

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
V.N. KARAZIN KHARKIV NATIONAL UNIVERSITY**

Name of the faculty **EDUCATION AND RESEARCH INSTITUTE
"KARAZIN BANKING INSTITUTE"**

Name of the department **Management, Business and Professional
Communications**

Specialty: **073 Management**

Educational program: **Management of Organizations and Administration**

Group: **AM-25M (full-time mode of study)**

QUALIFYING MASTER'S THESIS

on the topic:

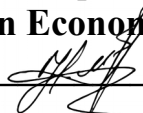
**INNOVATION MANAGEMENT IN THE COMPANY'S
MANAGEMENT SYSTEM**

student of higher education **Ding Lei**

The work is accepted for defence in the EC

Head of Department

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Kharkiv 2024

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25 September 2024

TASK
FOR A QUALIFYING MASTER'S THESIS
Ding Lei

1. Topic of work: "INNOVATION MANAGEMENT IN THE COMPANY'S MANAGEMENT SYSTEM".

Scientific adviser Iryna Denchyk
(full name, academic degree, academic title)

Approved by order of the university dated September 17, 2024 № 4601-5/1025.

2. The deadline for student submission of work November 18, 2024.

3. List of topics to be developed:

• In Chapter 1: to reveal the economic essence and significance of innovations in the activity of banking institutions; to generalize the classification of banking innovations and innovative technologies; to investigate the model of management of innovative activities of the organization.

• In Chapter 2: to provide a general description of JSC "OTP Bank"; to conduct an analysis of the financial and economic activity of OTP Bank JSC; to analyze the innovative activity of JSC "OTP Bank".

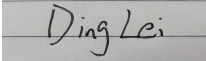
• In Chapter 3: to propose ways to improve and develop innovations and digital technologies in the banking sector; to justify the concept of "green finance" as a way of

sustainable recovery of Ukraine; to reveal the organizational and economic mechanism of financial support for the innovative development of JSC "OTP Bank".

4. Plan of qualifying master's thesis

No	Names of work sections
1	THEORETICAL BASICS OF COMPANY INNOVATION MANAGEMENT
2	INNOVATIVE ACTIVITY MANAGEMENT PRACTICE IN JSC "OTP BANK"
3	DIRECTIONS OF DEVELOPMENT OF INNOVATIVE ACTIVITIES OF BANKING INSTITUTIONS IN UKRAINE

5. Date of issue of the task September 25, 2024.

Student  Ding Lei
signature, full name

Scientific Adviser  Iryna Denchyk
signature, full name

ABSTRACT

The qualifying master's thesis contains 65 pages, 5 figures, 5 tables, and a list of 45 references.

The object of research is the process of innovation management in banking institutions.

The subject of research includes theoretical, methodological, and practical approaches to improving the management of innovative activities in the banking sector.

The purpose of the master's thesis is to generalize theoretical and methodological principles and to develop practical recommendations for improving innovation management in banking institutions under modern conditions.

Tasks of a qualifying master's thesis include:

- to reveal the economic essence and significance of innovations in the activities of banking institutions;
- to generalize the classification of banking innovations and innovative technologies;
- to investigate models for managing innovative activities within organizations;
- to provide a general description of JSC "OTP Bank";
- to analyze the financial and economic activities of JSC "OTP Bank";
- to evaluate the innovative activities of JSC "OTP Bank";
- to propose ways to improve and develop innovations and digital technologies in the banking sector;
- to justify the concept of "green finance" as a tool for the sustainable recovery of Ukraine;
- to outline the organizational and economic mechanism for financial support of the innovative development of JSC "OTP Bank".

The obtained results have practical significance, as the theoretical provisions, conclusions, and recommendations of the study are formulated into methodological developments. These can be directly implemented in banking institutions to enhance

their innovation management systems, taking into account the modern challenges of digital transformation and market demands.

Practical significance: This research provides banking institutions with a robust framework for managing innovations, addressing both internal challenges and external demands. By adopting the proposed recommendations, banks can improve their operational efficiency, enhance customer satisfaction, and contribute to sustainable development goals.

Year of completion of the qualifying master's thesis: 2024.

Year of defense of the qualifying master's thesis: 2024.

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INTRODUCTION

In the conditions of globalization and rapid development of technologies, innovations have become a key factor in ensuring competitiveness and sustainable development of companies. Innovation management as a component of an organization's management system is aimed at creating, implementing, and using the latest ideas, products, and processes to improve operational efficiency.

In today's realities, when market dynamics require adaptability and strategic flexibility from companies, innovative management becomes an important tool for achieving long-term goals.

The company's innovation management system covers a wide range of tasks: from generating ideas to introducing new products and processes, as well as monitoring their effectiveness. Effective management of this process requires the integration of innovations at all levels of the organization, the creation of an appropriate corporate culture, and the formation of an effective strategy focused on the use of modern technologies and resources.

The relevance of innovation management research is due to the growing influence of digitalization, changes in consumer behavior, and the need to meet the requirements of global markets. The successful implementation of innovations allows companies not only to strengthen their position in the market, but also to create new opportunities for development, increased productivity and adaptation to external challenges.

The purpose of the qualifying master's thesis is to generalize the theoretical and methodological principles and develop practical recommendations for improving the management of innovations in banking institutions in modern conditions.

The tasks of the qualifying master's thesis are:

- to reveal the economic essence and significance of innovations in the activity of banking institutions;
- generalize the classification of banking innovations and innovative technologies;
- to investigate the model of management of innovative activities of the organization;

- provide a general description of JSC "OTP Bank";
- analyze the financial and economic activity of JSC "OTP Bank";
- to analyze the innovative activity of JSC "OTP Bank";
- to propose ways to improve and develop innovations and digital technologies in the banking sector;
- justify the concept of "green finance" as a way of sustainable recovery of Ukraine;
- to reveal the organizational and economic mechanism of financial support for the innovative development of JSC "OTP Bank".

The object of research is the process of innovation management in banking institutions.

The subject of the research is theoretical, methodological and practical approaches to improving the management of innovative activities in the banking sector.

General scientific and special research methods were used in the work. General scientific ones include: cause-and-effect analysis, generalization, analytics. Empirical are: horizontal and vertical analysis, coefficient method, balance method and others.

The obtained results have practical significance, since the theoretical provisions, conclusions and recommendations of the study are formulated in the form of methodological developments that can be directly implemented in the activities of banking institutions to improve the innovation management system, taking into account the modern challenges of digital transformation and market requirements.

The qualifying bachelor thesis consists of an introduction, three chapters, conclusions, a list of used sources.

CHAPTER 1

THEORETICAL BASICS OF COMPANY INNOVATION MANAGEMENT

1.1. Economic essence and significance of innovations in the activity of banking institutions

Modern digital transformation leads to restructuring of the main and auxiliary business processes of credit organizations. The quality of management decisions is increasing, the sensitivity of commercial banks to various financial and non-financial risks is decreasing. Under such conditions, the importance of considering the impact of innovations on the development of banking business increases.

In the context of the banking sector, the economic essence of innovation is the systematic and proactive implementation and adoption of new or significantly improved solutions in various areas of banking activity. This activity is aimed at optimizing processes, expanding the range of services and promoting financial efficiency and sustainability.

Banking innovation can encompass a wide range of innovations, including but not limited to the development of sophisticated financial products, the introduction of advanced analytical tools using big data and artificial intelligence to improve risk management and facilitate better informed decision-making, and the emergence of digital banking solutions that revolutionize customer interaction with banking platforms, providing a smoother and more intuitive user interface. From a service offering perspective, innovation typically involves the development and introduction of new financial products or improvements to existing ones, incorporating attributes and functionality that meet new customer needs and preferences. This includes the creation of more individualized and flexible credit products, investment solutions with a better ratio of risks and profitability, or even the development of more operational and user-friendly applications for mobile banking [1-2].

Thus, the main approaches of scientists and practitioners to the interpretation of the concept of "innovation" and "banking innovation" are shown in Table 1.1

Table 1.1

Approaches to the interpretation of the concept of "innovation" and "banking innovation"

The essence of the concept of "innovation"	The essence of the concept of "banking innovation"
<i>as a result</i>	
- the final result of activities on the creation and use of innovations embodied in the form of improved or new goods (products or services), their production technologies, management methods at all stages of production and sale of goods, which contribute to the development and improvement of the efficiency of the functioning of enterprises [1]	- the result of the bank's activities aimed at obtaining additional income in the process of creating favorable conditions for the formation and placement of resource potential with the help of innovations that contribute to the client's profit [3]
- the result of the creative process in the form of created (or implemented) new consumer values" [2]	- the final result of innovative activity in the banking sphere, which was embodied in the form of a high-quality new or improved product or service implemented on the market, or a new improved technological process used in banking activity, as a result of which the satisfaction of customer needs is improved, competitiveness and efficiency increase activities from the position of "profit-liquidity-risk" and the development of the bank is taking place on an innovative basis [4]
<i>as changes</i>	
these are changes in technology and management, new combinations of equipment and technology; - innovation is defined as a certain new combination of the use of available resources, which gives a different quality of means of production, arises under the influence of cyclical processes of economic development, as a result of the introduction of new better products, more economical methods of production [2]	such an innovation in any area of the bank's operation, which has a positive economic or strategic effect (increase in the bank's customer base, increase in market share, reduction of costs for conducting any type of operations, etc.) [5]
carrying out changes in technique, technology, organization, ecology, economy, as well as in the social sphere with the aim of obtaining an economic effect based on the satisfaction of certain social needs [2]	innovations in all areas of the bank's activity, which provide the opportunity to achieve a positive economic or strategic effect in the form of an increase in customers and bank resources, market share, reduction of operating costs, etc. [6]
<i>as a tool</i>	
	a system of multifaceted (economic, organizational-management, institutional) innovations in

a special tool of entrepreneurs, a means by which they use change as a chance to implement a new type of business or service [1]	any sphere of banking activity, which provides a certain positive economic, social and strategic effect, which manifests itself in the external environment, that is, in increasing competitiveness, expanding the bank's client base, its sales network, strengthening the position on the market, and in the internal environment it is manifested through a reduction in transaction costs and an increase in the effectiveness of the bank's activities, in ensuring its effective functioning and stable development [7]
<i>as</i> process	
is a process aimed at the creation, production, development and quality improvement of new types of products, technologies, organizational forms [2]	

Therefore, taking into account the given definitions, we can conclude that innovations are manifested in improving the quality of goods and services, increasing the efficiency of products, processes, technologies or business models aimed at meeting the needs of the market and society. In the banking sector, innovation is the result of the bank's activities aimed at developing new products, services, technologies and innovative approaches to managing the institution to ensure profitability and strengthen competitive positions.

In addition, innovative approaches in banking operations often use fintech developments to increase efficiency and reduce operational costs. For example, the implementation of blockchain technology can increase the security and transparency of transactions, as well as reduce the time and costs associated with processing these transactions. Similarly, the deployment of robotic process automation can significantly improve the efficiency of internal operations of banking institutions, which will lead to faster service delivery and a reduction in the likelihood of errors.

Moreover, in risk management and compliance - a critical aspect of banking operations - innovation can come in the form of predictive analytics and machine learning algorithms that can recognize patterns and trends in large amounts of data, contributing to more informed and detailed risk assessment and the formation of more adequate reporting to regulatory bodies.

