in the use of BSCI is to automate the process of assessing and monitoring the implementation of innovation strategy. It can be provided using special software Microsoft Office PerformancePointTM Server 2007. It is considered to be a full-scale management solution allowing formalizing strategy and organizing constant monitoring of its implementation. With this software bank’s employees through special web portal have the opportunity to work with the necessary information, to control their own key performance indicators and to monitor achievement of general and specific corporate objectives. Simultaneously the software solution enables you to analyze processes in order to determine their causes and to predict the further implementation of the strategy [1].

**Conclusions.** Thus, in the case of full-scale implementation the proposed Balanced Scorecard of Innovation can be an effective tool to implement innovative strategies of the banks. At the same time it allows to update and improve this strategy, to establish the necessary communications, to coordinate customer needs with business objectives and to create an incentive system for employees. However, it is not a substitute for standard controlling instruments, it requires periodic review and will not be productive in the bank where there is no innovative corporate culture.

Summarized information on the selected BSCI indicators if it is disclosed by banking institutions, may be a database for the empirical research in the field of banking innovation as well as for determination of their innovation level during state statistical observations.

**Література**


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References


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