The Main Directions of Development of Innovative Activity in Commercial Banks of Uzbekistan

Zafarjon Yashinovich Rakhmanov¹; Azizbek Abdulalim Ugli Hakimov²

¹ PhD, Associate Professor, Head of the Department of the Institute for the Study of Youth Problems and Training of Prospective Personnel, Uzbekistan

² Independent Researcher, Institute for the Study of Youth Problems and Training of Prospective Personnel, Uzbekistan

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Abstract

In this article, the expansion of the number and coverage of remote banking services, including contactless payments, in the introduction of modern information technologies by banks of Uzbekistan; extensive use of automated scoring system, digital identification and credit conveyor; strengthening the information security of banking data and systems; introduction of new concepts and technologies in the banking sector (fintex, marketplace, digital banking); The practice of introducing new business models of banks, in particular, based on the principles of "digital banking" was studied. In addition, problems in the development of innovative activities in commercial banks were identified and proposals were developed to address them.

Keywords: Banking; Innovation; Innovative Infrastructure; Innovative Ecosystem; Digital Platform; Payment System Regulation; Big Data, Fintex; Marketplace; Digital Banking

Introduction

Although the crisis caused by the coronavirus pandemic has significantly slowed down the pace of socio-economic development in almost all countries of the world, it has intensified the process of developing and implementing innovations that will ensure financial integration and expansion of economic opportunities. This process is especially evident in the banking sector. At the heart of banking innovations are a number of factors of a technological nature. In particular, they include: a) the development of mobile communications and the Internet, which connects companies that provide financial services to customers; b) storage and processing of large amounts of digital data ("cloud" technologies, Big data); c) achievements in the field of robotization of services, biometric technologies, API (open platforms) [1]. But technology does not bring success on its own. In this regard, it should be noted that commercial banks need to develop goal-oriented innovation strategies and form mechanisms and tools for their implementation [2].
Analysis of Scientific and Practical Sources

In the research work of the Russian scientist V.V. Jdanovich “Transformation of banking regulation in the context of the development of digital technologies” it is noted that on the basis of the analysis of strategically important trends “… The main directions of development of business models used in banks: the transformation of banks into a digital ecosystem, the creation of financial supermarkets (marketplaces), the expansion of the non-banking sector, data commercialization” and others [3].

Based on his research, French scientist T. Philippon concluded that fintex innovations can break down the boundaries between sectors of the economy by destroying the structural structure of existing industries. The changes that are taking place, on the one hand, expand access to financial services, on the other hand, may cause certain problems in the application of legislative norms [4, p. 24].

According to A. Borlakova in her research work “Development of innovations in commercial banks”, “The success of innovative activities in banks is determined by the innovation strategy. "Strategic and innovative activities are interrelated and form a system of strategic innovation management of banks” [5].

According to the Uzbek scientist, Doctor of Economics N. Tukhliev, in order to develop digital technologies, it is necessary to increase investment in ICT. He also noted that the development of ICT and the growth of its share in GDP is directly related to the level of development of the corresponding digital infrastructure [6, pp. 12-16].

A.A.Azlarova and M.M. Abdurahmanova's article “The role of commercial banking in the development of the digital economy” includes the development of a regulatory framework for incentives for entities developing, recommending and using innovative products, the introduction of tax incentives for the widespread use of innovative technologies, optimal organization of innovation-based services and pricing policy, recommendations are reflected [7].

Research Methodology

Research methods such as analysis and synthesis, induction and deduction, statistics and comparison were used in conducting the research.

Analysis and Results

It is known that based on the strategic goals and priorities of the development of digital economy and e-government of the Republic of Uzbekistan, as well as the priorities identified in the UN Sustainable Development Goals and e-Government Development Rating, the President of the Republic of Uzbekistan Decree No. PD-6079 of October 5, 2020 “On approval and measures for its effective implementation”.

The following tasks have been set for commercial banks to implement the strategic directions set out in this Decree:

- Organization of customer service at attractive rates by all banks in order to improve the quality of remote banking services, the mechanism of formation of electronic receipts for payments made by commercial banks and payment organizations through their mobile applications through digital communication channels and payment mechanisms for requisites from commercial applications of commercial banks; introduction;
- Further improvement of accounting and financial reporting in the banking system by ensuring full compliance with International Financial Reporting Standards (IFRS);

- Creation of alternative access for users of HUMO and UZCARD payment systems from the infrastructure of existing payment systems (payment terminals, ATMs, kiosks) [8];

- Increase the popularity and scale of contactless payments in the national payment infrastructure through means equipped with NFC technology (without using a payment card);

- Increase the popularity and scale of payments made through the QR-online system, which allows you to make payments in accordance with international EMV standards;

- Creation and implementation of the Single Data Warehouse and business analysis system of banks on the basis of international standard requirements;

- Modernization of the software package of the automated banking system used by commercial banks (creation of an update / integration platform);

- Implementation of a customer relationship management system (CRM) in order to attract, service and retain customers in the bank and expand the opportunities for their delivery of banking products;

- Introduction of the information system "Risk Management" in banking;

- Introduction of a scoring system that automatically maintains analytical data on credit allocation to customers;

- Introduction of a system of legalization of income from criminal activities in banking (AML Antifraud) and the fight against various frauds;

- Professional development of information technology specialists of agencies and organizations in the field of economic development, financial and banking system, public asset management, competition development, business support and poverty reduction, including training in foreign educational institutions and the share of international IT-certified employees increase [9].