In parallel, innovation in the banking sector, if based on a strategically oriented approach, can lead to the creation of partnerships and alliances with fintech companies and other stakeholders to leverage external expertise and technological capabilities, resulting in a symbiotic relationship that will strengthen the innovative capacity of the

banking sector. institutions [7]. In essence, the introduction of innovations in banking is a multifaceted process that takes into account the complex dynamics of the financial ecosystem, contributing to the improvement of the quality of service provision, the quality of financial products and operational efficiency, while developing a culture of continuous improvement and adaptation to the changing financial landscape.

Digital financial technologies contribute to the development of innovative financial products and services that meet the changing needs and preferences of consumers. Banks can now provide services to a wide range of people regardless of the location of a particular client through digital account opening, robo-consultation on investment management, contactless payment solutions. Modern technologies allow banks to remain competitive even if they do not have a representative office in regions far from the center.

Sales are also expanding. Fintech solutions enable banks to reach customers through various digital channels such as mobile applications, online platforms and social networks. This wide availability, combined with the convenience and speed of digital transactions, helps banks increase sales and strengthen their market presence. The implementation of marketing strategies based on data enables banks to address potential customers with personalized offers, which contributes to further sales growth [3].

Intensification of communication with the target audience is constantly developing. Digital financial technologies facilitate dynamic and interactive communication between banks and their customers. Using chatbots, virtual assistants based on artificial intelligence and social networking platforms, banks can maintain constant interaction with the target audience, respond promptly to customer inquiries and collect valuable feedback to improve their products and services. Of course, interaction on the site or in the mobile application on the client's phone remains important. The quality of management decisions is increasing. The integration of data analytics and AI-based tools gives banks access to real-time data and the ability to draw certain conclusions that can be used to make more informed and strategic management decisions.

By analyzing customer behavior, market trends and operational performance, banks can identify opportunities for growth, reduce risk and improve overall operational efficiency. Sales of related services of other financial and non-financial sectors are expanding. Digital financial technologies facilitate cooperation and interconnection between the banking sector and other industries. For example, through open banking and API-based partnerships, banks can easily integrate third-party services such as insurance, investment products or e-commerce platforms into their digital offerings. Such cross-industry cooperation not only expands the range of services available to clients, but also creates new revenue streams for both the banking sector and partner industries.

Improving the quality of customer service is also one of the effects of digitalization. By leveraging technologies such as artificial intelligence, machine learning and natural language processing, banks can offer personalized services, fast response times and seamless interactions across digital channels, increasing overall customer satisfaction. Risk management is evolving as financial technology and other innovations enable banks to use big data analytics and credit scoring algorithms to more accurately assess risk, reduce default rates, and make more informed credit decisions.

So, summing up, we note that the economic essence of innovation consists in the systematic and proactive implementation and adoption of new or significantly improved solutions in various areas of banking activity. Many potential effects are highlighted, the manifestation of which is possible thanks to the innovative activity of banks, in particular, expansion of sales, creation of new products, reduction of personnel costs, improvement of risk management policy, sale of non-banking services, and others.

1.2. Classification of banking innovations and innovative technologies

In the banking sector, innovations can be divided and classified according to various characteristics. One such classification feature is the degree of novelty, where innovations can be fundamental, representing a radical departure from existing practices and introducing revolutionary products or processes that redefine the industry paradigm. On the other hand, they can be incremental, where changes are more evolutionary in nature, characterized by some improvement and refinement of existing products, services or processes aimed at increasing efficiency, customer satisfaction or other targets over time.

Similarly, the locus of innovation offers a lens through which to categorize banking innovation. Internal innovation is cultivated in a banking institution through internal research and development, using its own expertise and resources to promote innovation. In contrast, external innovation comes from outside the banking institution, often through collaboration with fintech companies, academia or other stakeholders, bringing in external knowledge and practices to drive innovation within the banking institution [1].

For effective strategic management of the bank's innovative activities, it is necessary to systematize banking innovations (Table 1.2).

Table 1.2

Generalized classification of innovations and banking innovations.

Classification of innovations	Classification of banking innovations
by subject and field of application	
product, assortment-product, process, organizational-management, marketing, innovations-markets, social [9-10]	grocery; financial; procedural; marketing; organizational[11-14]
by innovative potential	
radical, combined and modified [9-10]	radical; modifiers; combinatorial; pseudo-innovations[11-14]
according to the degree of novelty	

radical, revolutionary and step-by-step [9-10]	innovations at the level of a specific bank; innovations on the national market; global banking innovation [11-13]
according to the scale of implementation	
transcontinental, transnational, sectoral, corporate, firm [9-10]	local and systemic [11-13]
by the nature of the idea (innovative function)	
basic, improving and pseudo innovations [9-10]	inventive and imitative [11-13]

Distinguishing innovations based on their functional focus is another classification feature, where process innovations involve changes in the practical implementation of banking operations, aimed at increasing efficiency and optimizing work processes.

Product innovation, on the other hand, focuses on developing new financial products or improving existing ones to improve the value proposition. Similarly, organizational innovations are focused on changes in the structural and managerial aspects of the banking institution, aimed at forming a culture conducive to innovation and optimal work.

From a technological point of view, innovations in the banking sector can be classified by the type and degree of technology implementation. Digital innovation encompasses the implementation of digital solutions to improve day-to-day operations, including the deployment of artificial intelligence, blockchain technology and big data analytics to improve efficiency and expand the banking service offering. On the other hand, non-digital innovation can cover changes that are not related to the implementation of technology, for example, innovations in management practices, approaches to customer service or innovations in business models that aim to redefine the competitive position of a banking institution.

Similarly, the market orientation of innovations acts as a classification feature where demand-side innovations attempt to respond to changing customer preferences and demands through their innovation efforts. On the other hand, innovations stimulated

by technological development are manifested when the bank implements an innovation under the influence of the appearance of a new solution that can reduce costs, but in this case, unlike the previous type, the clients themselves do not need to implement such an innovation by the bank. As for specific areas of innovation implementation, there are a large number of them.

Key for the bank are credittech, paytech, cybertech, analytech, opertech, investtech, robotech. In the context of the implementation of other financial services within the framework of one's own system, such a direction of innovation as other technology is interesting. In addition, it is possible to increase efficiency in serving the needs of regulatory bodies with the help of regtech tools.

Current trends in the development of financial digital innovations include such technologies as:

- cloud computing (server computing, external computing);
- machine learning;
- biometric technologies;
- artificial intelligence;
- analysis of big data (as well as their storage and accumulation);
- augmented and virtual reality;
- blockchain (distributed data register);
- Internet of things (industrial Internet, IoT) [7, 13].

Banks use cloud computing for efficient data storage, data management and enhanced security measures. Financial institutions use machine learning algorithms to detect fraudulent activities, predict customer behavior, and improve investment strategies. Biometric technologies such as fingerprint and facial recognition are required to authenticate customers and secure transactions.

Artificial intelligence means the ability to imitate human cognitive functions. Banks use it to automate tasks, simplify customer service and optimize credit risk assessment. Big data is used to gain insight into customer behavior, improve decision-making, and identify opportunities for growth [2].

Banks can use augmented and virtual reality solutions to create immersive, interactive experiences to educate and engage customers. Also, financial institutions are studying blockchain technology to ensure safe, transparent and efficient transactions, to optimize cross-border payments. IoT devices are needed to improve branch security, automate customer service, and develop innovative financial products.

Creditech, a combination of the words "credit" and "technology", refers to the application of modern technologies such as artificial intelligence (AI), machine learning (ML) and data analytics to improve and optimize credit services in the financial industry. One of the ways banks use credit technologies is the use of artificial intelligence algorithms to analyze huge amounts of data and more accurately predict the creditworthiness of borrowers. This makes it possible to approve loans faster, with less human intervention, and minimize the percentage of defaults [13]. In addition, credit technologies can be used to develop personalized credit products for customers. By analyzing historical data and patterns, banks can adapt credit offers to individual needs, providing more flexible and competitive lending conditions.

For example, US bank BBVA Compass used a proprietary algorithm that uses alternative data sources, such as utility bill payment history and rent payment records, to assess the creditworthiness of unbanked customers. This enables the bank to offer loans to customers who would otherwise be denied access to funds due to insufficient credit history. Credit technology can also be used to detect and prevent fraudulent activities.

Banks have the ability to use AI-based algorithms to monitor transactions and user behavior patterns, flagging anomalies in real-time to detect potential fraud. For example, Mastercard introduced a Decision Intelligence solution that uses machine learning to assess the risk level of transactions, helping banks minimize the number of false rejections and improve the overall quality of service for cardholders.

Paytech, or payment technology, is the integration of digital technologies into payment systems to optimize and improve transaction processing, security, and user experience. Banks can use paytech to improve their existing payment infrastructure, offer innovative payment solutions and ensure seamless transactions for their customers.

Summing up, we note that innovations can be classified by the source of origin, source of financing, by the factor that determines their implementation, by the type of technology, by the area of work of the bank that is being improved, etc. Important technologies for innovation are cloud computing, machine learning, biometric technologies, artificial intelligence, big data, augmented/virtual reality, blockchain, Internet of Things. The key areas of innovative activity for banks at the moment are credittech, paytech, cybertech, analytech, opertech, investtech, robotech, as well as other tech and regtech.

1.3. Model of management of innovative activities of banking institutions

To ensure systematic management of innovations in the bank, it is important that this process be systematic, and therefore understanding the features of the mechanism is extremely important. In the context of bank innovation, the process of managing innovation in banking institutions typically begins with identifying and articulating relevant goals, challenges and opportunities that are both imminent and promising in nature, arising from a variety of sources, including regulatory change, new technology and transformation consumer behavior.

Management of innovative activities of the bank includes:

- definition of strategic innovation goals;
- development of a system of innovative strategies for the realization of these goals;
- analysis of the external environment taking into account risks;
- assessment of the innovative potential of the enterprise;
- generation of new ideas;
- formation of innovation and investment portfolio, development of projects;
- planning, organization and implementation of scientific developments in production;
- evaluation of the effectiveness of innovative projects;

- analysis and assessment of innovation risks and determination of ways to reduce them;
- assessment of the effectiveness of investment projects [17].

Determining strategic innovation goals consists in establishing the key goals or outcomes that the organization seeks to achieve through innovation. This may include aspects such as improving products or services, increasing production efficiency, increasing market competitiveness or developing new markets. Next, you need to develop a specific plan of actions and strategies to achieve the defined strategic innovation goals, that is, identifying the necessary resources, technologies, partnerships and processes, as well as establishing success criteria and mechanisms for measuring progress. In addition, it may include identifying potential risks and how to manage them. During the implementation of innovative activities, both internal (endogenous) and external (exogenous) factors play an important role (Fig. 1.1).



Fig. 1.1. Key factors of negative impact on innovative activity.

Analysis of the external environment taking into account risks is the process of assessing external factors that may affect the organization's activities, as well as

identifying and assessing possible risks that may arise as a result of these factors. Includes the analysis of economic, political, socio-cultural, technological and other external factors that can affect the organization's activities.

The assessment of the innovative potential of the enterprise plays a key role in determining the opportunities and prospects of the company's development through the implementation of innovative solutions. This assessment helps identify potential for new product creation, process improvement, and innovation strategy development, including analysis of the company's internal resources and capabilities, as well as external factors such as technology trends, market competition, and customer requirements.

The general model of management of innovative activities of the organization is given in Figure 1.2.

