ABSTRACT
of the dissertation "Improving the management of innovation activity of second-tier banks in the Republic of Kazakhstan" submitted for the degree of Doctor of Philosophy (PhD) in the specialty 6D051700- "Innovation management" Makysh Moldir Kikbayevna

The relevance of the research topic. In order to stabilize the economy of the Republic of Kazakhstan, the main content of the new stage of development of the banking sector should be improving the quality of banking services, including expanding the composition of banking products and services, improving their quality and improving the methods of provision, increasing long-term efficiency and sustainability of business. In this regard, the development and implementation of financial innovations in the banking sector of the Republic of Kazakhstan, as well as their consolidation, is of particular relevance.

At the present stage of management, the improvement of innovation activities of commercial banks is a necessary condition for increasing their competitiveness in the Kazakh and international markets. This is due to the fact that innovation is currently a system-forming factor in the development of all subsystems of the national economy, including the banking sector.

The urgency of the problem of the introduction of innovative technologies by domestic commercial banks at the present stage of economic development and the specifics of the current situation in the banking system predetermined the choice of this topic, which included the most important issues of the development of theoretical foundations and practical recommendations of innovation management in relation to the banking sector.

Innovative development of banking activity also determines the objective need to improve the methods of innovation management of second-tier banks in the Republic of Kazakhstan.

Relevance of the research topic. The purpose of the dissertation research is to develop theoretical justifications and practical recommendations concerning the improvement of innovation management of second-tier banks in the Republic of Kazakhstan, as well as to determine the directions of their implementation and development in domestic banking practice.

To achieve the set goal of the research work, it is necessary to solve the following tasks;
- To study theoretical approaches to innovations in the banking sector, to clarify the concepts of banking innovation and innovation management;
- Development of the theoretical foundations of innovation management in commercial banks;
- To consider the features of innovation process management in banking in foreign practice;
- Analysis of the state of Management, implementation of innovative products and technologies in the activities of second-tier banks in the Republic of Kazakhstan.
- Development of scientific and practical recommendations related to the improvement of innovation management methods used in the banking sector of Kazakhstan.

The subject of the study is the system of economic relations between economic entities in the process of innovation management in the banking sector of Kazakhstan.

The object of the study is the innovative activity of second-tier banks in the Republic of Kazakhstan and their management process.

The working hypothesis of the dissertation research is the theoretical and methodological aspect of the necessity and importance of the development of innovation management of second-tier banks in the Republic of Kazakhstan, aimed at the effective functioning and increasing the competitiveness of the domestic banking sector in modern conditions of innovative development of the economy of Kazakhstan.

Research methods. Such research methods as scientific abstraction, grouping and comparison, statistical and financial analysis, expert assessment and simulation modeling were used in the work.

Description of the main results of the study. The scientific novelty of the dissertation consists in the development of theoretical and practical recommendations concerning the development of the innovation management system of second-tier banks in the Republic of Kazakhstan. The elements of innovation contain the following theoretical and practical results obtained by the author:

- from the author's point of view, the management system, functions and directions of banking innovation activity in ensuring the effectiveness of the bank's innovation management, as well as the types and nature of organizational innovations are clarified;
- the types of innovative products and information technologies used in foreign banking practice, digital and non-banking services have been studied in detail;
- the analysis of the experience of using information technology technologies in the activities of second-tier banks of the Republic of Kazakhstan was carried out in order to assess the effectiveness of the introduction and application of innovations in the domestic banking sector;
- a new stage in the development of second-tier banks in the Republic of Kazakhstan through the introduction of strategic innovation management, proposals have been developed that are of practical importance due to the presence in the organizational structure of the bank of a special "department of innovative development, organizing their activities, and the activities performed by it.
- in the activities of the Kazakhstan bank, the need to create a "bank of the future" and an "ecosystem of an innovation bank" for the introduction of modern innovative technologies has been experimentally substantiated.

The main provisions of the dissertation submitted for defense:

1. Active development of the modern banking sector theoretical and methodological justification of the management system of banking innovation and its directions to identify the significance and positive impact of banking innovations, comparative and qualitative assessment of the effectiveness of innovation.

2. Comprehensive analysis of the state of management and development of innovative technologies by second-tier banks of the Republic of Kazakhstan in order to ensure their competitiveness and sustainability.
3. Practical important proposals related to the presence in the organizational structure of Kazakhstani banks of a special "department of innovative development" engaged in the implementation of the process of formation of strategic innovation management as a mechanism of innovative management of the bank and its functions.

4. Proposals related to the creation of an "ecosystem of an innovative bank", which allows to increase the competitiveness of the bank with the main borrowing of foreign banking experience, as well as in relation to the creation of a "bank of the future" through the introduction of modern innovative technologies and digital transformation in the domestic banking sector.

**Theoretical and practical significance of the dissertation work.** The conclusions, suggestions and recommendations formulated in the dissertation are important in the development of strategies for innovative management of banks in the direction of improving modern management practices in the field of domestic banking innovations. They can also be used in the process of training, retraining and advising bank employees on innovation management issues.

The theoretical and methodological results of the study were presented in higher educational institutions and were reflected in the practice of JSC "Centercredit Bank", JSC "First Heartland Jusan Wapk" and JSC "RBK Bank", which is confirmed by the acts of implementation.