The Decree also approved the parameters of the target for the introduction of digital technologies in banking.

<table>
<thead>
<tr>
<th>Key indicators</th>
<th>Unit of measurement</th>
<th>The amount of indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share of legal entities using remote banking services</td>
<td>percent</td>
<td>50</td>
</tr>
<tr>
<td>Number of QR-online codes generated in trade and service outlets across the country</td>
<td>piece</td>
<td>40 000</td>
</tr>
<tr>
<td>Proportion of employees in the banking system working and improving their skills in the field of information technology and cyber security (relative to the total number of employees of specialized units)</td>
<td>percent</td>
<td>30</td>
</tr>
</tbody>
</table>
In addition, by the Resolution of the President of the Republic of Uzbekistan dated February 17, 2021 No PD-4996 “On measures to create conditions for the accelerated introduction of artificial intelligence technologies”:

- Carrying out fundamental and applied scientific research on the development of useful technological solutions and the creation of a local ecosystem of innovative developments in the field of artificial intelligence, which will encourage their further commercialization;

- Increase the effectiveness of monitoring the activities of commercial banks and simplify their compliance with regulatory requirements (SubTech and RegTech), as well as the use of artificial intelligence technologies to analyze the quality of banking services, remote biometric identification (Face-ID) and credit risk assessment;

- Creation of a digital ecosystem for businesses and individuals based on the experience of the Russian group Sber;

- Measures for the use of artificial intelligence technologies for remote biometric identification (Face-ID) of users in the provision of e-government and financial services [11].

It should be noted that the above decrees and resolutions of the Republic of Uzbekistan set out in detail the priorities for improving the organizational mechanisms of innovative activities of commercial banks. With this in mind, we will try to analyze the state of implementation of the goals and objectives for the development of innovative activities in the development strategies of commercial banks.

The strategy for the development of the Silk Road JSCB for 2019-2023 was approved by the General Meeting of Shareholders on June 10, 2019. The main goal of this strategy is to strengthen its position as a universal commercial bank in the national financial services market.

In order to achieve the financial and quality indicators set out in the strategy, five key areas of development have been identified. The following measures can be included in the list of measures related to the organizational mechanisms of the bank’s innovative activities within each area of development:

**Direction 1.** Maintain an active customer policy. Implementation of customer segmentation in this area, development of service rules and segment-oriented package of services for each segment, formation of a database based on the principle of “know your customer” through the introduction of CRM application, increase sales of products and services, increase tariff policy efficiency. Among them are overdraft, credit cards, online conversion, virtual cards, multicurrency cards, personal manager system, the introduction of Islamic finance (Mubaraha), increasing the volume of payments via QR-code, and others.

**Direction 2.** Introduction of requirements of International Financial Reporting Standards No. 9 in the field of strengthening the corporate governance system and automation of measures to assess potential losses on the basis of SAP BW and SAP BO systems; Constant stress testing of the liquidity position to predict the negative impact on the financial condition of the bank; implementation of measures such as the application of the FSAP program in the management of banking risks, the use of budgeting and planning systems, the development and implementation of a system of key performance indicators to assess the performance of bank employees and departments.

**Direction 3.** Improving the level of automation of business processes in the bank to improve the IT platform, unification of various IT decisions on a single automated banking system platform, increase the efficiency of IT platforms (database) for the preparation of comprehensive and timely management
Direction 4. Improving the efficiency of cost management. Measures in this area include the introduction of IT applications that allow to determine the costs and revenues for each business line, the types of existing and introduced products, the reduction of administrative costs and operational risks through the automation of business processes.

Direction 5. Expanding cooperation with international financial institutions. The main tasks in this area are technical assistance from international financial institutions in the main areas of banking development, attracting investments from international financial institutions to participate in the capital and management of the bank and the establishment of joint financial companies in the financial services market [12].

The implementation of the strategy is expected to strengthen the bank's position in the national financial services market, as well as expand the scope of activities, increase the level of financial stability (see Table 2).