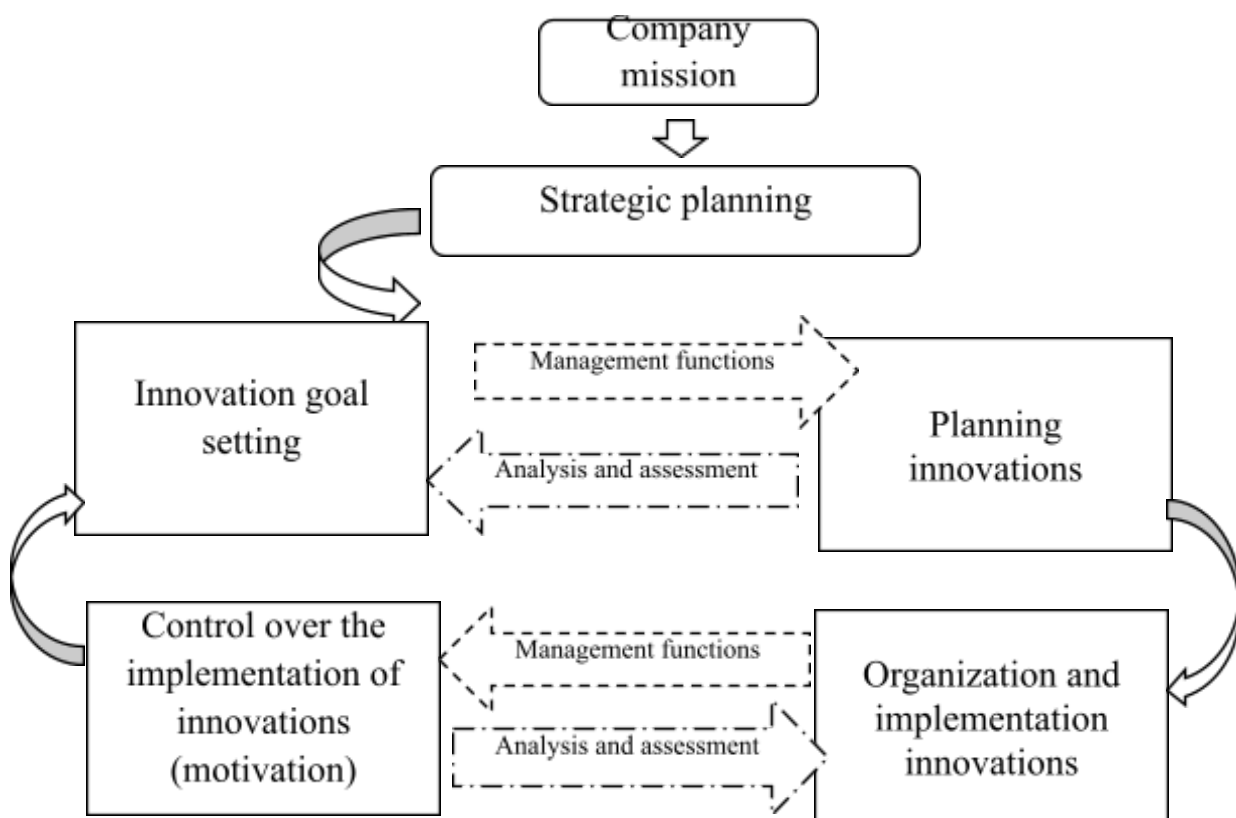
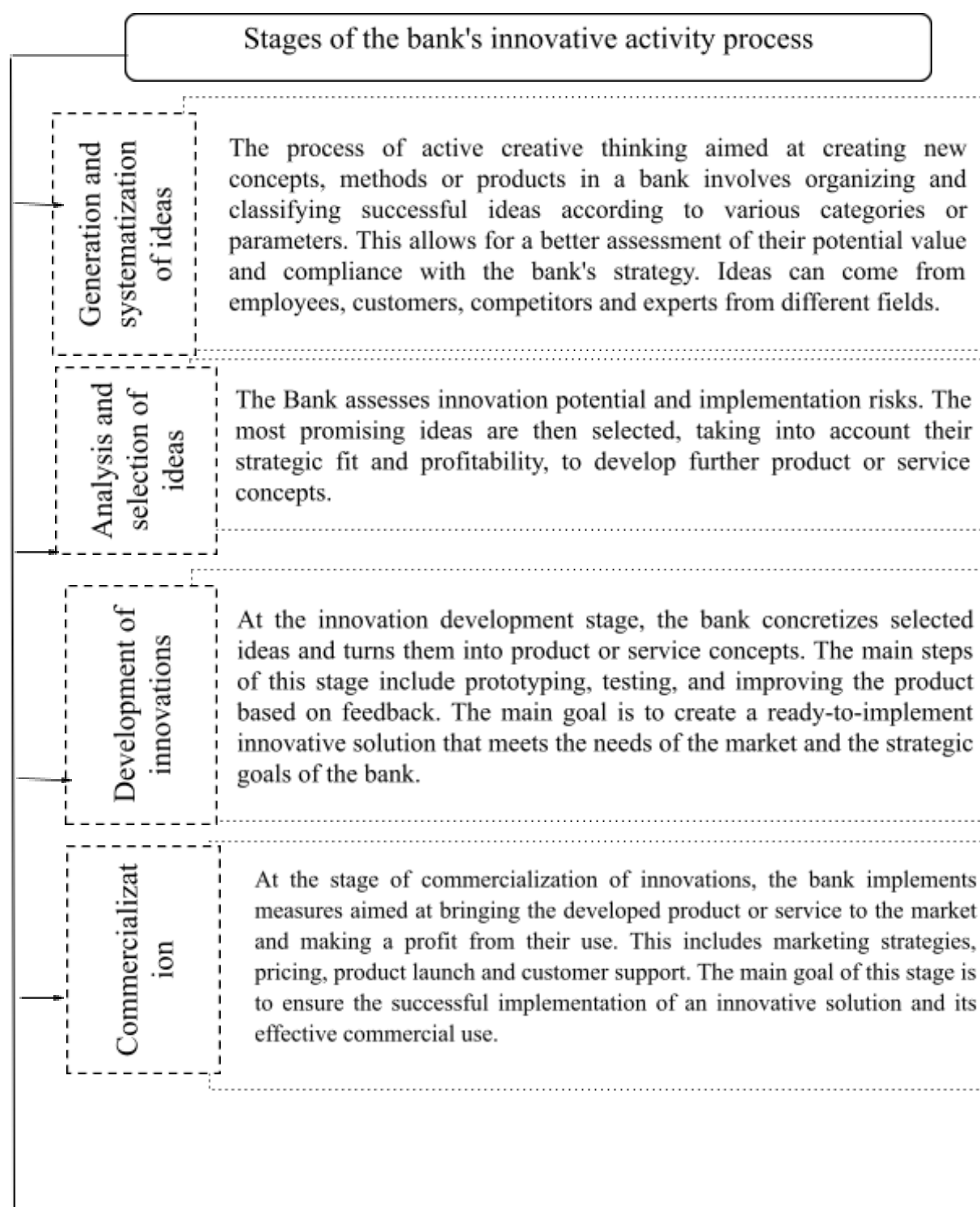


Fig. 1.2. Model of management of innovative activities of the organization

The stages of the organization's innovative activity process are shown in more detail in Figure 1.3 [14].

If all the considered stages were successfully completed in accordance with the established standards, the result of the innovative activity of the enterprise will be the achievement of the set goals, such as obtaining profit, increasing market share and creating an attractive image.

Assessment of the feasibility of the results of innovation implementation plays an important role in determining the economic efficiency of the project. This efficiency is determined by comparing the resources spent and the results obtained. However, it is worth noting that the goal of an innovative project can be different, for example, improving the environment, easing working conditions, or improving safety.



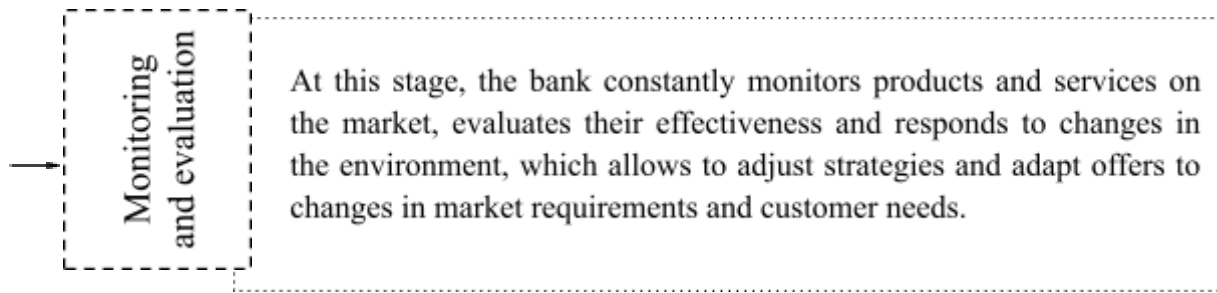


Fig. 1.3. Stages of the bank's innovative activity process

Depending on the goals, the following types of effects of innovative projects can be distinguished: economic, scientific and technical, social and ecological. The economic effect of the introduction of innovations is multifaceted and can significantly affect the development of both an individual enterprise and the country as a whole. Increasing productivity, reducing costs, improving product quality, developing new markets, strengthening competitiveness, creating new jobs and attracting investments are just some of the aspects of the economic effect. The implementation of innovative projects can become an important factor for stimulating economic growth and ensuring a stable competitive advantage in the market. Therefore, innovation should be considered as a strategic element of development, which is able to ensure success in the future.

The scientific and technical effect of the introduction of innovations is manifested in the development of new technologies, inventions, the promotion of scientific research, the impact on industrial standards, the development of new industries, the improvement of the quality of life, the increase of production efficiency and the creation of new products and services. Together, these aspects contribute to the development of technology and science, which are key to ensuring sustainable economic growth and improving the quality of life in society. Therefore, innovations are an important factor of progress, helping to solve current problems in various fields.

The social effect of innovations is their impact on improving the quality of life, creating new jobs, increasing the availability of products and services, improving health and safety, and developing cultural potential. All these factors have a positive effect on the social welfare and development of society, ensuring its progress and stability.

The ecological effect of innovations is expressed in reducing the negative impact on the environment and preserving natural resources. Innovations can lead to the creation of environmentally friendly technologies, energy-efficient solutions, alternative energy sources and production methods with minimal emissions and waste. This helps reduce the carbon footprint, reduce air and water pollution, and preserve biodiversity. Implementation of ecologically oriented innovations is important for ensuring sustainable development and environmental protection for future generations.

Therefore, innovation is a key factor in the successful development of any industry, particularly the banking sector. They stimulate the continuous improvement of products and services, increase the efficiency and competitiveness of banks, as well as respond to changes in customer needs and regulatory requirements. Through innovation, banks can attract and retain customers, reduce costs, expand market opportunities and strengthen their position in the industry.

CHAPTER 2

INNOVATIVE ACTIVITY MANAGEMENT PRACTICE IN JSC "OTP BANK"

2.1. General characteristics of JSC "OTP Bank"

JSC "OTP Bank" is one of the leading banks of Ukraine with foreign capital, which occupies a leading position in the country's banking market. The bank has been operating in Ukraine since 1998 and has gained a reputation as a reliable, stable and socially responsible financial institution that actively supports the country's economic development, especially in difficult conditions.

