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## ISSUES OF ENSURING STABILITY BY INCREASING THE SHARE OF FINANCIAL TECHNOLOGIES IN THE BANKING SYSTEM

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### Abstract

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#### Keywords:

smart digital financial technologies, Nonperforming Loan, innovative banking products

*This article examines the application of financial technologies in the banking system, its concept of sustainability, its role in banking, its impact on the financial stability of banks, the weight of Nonperforming Loans (NPL), the dynamics of other indicators characterizing the stability of banks and their current status. The article also presents the problems and issues of the introduction of financial technologies in the banking system of the country and the conclusions and recommendations for their elimination.*

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### INTRODUCTION

Banking practice in the world shows that the provision of banking products through remote services in banking is very effective. In particular, the offer of these banking products will allow banks to expand their geography of services. In particular, "the German digital bank Number 26 was launched in 2016, and in the same year began to serve citizens of countries such as Austria, France, Greece, Ireland, Italy, Spain, Slovakia" 1. Also, Digital Bank, which provides 90 percent of its services remotely, now handles more than 100 million transactions a month, ranking 4th in the world in terms of customer satisfaction based on Forbes research. A lot of research is being done to develop the banking market in the world. These studies cover the role of innovative banking products in the economy, their types and significance, the importance and necessity of innovative activities of banks, risk management of innovative activities. However, these studies do not adequately study the problems and laws inherent in the development of innovative processes of banking, the creation of the necessary infrastructure for innovative banking products, the solution of systemic problems specific to the country, an improved classification of innovative banking products determines the



relevance of research on the introduction of new types of banks through innovative development, improvement in them through financial technologies.

Although the trends and problems of widespread introduction of innovative banking products in Uzbekistan are determined by the state's innovative development strategy, it is necessary to strengthen the dynamics of creating innovative banking products to meet its rapidly evolving global banking and financial products market. The reason is that "... unfortunately, the banking system lags behind the requirements for the development of digital technologies, the introduction of new banking products and software for 10-15 years." In this context, a number of achievements in recent years in Uzbekistan on the introduction of innovative banking products by commercial banks

As it can be observed beyond traditional banking business, commercial banks are turning into complicated methods of financing of their activity. Sophisticated systems require adequate regulation and supervision. In this sense, Basel standards have been approved prudential and are followed by regulators of the banking system in Uzbekistan. Earlier Basel II standards were welcomed. Transformation from Basel II into Basel III has recently started. It is noted that new standards and recommendations elaborated by the Basel Committee on banking supervision should serve improvement of the banking system.

## **LITERATURE REVIEW**

Many native scholars divide the banking development of Uzbekistan into different stages. Bobakulov T. and Vakhobov A. (2009) and Mullajonov F. (2011) explain it differing in 4 stages, while many others write about more than that. In my opinion, there is no subtle distinction over the period after 2000 which was mainly divided into two stages by aforementioned authors and others. In that sense, I posit logic of the path of the development of banking system by dividing it into three different periods.

Aliev and Tursunkhodjaev (2013) stated that specialists of the Central bank in close cooperation with experts of the most known consulting companies of the world for less than three years developed and entered into practice new books of accounts and accounting systems for the banks, complying with the International Financial Reporting Standard. The new system gave transparency for investors and depositors of banks. In addition, perfection on internal and external auditing expertise was paid attention to as well.

Research conducted by international companies Huawei and Oxford Economics has shown that there are vertical and horizontal effects of digitization. From the point of view of socio-economic system, the theoretical rules for representing the economic system, which is regulated as a quasi-standard model of the banking and financial system under the influence of banking innovative products, have a balancing effect on the goal

In her research, A.P. Kornaukhova states that "the financial stability of a commercial bank is the full performance of its functions, the formation of sufficient reserves to cover possible losses, compliance with regulatory requirements, quality banking necessary to reduce risk" [4].

According to the regulations of the Basel Committee, in order for a commercial bank to be recognized as financially stable, it must fully comply with the requirements developed by the



Central Bank of the country in accordance with the requirements of the Basel Committee. The Basel Committee interprets financial stability not as a term but as a set of positive regulatory indicators that ensure the sustainable operation of the bank

### **RESEARCH METHODOLOGY**

In preparing this article, the existing theories put forward by foreign scholars were studied and the factors influencing the financial stability of banks in our country were analyzed. The research used mainly comparative assessment and scientific abstraction methods.

Reliability of research results Approved approach, methods and official sources of ministerial data, effectiveness of analyzes and experimental tests in the range of mathematical and statistical reliability, compliance with the requirements of reliability in statistical and factual legislation, Statistics Committee of the Republic of Uzbekistan, Central Bank of Uzbekistan, Uzbekistan It is based on the data of the Capital Market Development Agency of the Republic of Kazakhstan, the practical data of international organizations such as the World Bank, the International Monetary Fund and commercial banks.