Table 2: Strategic development parameters of “Ipak Yuli” Joint-Stock Commercial Bank for 2019-2023 [13]

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2018</th>
<th>2023</th>
<th>динамика</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ensuring the profitability of banking activities</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average return on capital (ROAE)</td>
<td>36,5%</td>
<td>Not less than 25%</td>
<td></td>
</tr>
<tr>
<td>Average asset rate of return (ROAA)</td>
<td>4,5%</td>
<td>Not less than 4%</td>
<td></td>
</tr>
<tr>
<td>Net interest margin</td>
<td>10,8%</td>
<td>11,0%</td>
<td>+0,2</td>
</tr>
<tr>
<td>Net profit (in billion soums)</td>
<td>160 804</td>
<td>528 595</td>
<td>3,3 times</td>
</tr>
<tr>
<td><strong>Improving the efficiency of banking</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The ratio of operating expenses to operating income</td>
<td>52,06%</td>
<td>39,21%</td>
<td>-12,85</td>
</tr>
<tr>
<td>The ratio of operating expenses to total assets</td>
<td>5,8%</td>
<td>5,7%</td>
<td>-0,1</td>
</tr>
<tr>
<td>Net profit per employee (million soums)</td>
<td>92 596</td>
<td>272 422</td>
<td>2,9 баробар</td>
</tr>
<tr>
<td><strong>Expanding the scope of activities</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The share of total assets accumulated in the banking sector</td>
<td>1,64%</td>
<td>Up to 3.0 percent</td>
<td>1.8 times</td>
</tr>
<tr>
<td>Total assets (billion soums)</td>
<td>3 932 101</td>
<td>11 994 931</td>
<td>3,1 times</td>
</tr>
<tr>
<td>Loan portfolio (billion soums)</td>
<td>2 438 262</td>
<td>9 112</td>
<td>3,7 times</td>
</tr>
<tr>
<td>Authorized capital (billion soums)</td>
<td>281 000</td>
<td>1 237 228</td>
<td>4,4 times</td>
</tr>
<tr>
<td><strong>Ensuring financial stability</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aggregate capital adequacy ratio</td>
<td>14,2%</td>
<td>16,0%</td>
<td>+1,8</td>
</tr>
<tr>
<td>Ratio of loans to deposits</td>
<td>67,5%</td>
<td>93,9%</td>
<td>+26,4</td>
</tr>
<tr>
<td>Stock coverage rate</td>
<td>3,5%</td>
<td>3,4%</td>
<td>-0,1</td>
</tr>
</tbody>
</table>

The data presented in Table 2.2 show that a number of long-term trends were taken into account by the “Ipak Yuli” Joint-Stock Commercial Bank during the development of the business development strategy. In particular:
- The tendency of the bank's profitability to decline in the near future due to the intensification of competition in the national financial services market. Despite the fact that the bank's loan portfolio will reach 9,112 billion soums by 2023 and increase by 3.7 times compared to 2018, the ratio of operating expenses to operating income will be reduced by 12.85 percentage points by 2023, the return on average capital and average assets will be lower than in 2018, planned;

- In the near future, customer deposits will become the main source in the formation of the bank's resource base and the downward trend in demand for borrowed funds from external sources. The Bank plans to increase the ratio of loans to deposits by 2023 from 67.5% in 2018 to 93.9%;

- The downward trend in operating costs due to the introduction of digital technologies in business process automation, data processing and management. By 2023, the ratio of operating costs to total assets is projected to increase by 0.1 percentage points compared to 2018, with a net profit per employee of 2.9 times;

- The tendency to increase the effectiveness of measures to form an optimal structure of bank assets in a changing and uncertain external environment. In 2023, the Bank's risk assets coverage ratio is expected to decrease by 0.1 percentage points compared to 2018.

**Conclusions and Suggestions**

The conducted research allows to note the following conclusions:

First, despite the recognition of financial stability as a priority in the analyzed strategy of banking development, automation of business processes, expanding the use of electronic platforms to offer banking services and products to customers, the use of “cloud technology” in management decision-making it is noted that it is a factor that strengthens the level of competitiveness, expands the customer and resource base;

Secondly, the analyzed strategies do not focus on the issue of innovative activity and the formation of its infrastructure. All developments implemented in the Bank's activities consist of software developed by foreign and domestic IT companies, and most of them cannot be interpreted as innovative developments;

Third, banks that position themselves as digital banks are also collaborating with IT companies that are outside their sphere of influence. In this case, banks will not be able to influence the process of creating a software algorithm. What they may require is to ensure that the software is compatible with the bank’s core technologies;

Fourth, in the near and long term, the lack of IT companies within the framework of innovative infrastructure and influence will remain the biggest problem in shaping the ecosystem of banks;

Fifth, the failure to address the issue of creating innovative infrastructure in the strategic plan of banks calls into question the successful implementation of the task of staff development, including training in foreign higher education institutions and increasing the share of international IT-certified employees.
References

[10] Based on the appendix to the Decree of the President of the Republic of Uzbekistan dated October 5, 2020 No PD-6079 “On approval of the Strategy Digital Uzbekistan - 2030 and measures for its effective implementation” https://lex.uz/docs/5030957

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