OTP Bank provides a wide range of services, including credit and deposit products, insurance, asset management, leasing, factoring, as well as corporate and investment banking. In 2023, the bank continued to support the economy of Ukraine, in particular through servicing retail and corporate clients, providing them with access to financial products and services that contribute to business development and stability. In addition, OTP Bank actively invests in information technologies and digitalization, implementing the strategy of creating the latest client services for private and corporate clients. This makes it possible to ensure the convenience and availability of financial services through online channels and innovative technologies [15].

In addition to the bank itself, the group in Ukraine includes OTP Factoring, OTP Leasing and OTP Capital. Thanks to such directions, OTP Bank provides clients with a variety of financial solutions that contribute to the development of their business and financial situation. The total number of employees in Ukraine is 2,590, of which 2,390 work directly at OTP Bank. The bank actively supports the corporate culture and professional development of its employees, creating a comfortable environment for their development and career growth.

Also, an important part of the bank's activity is the implementation of social initiatives and projects aimed at supporting local communities, which allows the bank to remain a socially responsible partner for its customers and employees.

OTP Group operates in 12 countries, serving 17 million clients and providing a wide range of financial services for private and corporate clients. Founded in 1949 as a state savings bank, today the group includes major subsidiaries in the fields of insurance, real estate, leasing, factoring, asset management and pension funds. In 2023, OTP Group expanded its presence in the Central Asian market by acquiring Ipoteka Bank in Uzbekistan, the country's fifth largest financial institution. Entering the Uzbek market became an important step in the group's development strategy [15].

In 2023, OTP Group member banks were recognized as Banks of the Year in Albania, Croatia, Montenegro and Slovenia by The Bankers 2023 Bank of the Year Awards. In addition, the Euromoney Awards for Excellence 2023 recognized the group's achievements in several categories: Best Corporate Bank in Hungary, Best Bank for Digital Solutions in several countries (Hungary, Croatia, Montenegro) and Best ESG Bank in Croatia. Also, OTP Group banks received awards in the Best Digital Solutions Bank category in Bulgaria, Hungary and Serbia according to Global Finance. These awards confirm the group's leadership position in the CE markets, as well as its achievements in innovation, digitalization and sustainable development.

JSC "OTP BANK" is one of the leading banks in Ukraine, which occupies a stable position in the top ten in terms of main financial indicators. It is a universal financial institution that is focused on providing high-quality services to both corporate and private clients, as well as representatives of small and medium-sized businesses.

The main strategic areas of the bank's activity include:

1. Establishing and maintaining long-term and mutually beneficial relationships with clients, which ensures a stable partnership and trust.
2. Provision of a full range of financial services, including loans, deposits, asset management, insurance, leasing, factoring, as well as corporate and investment banking.
3. Increasing the level of professionalism and introducing innovations in all aspects of the bank's activities.

4. Creating favorable conditions for the development of initiative and creativity among employees, stimulating the disclosure of their potential.

In addition to traditional banking services, JSC "OTP BANK" also carries out a number of additional activities, in particular: issuing its own securities, conducting lotteries, providing services for storing clients' valuables and renting individual safes, investment activities, collection and transportation of currency values, as well as provision of consulting and information services on financial issues. This allows the bank to be flexible in providing complex solutions for its clients and to adapt to the requirements of the modern market.

In accordance with the requirements of the legislation of Ukraine and on the basis of licenses issued by the National Securities and Stock Market Commission, OTP Bank has the right to carry out depository activities as a custodian of securities, as well as to perform professional activities on the stock market, in particular: to carry out brokerage and dealer activities, and also provide underwriting services. This allows the bank to participate in securities trading, organize securities issues and provide a wide range of services for investors and enterprises, contributing to the development of the stock market and attracting capital.

JSC "OTP Bank" carries out its activities through a wide regional network, which includes 85 off-balance sheet operational branches, four of which are the base for regional directorates registered by the National Bank of Ukraine [15]. In addition, the regional directorate of the Kyiv region functions within the structure of the head office. The professional distribution of functions, powers and responsibilities between various bank management bodies ensures an effective system of internal control and management, which contributes to high operational efficiency and maintaining the stability of banking processes.

The management bodies of JSC "OTP Bank" include various levels and structures that ensure effective management and control at all stages of the bank's activities. The main management bodies of the bank are as follows:

The Supervisory Board is the highest management body of the bank, which is responsible for the general strategy and policy of the bank. The Supervisory Board

controls the activities of the executive branch, approves financial reports and other important decisions, including major investments, changes in the ownership structure, development strategy, etc.

The board is the body that carries out the current management of the bank. The Board is responsible for the implementation of strategic decisions, management of financial flows, development and implementation of policies, control over financial activities and reporting, as well as for making operational decisions within banking operations. Each member of the board has certain functional responsibilities, in particular with regard to credit activities, risk management, operational functions, etc.

The general director (or CEO) is the person who heads the board and is the main executive body responsible for the general direction and efficiency of the bank's work. The general director participates in the development of the bank's strategy, manages its operational activities, makes key decisions for the development and implementation of the strategy.

Committees are specialized groups created to solve specific issues of management and control. Such committees may include:

Credit Committee — to make decisions on granting loans.

Risk Management Committee — for assessment and management of various types of risks (financial, operational, credit, etc.).

The audit committee — for internal control and supervision of compliance with financial reporting and corporate governance standards.

The top executive body is a person or group of persons who manage the day-to-day activities of the bank based on decisions made by the board. They perform current operations, ensure interaction with clients and partners, implement internal policies and development programs. Each of these bodies works in close cooperation to ensure stable functioning and development of the bank, support of high standards of management and corporate culture.

Innovative activity at JSC "OTP Bank" is carried out and controlled through several key committees that are responsible for various aspects of innovation processes, from strategic planning to the implementation of technological solutions.

Here are the main committees that play an important role in innovation management:

- The Digital Transformation Management Committee, which is responsible for planning and implementing digital changes in banking processes. It focuses on the integration of new technologies such as artificial intelligence, blockchain, financial technology (FinTech) and other innovations that can improve banking services and operations. The Committee evaluates the effectiveness of digital initiatives and monitors their implementation.

- Credit Committee, although the main task of this committee is to make decisions on granting loans, it also actively interacts with innovative projects related to new financial products and services for corporate and private clients. The credit committee may be involved in the evaluation of new financial instruments and lending models based on innovative approaches.

- The risk management committee is involved in the control of innovative activities, especially from the point of view of potential risks associated with new technologies, financial products and services. He assesses the risks associated with new innovations and proposes measures to minimize them, ensuring the safety and stability of financial operations.

- The Audit Committee carries out independent control over the implementation of innovation projects, verifies their compliance with internal standards and regulatory requirements, and also verifies the effectiveness of management practices in the context of innovation implementation.

- The IT Committee (IT Committee) plays an important role in the implementation of technological innovations in the bank, controlling investments in infrastructure, support of new technologies and integration of digital solutions in banking operations. It also oversees the implementation of cyber security and customer data protection, which is an important aspect of innovation.

These committees work in close cooperation to ensure the smooth implementation of innovations in banking, ensuring monitoring of results and compliance of new initiatives with market, customer and regulatory requirements.

2.2. Analysis of financial and economic activity of JSC "OTP Bank"

Since 2019, JSC "OTP Bank" has been included in the list of systemically important banks of Ukraine in accordance with the decision of the National Bank of Ukraine (NBU). This status is given to banks that have a great influence on the stability and development of the country's financial system due to their scale, activity and importance for the economy.

Grounds for classification as systemically important banks[15]:

1) OTP Bank has a developed regional network, which includes a significant number of branches and serves millions of clients throughout Ukraine. This allows the bank to have a significant impact on the banking sector.

2) The bank owns large financial assets, which ensures its strategic importance for the stability of the financial system.

3) The bank actively provides financial services for both corporate and private clients, including small and medium-sized businesses, which is an important factor in supporting economic activity at all levels.

4) The Bank actively participates in various financial instruments and markets, including depository activities, brokerage and dealer activities, which increases its significance for the stability of the financial system.

5) OTP Bank actively participates in the state payment system and other critical financial processes, which is important for maintaining the stability and functioning of the economy as a whole.

The status of a systemically important bank obliges OTP Bank to meet more stringent requirements of regulatory bodies, in particular, regarding capital reserves, internal control and risk management. This guarantees that the bank will be able to continue to fulfill its important role in maintaining the stability of the financial system of Ukraine.

In addition, OTP Bank has a strategic potential for promoting financial integration and attracting investments, which has a positive effect on the development of the Ukrainian economy. Under conditions of crises or financial instability, the role of

such banks becomes even more important to prevent systemic risks and ensure smooth operation of the banking system.

Next, we will analyze the key indicators of JSC "OTP Bank" for 2022-2023. (Fig. 2.1) [16].

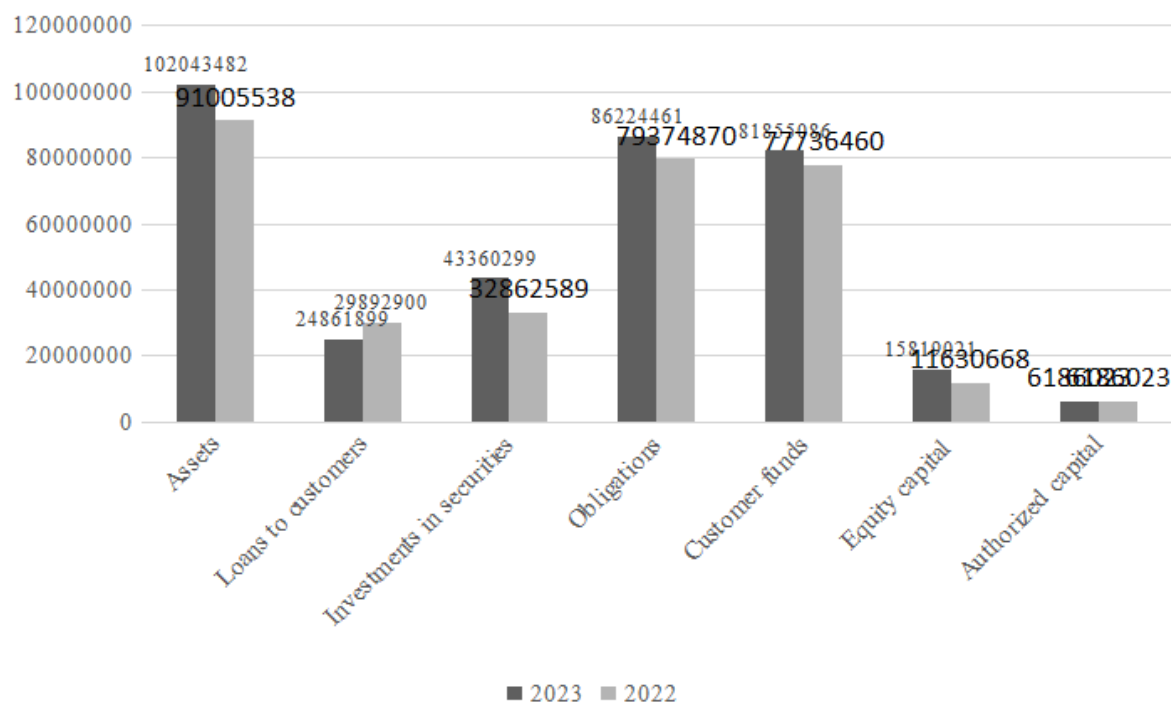


Fig. 2.1. Key indicators of JSC "OTP Bank" for 2022-2023, (thousand UAH).