**During the research of the dissertation work, the following conclusions were made:**

1. New technologies allow banks to minimize or even eliminate operational risks associated with customer interaction. Banks are expanding access to products and services through remote channels and significantly reducing the presence of employees needed to conduct basic banking operations. Thanks to new technological processes, such as opening a deposit via a mobile application on a smartphone, the possibility of equal money transfer and electronic payments, banks can provide access to their products and services, despite the proximity of the client to the bank branch. As for small and medium-sized businesses (SMEs), they also benefit from increased access to credit as a result of improved scoring models using new technologies (such as accounts payable, accounts receivable, utility bills, etc.). Internet technologies also allow banks to reduce credit risk by achieving SME operations and financial indicators in real time.

2. Provide a more complete understanding of approaches to innovation risk management. The growth of consumer and market data in the last decade has stimulated the development of new technologies, including big data and analytics, data processing and machine learning. These technologies allow banks to analyze information about their customers and market trends. The advantages of these innovations are: increased transparency for customers (for example, the terms and price of the product) and improved institutional risk management. Digital technologies aimed at improving the quality of customer service (for example, online banking), increase the transparency of financial products and services (for example, pricing). In addition, corporate clients use banking websites and other data sources to compare financial products to increase market transparency. The findings improve the solution and increase the efficiency of the market. The training of specialists and the use of advanced analytics strengthen the control,
control and mitigation of risks in the banking sector. Banks can use advanced internal and market data and advanced analytics to better understand the main risk factors associated with the client and the financial transaction.

3. Increasing flexibility and speed by providing banks with competitive advantages. The introduction of digital technologies has accelerated the pace of changes in the banking sector and the financial sector as a whole. New participants in the banking ecosystem are rapidly developing and demonstrating the feasibility of digitally supported business models. Technological innovations accelerate the change of banking technologies and enterprise architecture, which allows banks to increase flexibility and speed, providing them with competitive advantages. New participants in the banking ecosystem - startups, fintech companies - indicate that digital infrastructure and platforms have the ability to meet strict requirements for technical fault tolerance and sustainability (for example, systems can be constantly updated when they are available). The introduction of digital platforms within the existing infrastructure will allow banks to accelerate the provision of resources, expand their presence in the market and maintain the flexibility of business development and resources for business management in a controlled and stable mode. The transition to digital platforms allows banks to interact closely with customers, as well as quickly develop and provide relevant services. Digitalization of business processes will allow banks to reach scale and become an efficient, stable and transparent company.

4. Digital business transformations aimed at improving the quality of customer service require reorganization, optimization and automation of business processes. These transformations and the core technologies used to transform these processes can also be used to improve operational control. For example, digitizing manual processes with RPA support can reduce execution costs and improve the quality and consistency of the process. RPA (Robotic Process Automation) is a business process automation technology that allows you to configure software or a "robot" to perform an automated process by creating algorithms based on a special platform. RPA robots simulate human actions in the system using a user interface for data collection and processing and application management

5. Costs and margin profit remain important factors in making strategic decisions of the bank, especially in conditions of slow economic growth. Banks can achieve their goals by using technological innovations to replace expensive and inefficient outdated technologies and optimize business processes. In particular, new technologies can improve the efficiency of banking expenses, reduce the cost of quality control of operations and replace outdated processes. Companies using digital technologies, such as Amazon, Google and Microsoft, have combined their experience to create low-cost infrastructure platforms with advanced capabilities. The commercialization of such platforms and capabilities has formed the technical basis that many non-banking organizations are part of the financial services ecosystem.

Thus, the most important for the prospects of application and implementation of banking innovations in Kazakhstan are:

- creation and use of unique banking products and services within the framework of the development of modern information technologies;
- providing the end user with complete information about new products and services in order to increase customer demand for banking innovations;
- use of virtual telecommunication financial technologies;
- increasing the level of security of information and its transmission channels;
- introduction of banking products and services using the Internet or an unusual social network;
- in any way to increase the level of qualification of the bank's employees in the field of innovation development;
- interaction with real companies that can apply new technologies and, if necessary, offer unique promising projects (startups) to banking institutions.

Such options for the development of banking innovations, in our opinion, will create an optimal mechanism for the implementation of innovative processes, increase the availability and quality of applied technologies, products and services and, most importantly, increase the level of competition of domestic banking innovations compared with foreign innovative technologies of the banking sector of the economy.

**Compliance with the directions of scientific development or state programs.**

The topic of the dissertation corresponds to the following directions of science development and state programs:

- Strategy "Kazakhstan-2050" new political course of the established State": address of the president of the Republic of Kazakhstan – Elbasy N. A. Nazarbayev to the people of Kazakhstan, December 14, 2012.
- State program "Digital Kazakhstan". Approved by the resolution of the Government of the Republic of Kazakhstan dated December 12, 2017 No. 827.

**Description of the applicant's contribution to the preparation of each publication.** According to the dissertation research, a total of 10 articles have been presented and published on the dissertation, including:

- In the journal included in the Scopus database (Academy of Strategic Management Journal, Volume 20, Issue 5, 2021, - 1 article;
- At international scientific and practical conferences (in Kazakhstan -4, in Belarus - 1, in Kyrgyzstan - 1) -6 articles.