In 2023, JSC "OTP Bank" demonstrated positive development dynamics. Assets increased by 12.1% and amounted to UAH 102.04 billion, which indicates effective management of resources. The volume of clients' funds increased by 5.3% to UAH 81.86 billion, which confirms the high trust of clients. At the same time, equity increased by 36.1%, to UAH 15.82 billion, ensuring the growth of the bank's financial stability. Investments in securities increased by 31.9% to UAH 43.36 billion, demonstrating a strategic transition to a stable source of income. At the same time, the volume of loans to customers decreased by 16.9%, which may indicate a cautious approach to lending in conditions of economic instability. The authorized capital remained unchanged at the level of UAH 6.19 billion, which ensures the stability of the equity capital structure. In general, the bank continues to adapt to economic challenges, demonstrating growth in key financial indicators and strengthening its market position.

Bank profitability indicators are given in Table 2.1 [16].

Table 2.1

Profitability indicators of JSC "OTP Bank" for 2022-2023, thousand UAH

Indicators	2022	2023	Deviation
1. Interest income	8787828	12121526	+3,333,698
2. Interest expenses	1981446	3480867	+1,499,421
3. Commission income	1785441	1869768	+84,327
4. Commission costs	663787	739463	+75,676
5. Profit before taxation	726411	7422838	+6,696,427
6. Net profit	597106	3712307	+3,115,201

The analysis of profitability indicators of JSC "OTP Bank" for 2022-2023 shows a significant improvement in financial results. In particular, interest income increased by 3,333,698 thousand. UAH, and commission income — by UAH 84,327,000. UAH, which indicates effective asset management and provision of banking services. At the same time, the increase in interest expenses by 1,499,421 thousand UAH and commission costs for 75,676 thousand. hryvnias is a consequence of the expansion of the bank's operational activities. The most impressive is the growth of profit before taxation by 6,696,427 thousand. UAH, which provided a net profit in 2023 at the level of UAH 3,712,307 thousand. UAH, exceeding the previous year by 3,115,201 thousand. UAH These results confirm the bank's stable financial growth and its ability to effectively adapt to changes in the economic environment.

Compliance with economic standards is important for the sustainability of JSC "OTP Bank" and compliance with the requirements of the NBU. Let's consider how the bank provides these indicators and their impact on financial stability and efficiency (Fig. 2.2) [16].

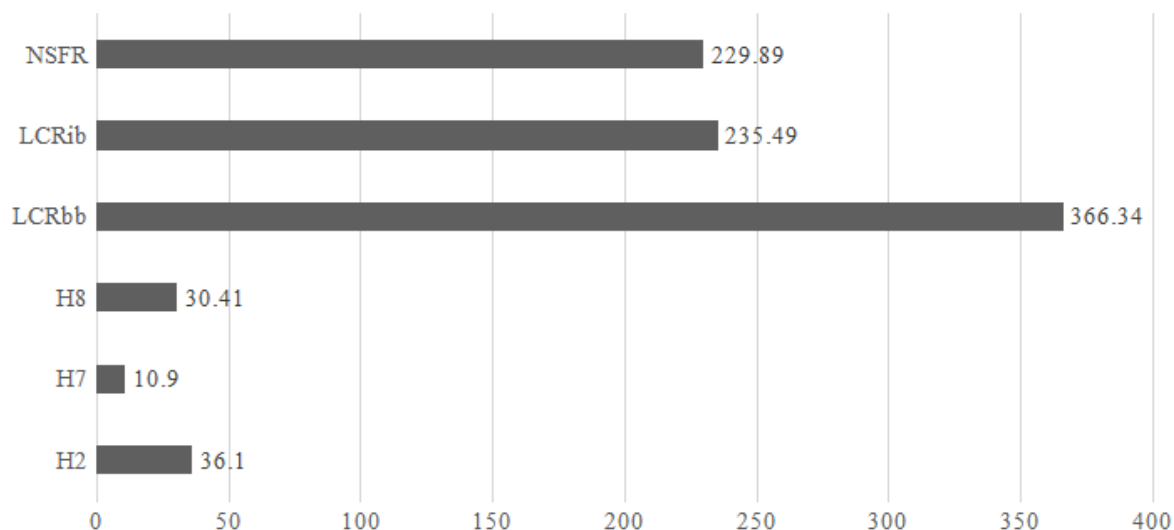


Fig. 2.2. Dynamics of economic regulations of JSC "OTP Bank" as of November 1, 2024, (%).

JSC "OTP Bank" demonstrates a significant reserve of financial stability, exceeding the standards established by the National Bank of Ukraine. Regulatory capital adequacy (H2) is 36.1% with a minimum standard of 10%, which indicates a high capitalization of the bank. The norm of instant liquidity (H7) is 10.9% with a minimum of 30%, which requires attention to short-term liabilities. Total liquidity (H8) at the level of 30.41% exceeds the norm of 20%, which confirms the sufficiency of resources to fulfill current obligations. Liquidity indicators based on LCRbb (366.34%) and LCRib (235.49%) ratios significantly exceed the norm of 100%, and NSFR at the level of 229.89% at the norm of 100% ensures the bank's long-term stability.

Therefore, JSC "OTP Bank" demonstrates a stable and positive financial condition, which is confirmed by key indicators. The bank has high capitalization, a significant reserve of liquidity and adheres to the basic economic norms established by the NBU, significantly exceeding the minimum requirements. The growth of interest and commission income, as well as a significant increase in net profit in 2023, indicate efficient operational activity and adaptation to market conditions. In general, the bank remains one of the leaders of the financial sector of Ukraine, strengthening its position thanks to a high level of capital, innovative approaches and strategic flexibility.

2.3. Analysis of innovative activity of JSC "OTP Bank"

JSC "OTP Bank", keeping pace with modern banking trends, in recent years introduced a number of effective innovative products into its operations, which significantly influenced the development of the system of remote banking services for customers.

Today JSC "OTP BANK" offers the following digital services [16]:

- ordering bank cards;
- management of bank card settings, namely blocking/unblocking, management of transaction limits, management of the ability to make payments on the Internet with a card, etc.;
- currency exchange online;
- payment of various services (replenishment of mobile phone account, Internet, utility services, etc.);
- repayment of loans;
- management of current deposits (replenishment, withdrawal, change of accounts for payments, change of extension sign, etc.);
- review of detailed information on all current bank products;
- transfer of funds from card to card and to any details on the territory of Ukraine, free transfer of funds between the bank's own accounts;
- settings of various templates for payments and transfers and other useful functions.

Thanks to the ability of customers to carry out most transactions (various payments, money transfers, services and consultations) in a digital format, the bank's activities reduce the load on bank branches, save customers' time and increase the bandwidth for simultaneous service to the bank's customers. In order to improve banking services, JSC "OTP Bank" constantly analyzes the market for the provision of banking services, as well as studies the needs of customers in obtaining quality services and simplified processes in solving financial issues.

Starting from 2018, JSC "OTP Bank" focused its efforts on the active development of remote service channels in order to meet the needs of clients in obtaining services in an efficient and convenient way. Despite the availability of a wide range of interaction channels, the main method of remote customer service of the bank remains telephone communication. To this end, JSC "OTP Bank" expanded the functionality for clients and introduced an intelligent voice menu IVR (Interactive Voice Response), the technology of which is capable of automatic recognition of human speech.

The intelligent robot-employee of the bank's contact center, which was developed jointly with the "NOVA AITI" company, was named the "Lesya" robot. For the efficiency of customer service, JSC "OTP BANK" replaced the classic IVR, which offered the client to press many buttons to solve one or another question, with an intelligent IVR voice menu that works on Natural Language Understanding (NLU) technology. The "Lesya" robot quickly processes the client's request and provides answers to common questions, including information on the client's card and/or credit accounts. Taking into account the successful service of customers in the mode of telephone communication, JSC "OTP Bank" continued to improve the processes of automatic customer service.

Thus, at the end of 2018, the bank implemented the provision of advice to clients in such messengers as Facebook Messenger, Viber, Telegram and online chat, where the "Lesya" robot can answer most of the typical questions, thereby allowing operators to focus on solving more complex customer requests.

In 2019, JSC "OTP Bank" was included in the list of the best innovative companies of Ukraine according to the rating of "TOP-100" magazine and delo.ua, compiled by the editors together with relevant experts. The companies were evaluated according to 3 parameters and a 5-point scale: innovativeness of the company's product, innovative approaches in business process management, scale of innovations. OTP Bank entered the list of the best innovative banks of the Ukrainian market thanks to the new branch - Future Branch. In the branch, visitors can carry out transactions independently using laptops, deposit boxes and modern ATMs. Clients have the

opportunity to independently open deposits, issue loans, pay bills, make loan payments, and buy currency. In the new branch, all the functions of a regular bank and cash registers are available. And after all banking transactions, guests can independently prepare and treat themselves to coffee [17].

The main reason for the creation of a branch of a new format was the trend of digitization. OTP Bank thus changes the role of the bank branch: from a transactional one to an educational one and ensures migration to digital interaction channels.

In order to improve work and expand opportunities for Internet banking users, OTP Bank introduced its OTP Smart mobile application, thanks to which the bank's clients have the opportunity to use the remote banking service to obtain the necessary information 24/7.

The OTP Smart mobile application provides the user with a number of opportunities: making instant transfers between OTP Bank accounts; transfer of funds according to details, in particular to credit cards of other banks; withdrawal and replenishment of funds from existing deposits; issuance and repayment of loans; payment for mobile services and various game accounts; movement and control of the balance of funds; receiving account details, viewing their statistics and statements.

The most popular operations in the OTP Smart mobile application are money transfers of bank clients between their own accounts, top-up of a mobile phone account, as well as top-up and withdrawal of funds from a deposit account. According to the bank's statistics, every 5 seconds there is a successful login to the OTP Smart mobile application, and every 10 seconds the bank's clients perform one operation in Internet banking.

For simple contactless payments in the OTP Smart application, it is possible to add payment cards to the Google Pay electronic wallet in just a few clicks.

In order to create conditions for convenient communication between customers and the bank, the OTP Smart application was integrated with the Omilia chatbot (robot). Thus, tens of thousands of customers were registered with the robot, which during the year was the main channel for customer registration in the large-scale Avtozabava campaign. These and various other innovations helped the bank attract more than

300,000 customers to use the OTP Smart mobile application in 2020. new customers, and subsequently the total number of customers connected to OTP Smart reached almost 1 million. persons [16].

As of the end of 2020, the number of active users was 310,000. people, which exceeded the number of users by 42% the previous year, and in the mobile application - 273 thousand. people (increase in users for the year – 57%). The total number of active transactions in the OTP Smart application in 2020 increased by 127% and amounted to 7 million. Also, over the year, the monthly number of mobile phone top-up operations increased by 56%, utility payments - by 75% [14] .

In 2020, JSC "OTP Bank" completely updated the network of ATMs in its operating branches, in which new recycling ATMs were installed, the feature of which is the presence of the function of contactless reading of payment cards/tokens (digital payment cards). At the same time, the functionality of ATMs was updated, the function of repaying loans and buying currency was implemented, and the entire network was transferred to a new software and "microservice" architecture.

Also in 2020, the bank implemented a new modern remote service system for corporate clients "Click OTPay" with a mobile application, which marked the beginning of the development of remote services for ordering and processing bank products through a personal office without visiting branches and signing paper documents. This system provides the possibility of opening an account for legal entities remotely in just four steps: registering an application, choosing a branch, adding documents and receiving an invitation to sign documents.

JSC "OTP Bank" switched to the new operating system B2, which allows the implementation of new ultra-modern services and ensures maximum security during all banking transactions. In 2021, OTP Bank continued to implement the digitalization strategy, simplify customer service processes, study and meet the growing needs of customers in solving financial issues remotely [15].

In order to create comfortable conditions for the bank's customers when opening their first account online, JSC "OTP Bank" has provided the possibility of combining with open sources of information for the convenience of filling in the necessary data,

automatic verification of relevant information, as well as opening a bank account for legal entities. Thanks to these changes, the bank provided customers with the opportunity to open bank accounts within 10 minutes, including obtaining details and access to the "Client-Bank" system.

JSC "OTP Bank" also implemented an end-to-end automatic process of receiving deposit tranches through the "Client-Bank" system, defining clear conditions and the possibility of quickly signing the corresponding contract. The signed contract in electronic format for the deposit tranche of the bank is placed in a special section in the "Client-Bank" system and is permanently available to the client. At the same time, OTP Bank also continued to improve the newly developed mobile banking application OTP Credit. This application allows bank customers to carry out p2p operations (transfers from card to card, translated from English peer-to-peer means "from person to person"), repay bank loans and buy goods in installments, keep a calendar of all payments, receive reminders about payments and information about the further payment of the commission, etc. Thanks to this decision, clients of JSC "OTP Bank" can use the bank's products and services without visiting branches, which became especially important in the conditions of quarantine restrictions during the COVID-19 pandemic. The total number of users of the OTP Credit mobile application since its launch (December 2020) has exceeded 300,000. people according to the results of 2021.

In 2020, OTP LAB was again awarded "Best Financial Innovation Labs" by Global Finance Magazine. This award is given to financial innovation hubs that actively explore new directions and implement advanced approaches in the financial sector. OTP LAB was founded by OTP Bank in Hungary three years ago with the aim of supporting innovative ideas of employees and cooperation with startups, technology companies and educational institutions to find innovative solutions. Due to the active process of digitalization, OTP LAB has become a leading innovation hub that implements ideas both inside the bank and outside of it. As part of the OTP Startup Partner Program, the bank has established ties with more than 850 startups and launched pilot projects with more than 30 of them.

2021 was the year of large-scale digitization of Ukraine, thanks to which the number of electronic government services increased, and the "State in a smartphone" program, which was implemented through the "Diya" mobile application, maximally contributed to the availability of many services for citizens in an online format. For its part, JSC "OTP Bank" completed the project of integration with the "Diya" application, which made it possible to use digital documents of Ukrainian citizens for service, namely, the formation of legal cases of new clients from among individuals, updating the personal data of existing clients for the purpose of providing banking services etc. [15].

The bank constantly improves existing products and processes for its corporate clients, trying to make cooperation with them as efficient and comfortable as possible, and builds long-term and fruitful relationships. Thus, in 2021, remote opening of current accounts and deposits for legal entities, online decisions on granting loans, and more loyal tariff packages for customers were implemented.

2021 was a year of great achievements and good news for OTP Bank JSC, which became possible thanks to the cohesive and responsible work of the entire team. And even the quarantine measures that were implemented from time to time in certain regions of the country did not significantly affect the bank's performance.

Thus, in 2022-2023 JSC "OPT BANK" supported the information campaign of the National Bank of Ukraine on combating fraud - #ShakhraiGoodbay. JSC "OTP Bank" will assist in disseminating relevant information among the population in order to jointly inform potential clients about the basic rules of payment security. Taking care of its customers, JSC "OTP Bank" introduced the 3D Secure service for them in order to ensure maximum security when making payments on the Internet using the bank's payment cards. 3D Secure is a modern technology that was developed by the international payment systems Visa (Verified by Visa) and Mastercard (Mastercard SecureCode) for additional identification of the cardholder who performs a banking transaction and maximally reducing the risk of bank card fraud [16].

Therefore, the active implementation of modern technologies provides new opportunities for cooperation both to consumers of banking and financial services, and

to those who provide them: speed, accessibility, comfort of receiving various types of services, which are constantly growing. At the same time, along with unconditional advantages, new technologies also bring new threats. In this regard, the strategic goal of JSC "OTP Bank" is the implementation of innovative services in combination with modern requirements for financial security, quality of customer service and protection of their personal data.

CHAPTER 3

DIRECTIONS OF DEVELOPMENT OF INNOVATIVE ACTIVITIES OF BANKING INSTITUTIONS IN UKRAINE

3.1. Development of innovations and digital technologies in the banking sector

The rapid progress of the latest digital technologies and globalization have led to the modernization of approaches in the banking business and its interaction with clients and the regulator. It was rapid digitalization that contributed to the formation of the concept of "digital economy" as a separate concept in theory and practice. This term first appeared at the end of the 20th century, and its essence was considered in the context of technological changes observed in all industries and spheres, in particular in the financial and banking sector.

In economic activity, such changes lead to a review of business strategies, models, approaches to operations, product sales, organization of work of business units, etc.

We note that the digital transformation of banking activity can be considered as a system of measures aimed at deepening the cooperation of banks with technological companies in order to achieve strategic development goals related to the introduction of innovative work methods, new banking products and services to increase and expand the client base and increasing the bank's competitiveness [18-19].

Global trends in the digitalization of the banking sector indicate a rapid increase in the popularity of digital services in the banking sector in the last ten years, in particular, a certain digital culture, which has formed primarily among young generations, for whom modern technologies and their use have become integral attributes, has a significant influence everyday life and work.

According to "The fintech times" research, the global banking sector responded promptly and effectively to challenges during the coronavirus pandemic, which gave a significant impetus to the development of digital technologies [20].

We believe that the wide implementation of digital technologies in the banking and generally financial sector of Ukraine actually became possible to a large extent in the context of risks and threats of loss of customers and competitiveness during the pandemic, and later in the conditions of war. At the same time, the partially successfully digitized banking system of Ukraine made it possible to "persist" in the first weeks of hostilities in February-March 2022. Undoubtedly, the continuation of digitization processes based on established trends will be the key to the successful post-war recovery of the country in terms of providing banking services, including potential investors.

The majority of banking institutions in Ukraine and the world direct significant resources to improve offers for clients in order to attract new business and create additional value for it. However, a large number of banks are betting on a strategy of increasing the efficiency of their operations, according to which digital channels are used mostly for the execution of everyday transactions on a significant scale. Undoubtedly, this approach somewhat reduces costs, increases productivity and enables banks to attract new customers, but it does not allow effective use, for example, of digital banking, which generally forms a significant business expansion potential for the bank.

At the same time, one of the directions of such growth and customer attraction for banks of Ukraine and other countries is the use of artificial intelligence. According to estimates by The McKinsey Global Institute (MGI), artificial intelligence can create from 200 to 340 billion dollars. US additional profits for the global banking sector through increased productivity and other benefits. In particular, the development of artificial intelligence will contribute to the improvement of the automation of various banking processes [20].

Of course, the use of artificial intelligence to create and provide financial services is not a new trend, but it is practically indispensable when it comes to the collection of

large amounts of data and its processing, risk assessment, process optimization, etc. In terms of the activities of fintech companies and banking institutions, this technology greatly simplifies such processes as tracking the financial status of customers, analyzing information about their investments, loans and accounts and other information, the collection of which is allowed.

Wider implementation of artificial intelligence technologies can enable banks to compete more effectively with other financial intermediaries, which are often more flexible with regard to the digitization of processes and the corresponding services they can provide to customers.

In our opinion, many banks in Ukraine today still do not digitize and synchronize effectively enough, and sometimes frankly do not keep up with global challenges and customer requirements, in particular, innovative business.

This is confirmed by the rapid growth of Monobank's client base, which in many ways has become more convenient for millions of users in a relatively short period of time. At the same time, many other powerful banks are digitizing somewhat more slowly, losing customers.

At the same time, in our opinion, it is appropriate to emphasize that digital technologies open up wide opportunities for innovations in the credit market, in particular in terms of:

- quick access to loans, when online platforms and mobile applications allow customers to apply for loans directly from their devices, which significantly speeds up the process of obtaining;
- automated analysis of creditworthiness using machine learning algorithms and artificial intelligence, therefore, it is possible to analyze credit risk faster and more efficiently and make decisions on granting credit;
- personalization of offers, because data analysis allows banks and financial companies to create personalized loan offers that meet the specific needs and capabilities of the client;

- the use of blockchain for lending, when this technology can be used to support instant payment systems, which will make it possible to reduce the time required to process credit transactions;

- fintech platforms and P2P lending, since it is digital technologies that contribute to the development of fintech platforms and P2P lending systems, which provide new opportunities for obtaining loans using decentralized and innovative models;

- data analytics for risk monitoring, because big data and analytics allow banks and financial institutions to better assess lending risks and manage them more effectively, which helps to reduce the number of insolvent customers.

In general, digital technologies open up new opportunities to improve lending processes, providing faster access to loans, increasing the efficiency of credit analysis and reducing risks for banks and customers.

In turn, the forecasts of the international organization Mordor Intelligence are of interest, according to which by 2026 the estimate of global artificial intelligence may increase to 26.67 billion dollars. USA. Privatbank became one of the first banks to widely use this technology in Ukraine. In the multifunctional application Privat24, the technologies of machine learning, artificial intelligence and chatbots based on them were applied [24].

An important place in the technological development of the global banking sector, as shown by foreign experience, is occupied, in particular, by the concept of open banking. Open banking (oren banking) is a system in which different banks open up their application programming interfaces (APIs), allowing companies to access the financial information needed to develop new applications and services, ultimately providing account holders with broader financial opportunities.

The advantage of open banking is to create new opportunities for fintech companies to develop more advanced solutions for managing personal finances, as well as to promote competition in the banking sector by encouraging traditional operators to improve their own offers or cooperate with third-party companies. An API interface as a component of open banking is a set of protocols that define how different software components should interact, allowing applications to interact with each other.

APIs are also necessary for the functioning of Banking-as-a-Service (BaaS), a key component of open banking. As you know, BaaS is an end-to-end process that connects fintech companies and other companies with bank systems directly using API interfaces [25].

In turn, the implementation of these technologies cannot fully work without the regulation of the rules. Thus, in 2015 the PSD2 payment directive appeared in the EU, which obliges banks to provide customer data, with their direct consent, to third-party service providers, including fintech companies. Such a step was implemented to provide technology companies with a full range of information for effective functioning and development [26].

It is necessary to note the efforts of the National Bank of Ukraine in terms of timely response, in particular to the requirements of the directive, as well as work in general regarding proposals for legislative changes and other initiatives aimed at adapting the banking system and the financial sector to the requirements of the EU, taking into account the prospects of integration and taking into account the commitments already made in within the framework of the Association Agreement with the EU.

As a result, a number of steps to harmonize with EU directives and other requirements were taken even before the war, and this process continues successfully even during the hostilities. The coronavirus pandemic and quarantine became a significant impetus for the development of open banking technologies in the world. According to TrueLayer data, during the quarantine period there was a significant increase in the number of individuals who used Open Banking Payment Initiation (PI) to pay for various goods and services.

PI is a relatively new form of online payment made available under the PSD2 directive that allows customers to make payments directly through online banking. At the same time, fees for similar transactions are usually lower than for other online payment methods. It is worth noting that a significant part of the growth of PI fell precisely on users whose bank accounts were opened in large banks (about 88%). At the same time, 12% of the growth is accounted for by clients of small banks. This trend

indicates a better ecosystem of Internet banking in large banking institutions due to a shift in emphasis to the development of Internet banking. Such statistics indicate a wider acceptance of open banking in Europe beyond the technologically advanced users of modern neobanks [27].

Also, according to True Layer research, before the start of the COVID-19 pandemic, there was a steady increase in Open Banking Payment Initiation of approximately 43% per month. At the same time, in the first months of the quarantine, this indicator increased to 460%, as a result of the transition of a significant number of individuals to remote work. In general, it is noted that the number of transactions within open banking increased by 832% during the first six months of COVID-19 [27].

In Ukraine, open banking technologies began to be actively implemented from the middle of 2023 with the adoption of the NBU "Concept of Open Banking in Ukraine", which defines the directions of development, the road map and key requirements for the implementation of open banking. On the creation of this document, the NBU worked together with the working groups of participants of the payment market, which as a result approached the European one. The concept, in particular, outlines the relevant prospects for the introduction of digital technologies in the financial and banking system itself, contains the following main emphases and priorities:

- open banking should play a key role in the future development of the financial market. The basis of the model is the development of a new ecosystem based on the application programming interface (API) and intended for the development of payment products and services;

- the content of open banking is revealed, which consists in the fact that banks and other financial institutions must open their APIs to companies that provide non-financial payment services with the possibility of connecting to their services to gain access to information on user accounts and initiate payment transactions. Accordingly, the interaction of all open banking participants should be based on the principles of mutual benefit, non-discrimination, taking into account the interests of all parties in order to meet the needs of users;

- an important condition for the implementation of open banking is that only the user, that is, a natural or legal person, decides to whom to grant access to his account and a specific amount of information about it;

- thanks to the implementation of open banking technologies, users will be able to use their funds on their accounts more efficiently, using for this purpose information on the flow of funds and their balances on the accounts of different banks, consolidated in one payment application;

- in the new system of open banking, each participant plays a separate role in ensuring the creation of rules and principles of interaction and data exchange, which must be transparent and acceptable to banks and providers of financial and non-financial payment services;

- different from the classical understanding of banking services, open banking relies on the technological network of banks and other providers of non-financial payment services, in order to carry out an effective exchange of information subject to the prior consent of the user; due to the fact that the open structure of the API is the basis of market solutions, with the help of open banking it is planned to transform the payment market, stimulate the development of fintech companies, create new opportunities for the development and scaling of the ecosystem, and increase the level of competition among participants of the payment market.

At the same time, the regulator is expected to ensure a high level of protection of user rights and data security; The NBU undertakes the determination of the basic principles of open banking and directions for its further development in accordance with market needs, as well as ensuring regulatory and legal regulation and supervision of payment service providers' compliance with the relevant requirements. It is assumed that the technical specifications will be approved by the regulator on the basis of joint efforts with all market participants [28]. According to the Law of Ukraine "On Payment Services" as amended on April 1, 2023, the concept of open banking in Ukraine must be implemented by August 2025.

According to representatives of the Association of Financial Companies "Financial Ombudsman", the implementation of this law will have positive

consequences not only for individuals, but also for banks. Banks' opening of their APIs will trigger the emergence of more and more new payment services, as well as the improvement of existing ones and, importantly, their reduction in price.

It is worth noting that for the successful implementation of open banking, it is necessary for commercial banks to develop uniform API opening standards. This will contribute to the development of healthy competition and stimulate the improvement of the quality of payment services. On the other hand, the NBU declares its readiness to manage this process in order to create protected and safe standards of the open banking system for all its users [29].

Particular attention should be paid to the progress of neobanking, which is developing despite crises, global recession and war. Neobank can be considered as a technological platform that offers financial services, is usually created on the basis of traditional banks through partnership agreements and does not operate outside the traditional banking system [30]. Undoubtedly, the key advantage in this case is to reduce the cost of operational processes and expand the potential for attracting new customers due to the minimization of commission costs for customers. Additional competitive advantages of neobanks compared to traditional banks are also the ability to offer clients other related services of a financial nature, often non-banking, among which the main ones are insurance and investment.

As of 2023, the level of penetration of neobanks into the world economy was estimated at 3.5% of the total population (about 300 million people). At the same time, a significant jump in the number of clients of neobanks can be traced precisely in the period 2020-2022, which fell on the crisis caused by COVID-19. Further growth in the penetration of neobanks into the world economy is estimated at an average of +0.5% per year.

In Ukraine, neobanks appeared on the market in 2017, and the first was Monobank, based on UniversalBank. As of 2023, this particular bank is the leader among functioning neobanks in Ukraine (the number of clients is estimated at 7 million people). One of the modern innovations that Monobank was able to implement on the market was trade acquiring without POS terminals, which can be implemented by

merchants. There are also other neobanks, including Sportbank, Izibank and Neobank (whose total number of clients does not exceed 2 million). Digital services of other banks, such as Privat24, Sense, PUMBOnline, O-Bank, etc., are considered to be similar in terms of functionality [30].

However, analyzing the trends of recent years, it can be said that Monobank remains the leader of the neobank sector in Ukraine. Therefore, the growing role of digital technologies in the banking system is a global trend, which, given the level of globalization, is also manifested in Ukraine. As a result, a new environment is being formed in the banking market, which should contribute to the growth of the work efficiency of both individual participants of this market and the system as a whole.

However, with the introduction of these technologies, each bank will face the issue of developing new business strategies, innovative products and solutions that will allow them to remain competitive. It is worth noting that key changes in the banking sector in the context of digitalization should be primarily client-oriented and take into account a number of conditions for success, including improving the quality of customer service, developing new and improving existing products, including for the credit market, and optimizing processes, development and implementation of reliable customer identification tools. In this context, in addition to the already outlined prospects and advantages of digitalization, it is important to consider the risks associated with deepening the digitalization of banking processes, namely:

- the growing role of technological risks that can affect the economic security of banks and the stability of the financial system;
- dependence on technologies and the constant need for significant investments in new fixed assets in order to maintain stability;
- a potential decrease in the level of trust in banks as a result of the introduction of open banking;
- expansion of opportunities for Internet fraud;
- cyber threats from hackers, which can lead to the loss or distribution of personal data of users on the network.

Therefore, the balance between the new prospects that digitization opens up for the banking sector and the credit market, as well as the listed and other risks from the implementation of digital technologies is the basis for the effective development of the banking system of Ukraine in the long term and the preservation of the competitiveness of financial institutions.

Therefore, the development of digital technologies in the world sets new trends in all spheres of life, industries and sectors of the national economy. After a significant reduction in the number of banks and optimization, the Ukrainian banking system, having adapted to the challenges of the martial law, should in the long term contribute to the post-war recovery of the country, which will be accompanied by new challenges and risks. Readiness for further transformations at the level of the regulator and the management of individual banks will be the key to strengthening competitiveness, digitalization of banking services, implementation of progressive innovative solutions in working with clients in the credit and other markets. At the same time, readiness at the legislative level to expand the spheres of use of digital technologies in Ukraine in the banking sector and already planned harmonization measures within the domestic banking system will contribute to its further integration into the EU.

3.2. "Green finance" as a new way of sustainable recovery of Ukraine

Environmental finance, or "green finance", is a resource mobilization tool for sustainable development aimed at solving environmental problems and ensuring an environmentally oriented economy. For Ukraine, which needs significant investment in infrastructure reconstruction after the war, environmental finance opens up opportunities for sustainable recovery with the support of international partners.

In modern conditions of environmental challenges and depletion of natural resources, there is a need to rethink economic approaches. The European Union demonstrates an effective example through the implementation of the green economy

model, in particular the "European Green Deal" strategy, which combines ambitious goals with clear performance criteria.

The experience of the EU is important for Ukraine, which is on the path of European integration and post-war recovery. The focus on "green" recovery requires the creation of an appropriate political environment and the introduction of environmental innovations, digitalization and circular production processes. The transition to a green economy becomes necessary for the rational use of resources, the application of flexible economic mechanisms to protect the environment, support innovation, effective waste management and optimal use of water resources.

In table 3.1. foreign experience of using environmental finance is summarized.

Table 3.1

Foreign experience of using environmental finance.

Country	Description
European Union	Green Deal: The EU allocates massive resources to transition to a climate-neutral economy by 2050. Instruments such as green bonds are used to finance energy projects, infrastructure upgrades and renewable energy development. The Just Transition Fund program: aims to support regions that are transitioning from traditional industries to environmentally friendly technologies.
USA	Inflation Reduction Act (2022): Allocates \$369 billion for climate initiatives, including clean energy development, electric transportation, and energy efficiency projects. Stimulation of private investment through tax incentives for companies implementing environmental technologies.
China	One of the world leaders in issuing green bonds to finance projects in the field of renewable energy, water treatment and waste processing. State policy actively supports the financing of "green" banking products.
Scandinavian countries	Norway, Sweden and Finland actively finance environmental start-ups through public investment funds and soft loans. Green bonds are successfully used to invest in low-emission transport infrastructure.
Japan	A significant part of the state budget is directed to "green" innovations, in particular, the development of hydrogen technologies. The government encourages cooperation with the private sector through grants and joint projects.

The following measures are proposed for the implementation of a green economy in Ukraine in the context of the crisis: the development of ecological transport to reduce the level of harmful emissions; transition to renewable energy sources to reduce dependence on non-renewable resources; financing of nature protection initiatives and preservation of biodiversity; implementation of green construction using environmentally friendly materials and technologies; reducing social inequality through the creation of jobs in the green sector and the development of social programs.

One of the most important tasks for Ukraine is the reconstruction of housing destroyed as a result of the war, which remains a critical humanitarian and socio-economic problem. The restoration of the housing stock will contribute not only to the support of the affected communities, but also to the restoration of social stability and the improvement of the population's well-being.

In addition, there is an urgent need to create new enterprises to overcome unemployment and stimulate economic recovery. This will provide jobs for internally displaced persons and facilitate the return of Ukrainians who have temporarily moved abroad. The construction of new enterprises will become the driver of the country's socio-economic recovery.

JSC "OTP Bank" has every opportunity to actively participate in the development of environmental finance in Ukraine, given its role as one of the leaders of the banking sector and the international support of OTP Group. Key actions of the bank may include:

- 1) Issuance of green bonds. Organization of the issue of green bonds to finance energy efficiency, renewable energy, water treatment and waste processing projects. Cooperation with international organizations, such as the EBRD or the World Bank, to attract funds for "green" investments.

- 2) Financing of environmental projects. Development of special credit programs to support businesses that work in the field of renewable energy sources, construction of energy-efficient buildings or development of clean technologies. Offer of concessional loans for agricultural enterprises that use environmentally friendly technologies.

3) Integration of ESG standards into financial products. Inclusion of environmental, social and governance (ESG) sustainability criteria in the evaluation of clients and funded projects. Supporting corporate clients in developing their sustainable development strategies.

4) Development of partnerships. Participation in international initiatives and programs, such as the Green Climate Fund or the Sustainable Finance Platform. Cooperation with the government of Ukraine and local communities to finance ecological restoration projects in the affected regions.

5) Popularization among customers. Implementation of educational campaigns for clients on the benefits of green financing and green business opportunities. Development of incentive programs for customers who switch to environmentally friendly technologies.

6) Implementation of internal environmental standards. Optimization of own processes in order to reduce the carbon footprint, for example, switching to the use of energy-efficient technologies in departments and offices. Development of digitalization of banking services to reduce paper document circulation.

For example, JSC "OTP Bank" today offers special financing conditions for projects to increase the energy independence of Ukrainian companies. The bank provides favorable rates, quick decision-making (up to three working days) and comprehensive support in choosing partners and implementing energy efficiency measures. Within the framework of the "Affordable loans 5-7-9%" program, you can get up to UAH 150 million at preferential rates of 5, 7 or 9% per annum. If the enterprise does not meet the criteria of the program, alternative financing is provided at 13.5% [31].

It is recommended that JSC "OTP Bank" consider the possibility of expanding cooperation with the EBRD in order to provide up to 15% compensation of the project cost for clients whose initiatives meet the criteria of this organization. It is also advisable to introduce an extension of the financing term to 7 years, starting from 2025. This will allow companies to effectively implement large-scale and long-term projects without significant financial burdens. Such initiatives will help increase business energy

efficiency, support economic stability, and develop sustainable solutions even in the face of an economic crisis.

Therefore, JSC "OTP Bank" demonstrates high potential in strengthening its investment attractiveness through the use of modern financial instruments and cooperation with international organizations. This allows the bank to support the sustainable development of Ukraine's economy, in particular, in the reconstruction of regions affected by the war. Thanks to the active implementation of ecological finance, the bank strengthens its image as a socially responsible and ecologically oriented financial institution. Participation in such initiatives contributes to the creation of foundations for a sustainable future, strengthening the bank's reputation and its role in the recovery of the country's economy.

3.3. Organizational and economic mechanism of financial support for innovative development of JSC "OTP Bank"

Most of the previously performed scientific and practical studies highlight modern theories of innovation management, issues of regulation of innovation processes, or only a small number are devoted to certain aspects of financial support for innovative development of the bank. Therefore, among scientists, the problems of financial support for the innovative development of banks are not sufficiently considered.

Thus, the need to develop a comprehensive approach to the creation of an organizational and economic mechanism for financial support of innovative development and harmonization of the bank's innovation and investment policy requires scientific substantiation of theoretical and practical aspects. When considering issues of financial support for innovative development, primary attention should be paid to investment sources. Financing innovative programs involves providing them with resources, which include not only funds, but also other investments expressed in

monetary terms, such as fixed and working capital, property rights, intangible assets, credits, loans, pledges, land use rights, etc. The sources of funding for innovative development of the bank are as follows: borrowed funds: assets, liabilities, funds of the NBU and other banks (lending), financial flows of banking activities. Financing of the bank's innovative activities should be carried out according to the following principles: 1) target linking with the task of effective implementation of achievements; 2) variety of funding sources; 3) legal security of investors [45, c. 450]. Financing of innovative activities of banks is usually carried out through self-financing or the use of borrowed and borrowed funds: assets, liabilities, funds of the NBU and other banks (lending), financial flows of banking activities.

The organizational and economic mechanism of financial support for innovative development should consist of the following elements:

- 1) input information: regulatory and legal acts, information on banking innovations in the market of banking services of the country (region), financial condition of the bank, economically and scientifically justified financing needs;
- 2) the purpose of financial support: to ensure the availability at a certain point in time of a sufficient amount and quality of optimally priced funds necessary for the implementation of innovations and technologies in the bank;
- 3) subject: implementation of bank innovations;
- 4) subjects of financial support: bank, regulator (NBU);
- 3) objects: banking innovations;
- 5) functions of financial support: attraction of financial resources, placement of financial resources, use of financial resources; assessment of the need for financing and its sources, planning of financial flows, accounting and analysis of sources of financing, analysis of financing methods, control over the use of funds aimed at the implementation of innovations.
- 6) sources of funding for innovative development: own capital, liabilities to the bank's clients, to other banks, to the NBU;
- 7) resource support: financial resources, information resources, personnel resources;

8) principles: principle of system analysis, principles of interaction and coordination of subjects and objects of the mechanism of financial support of innovative development; the complexity of the approach; planning, economic feasibility and effectiveness of results; adequacy of determining financial opportunities (potential) on the basis of system-structural innovation renewal; monitoring threats to financial support for development; promptness and flexibility of response to the prevention of threats of destabilizing factors using available opportunities; timeliness and efficiency of information provision based on the use of the latest technologies and innovative software products. The principles of financing the bank's innovative development should focus on a variety of sources and provide for the rapid and effective implementation of innovations.

9) forms of financing: state, loan, self-financing;

10) methods of financing: reinvestment, shareholding, lending, budgetary and charitable;

11) financing levers: rates and cost of capital market services;

12) monitoring of financial support;

13) control and regulation of financial support and innovative development.

As subjects of managerial influence, they are considered primary management units (separate units). The objects of the financial support system include:

1) the bank's assets, since the implementation of certain innovations requires real cash funds, which are reflected in the assets of the bank's balance sheet;

2) the bank's obligations, which collectively reflect the raised and borrowed capital necessary to finance activities;

3) own capital, corresponding to all sources of self-financing of innovation implementation;

4) financial flows;

5) certain types of activities, processes, etc., i.e. everything that the bank's management focuses on to ensure conditions for innovative development.

In addition to the structure, an important characteristic of any system is its organization, which is understood as the internal orderliness and coherence of the

interaction of its elements, the set of processes that make up the system, the process through which the structure of the system is formed and preserved. In this connection, there is a need to disclose the content and sequence of stages of financial support. In order to effectively manage the innovative activities of the enterprise, it is advisable to use a step-by-step approach. The stages of the mechanism of financial support for innovative development have basic management functions (analysis, planning, regulation, control). At the same time, depending on the production conditions and the specifics of a specific economic situation, the stages must be used both separately and in various combinations.

The main stages of this approach are as follows:

- 1) setting goals and objectives of innovative production activities;
- 2) formation of the innovative strategy of the enterprise;
- 3) long-term innovative forecasting;
- 4) allocation of funds and resources for innovative activities of the enterprise;
- 5) development of strategic plans for innovative activities of the enterprise.

The mechanism takes into account the goals, sequence and significance of each of the stages. At the first stage, the current state of the bank and its innovative activities are evaluated based on the analysis of the main coefficients and indicators of financial stability. Sources of possible financial support are determined.

At the second stage, it is expedient to conduct an analysis of the innovative activities of the bank in recent years and determine its compliance with the trends occurring in the banking sector regarding innovative technologies and products. The amount of necessary financial support is determined in accordance with the needs of the innovation strategy: for what period it is calculated, what is the duration of its preparation and implementation.

At the third stage, based on the results of the analysis, it is necessary to develop a strategy plan for the innovative activity of the bank, which would correspond to the general strategy of the bank's development. The schedule of financial support is adjusted to the strategy plan, an analysis of risks that may hinder the timeliness of the injection of financial resources during the implementation of the strategy is carried out.

The organizational function provides for the formation of a clear plan for the receipt of financial resources as financial support for innovative development, which will include: the creation of a department that is responsible for the organization of financial support for innovative development, the identification of responsible persons, the compilation of a matrix of measures and a Gantt chart, the determination of sources of funding, calculation of cash flow, economic efficiency of investments, determination of risk management measures.

At the fourth stage, it is advisable to determine the innovative potential of the bank, the economic efficiency of financial support to support the innovative development of the bank. At this stage, it is necessary to draw up a schedule (Gantt chart) to determine the specific time of the infusion of financial resources to ensure the implementation of the innovative strategy.

At the fifth stage, the strategy of innovative development is implemented, the indicators are controlled and the bank's activities are monitored in order to achieve the set goal of innovative development. Cash flows aimed at the implementation of the innovative strategy, timeliness and completeness of their receipt are subject to control.

The presented mechanism allows, first of all, to analyze the bank's financial stability for innovative development. Determining the stage of innovation potential management on this basis allows you to check the correctness of the chosen direction of innovative development from the standpoint of the current and future financial status and financial support. The developed method can become a meaningful basis for forming a strategy for innovative development and effective commercialization of new technologies. The main tasks of the mechanism for managing the financial support of the bank's innovative activities are the formation of priorities for its innovative activities, as well as the determination of production needs for innovations. Equally important is the definition of areas of application of innovations and their selection, which ensures the maximum economic effect from the application of innovations and the return of invested financial resources, ensuring the process of creation (or acquisition) and implementation of innovations and its control.

Thus, the mechanism of financial support for innovative development is an ordered, interconnected, coordinated set of financial relations, incentives, levers, tools, forms and methods, aimed at achieving the goals of the bank's innovative activity, taking into account the bank's financial capabilities and the internal laws of the innovative development of the banking sector.

CONCLUSIONS

In the process of studying the theoretical and practical aspects of managing banking innovations and innovative technologies, the following conclusions and proposals were formulated.

The economic essence and significance of innovations in the activity of banking institutions are indicated. The economic essence of innovation lies in the systematic and proactive implementation and adoption of new or significantly improved solutions in various areas of banking activity. Many potential effects are highlighted, the manifestation of which is possible due to the digitalization of banks, in particular, the expansion of sales, the creation of new products, the reduction of personnel costs, the improvement of risk management policies, the sale of non-banking services, and others.

The classification of banking innovations and innovative technologies was carried out. They can be divided by the source of origin, the source of financing, by the factor determining their implementation, by the type of technology, by the area of work of the bank that is being improved, etc. Cloud computing, machine learning, biometric technologies, artificial intelligence, big data, augmented/virtual reality, blockchain, Internet of Things are important technologies in innovation. Credittech, paytech, cybertech, analytech, opertech, investtech, robotech, as well as othertech and regtech are the key areas of innovative activity for banks at the moment.

The mechanism of management of innovative activities of banking institutions is characterized. It largely depends on the interaction of special units, such as innovation units, and individuals engaged in developing strategies and anticipating breakthrough trends, working harmoniously to create a culture of innovation and flexibility within the organizational hierarchy. The innovation trajectory follows a disciplined path, starting from a market and technology research phase to prototype development, then moving to real-world pilot testing to refine the solution based on real-time feedback and insights.

JSC "OTP Bank" was chosen as the basis of the study, which demonstrates a stable and positive financial condition, which is confirmed by key indicators. The bank has high capitalization, a significant reserve of liquidity and adheres to the basic

economic norms established by the NBU, significantly exceeding the minimum requirements. The growth of interest and commission income, as well as a significant increase in net profit in 2023, indicate efficient operational activity and adaptation to market conditions.

JSC "OTP Bank" actively implements innovative solutions, such as the development of digital platforms, automation of business processes, integration of artificial intelligence to improve the customer experience, as well as optimization of risk management using analytical models. In general, the bank remains one of the leaders of the financial sector of Ukraine, strengthening its position thanks to a high level of capital, innovative approaches and strategic flexibility.

It has been proven that the introduction of open banking in Ukraine has significant potential for the transformation of the financial sector. However, successful implementation depends on the speed of adaptation of the regulatory framework, ensuring cyber security and banks' readiness for changes.

Environmental finance, or "green finance", is a resource mobilization tool for sustainable development aimed at solving environmental problems and ensuring an environmentally oriented economy. For Ukraine, which needs significant investment in infrastructure reconstruction after the war, environmental finance opens up opportunities for sustainable recovery with the support of international partners.

A model of the organizational and economic mechanism of financial support for innovative development of JSC "OTP Bank" is presented, as an ordered, interconnected, coordinated set of financial relations, tools, forms and methods, which is aimed at achieving the goals of the bank's innovative activity, taking into account the bank's financial capabilities and internal laws innovative development of the banking sector.

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