### **ANALYSIS AND RESULTS**

In general, innovative banks are those in which business processes and technologies are well established, a detailed long-term strategy is developed for all levels of management, all defined KPI indicators are applied in practice, constantly evolving and new products (services) and new sales channels are introduced. is a bank that provides high-quality customer service and high satisfaction with banking services, actively supports development projects and tasks by the bank's management.

The activities of digital banks and non-banks, which today operate as innovative banks, are mainly based on remote services through the use of financial technologies and are being studied by researchers.

In the course of the research, it was scientifically substantiated that the concepts of “Smart Digital Bank” and “Neobank” are synonymous, and that the concepts of “Banking Financial Technologies”, “Innovative Banking Products” and “Smart Digital Financial Technologies” (SMRT) are similar in content.

Also, the newly supplemented classification and description of smart digital financial technologies in smart digital banks are given in Table 1.



**Table 1**

**Classification of smart digital financial technologies by new brand**

Based on the classification presented in this table, the development of an innovative financial

<b>Smart digital financial instruments (SRMI) groups</b>	<b>Types of Smart Digital Financial Services (SRMX)</b>	<b>Types of operating platforms (information technology tools) SRMTs</b>
<b>Electronic Securities (ES) group</b>	Types of services related to ESs	For ES transactions and related services digital platform
<b>Electronic loans and credits (ELC) group</b>	Types of services related to ELCs	Digital platform for ELC transactions and related services
<b>Payment and Settlement (PH) Group</b>	PH-related services	Digital platform for PH operations and services
<b>Crypto-currencies (CC) group</b>	Types of services related to CCs	Digital platform for CC transactions and related services

services market based on the transformation of traditional banks into a smart digital banking phase by ensuring the horizontal and vertical connection of the “financial instrument-service-platform” trio. At the same time, banks will operate in the “neobank” mode, and all banking operations will be offered through remote platforms. “Neobanks” or "smart (SMART) digital banks" - a system capable of operating independently without human intervention, integrated into the necessary public services or service enterprises and organizations.

In general, we can observe the widespread use of banking products and digital banking, improved by financial technologies in the world and in our country. These observations and studies show that innovative banking products can have both positive effects as well as negative effects and consequences. This can be seen in the SWOT analysis presented in Table 2.

**Table 1**

**SWOT analysis of the impact of financial technologies and digital banking**

<b>Strengths</b>	<b>Weakness</b>
<ul style="list-style-type: none"> <li>- can be used anywhere and at any time;</li> <li>-Low time cost;</li> <li>- low-cost fast transactions;</li> <li>- high profitability.</li> </ul>	<ul style="list-style-type: none"> <li>- Low willingness of people over 50 to use digital technologies;</li> <li>- compliance with technical requirements such as computer, smartphone, Internet connection;</li> <li>- the presence of systemic shortcomings in the network.</li> </ul>
<b>Opportunities</b>	<b>Threats</b>



- remote implementation of all banking services;
- As a result of the government's correct strategy and effective reforms in this area, it will lead to economic growth through the development of small and medium-sized businesses, poverty reduction, acceleration of economic processes;
- The large number of smartphone users will allow to expand the market of these services;
- Continuous development in the field of information technology.
- the possibility of widespread phishing, misinformation or misleading information;
- the presence of problems with cyber threats in digital mode;
- Ineffective wrong strategies or decisions by government or banking system leaders can accelerate and extend the complexity of these decisions.

The SWOT analysis in Table 2 shows that the availability of digital banking products anywhere and at any time, low time costs, the availability of low-cost fast transactions, high profitability are the positive effects of innovative banking products. technical requirements such as low, computer, smartphone, internet connection, the presence of systemic shortcomings in the network have their negative effects.

In 5 developing countries, where banking products improved through financial technologies have been widely introduced, troubled assets have been steadily declining despite the economic crisis of the last year.

The data in Table 3 show that the NPL can be seen to have decreased from at least 2 per cent (Peru) to 14 per cent in Brazil. At the same time, in a country like India, which is large and has a very high income inequality, the decline in this indicator can be considered a great effect.

**Table 2**

**Nonperforming Loan (NPL) Growth Rate in Financial technologies are widespread in developing countries**

Indicators	2018	2019	2020	2021	average annual indicator, % da
<b>Brazil</b>	3	3	2	2	
<b>annual growth, in%</b>	85	102	72	76	<b>14</b>
<b>Chile</b>	2	2	2	2	
<b>annual growth, in%</b>	98	110	76	73	<b>6</b>
<b>India</b>	9	9	8	9	
<b>annual growth, in%</b>	95	98	86	90	<b>7</b>
<b>Peru</b>	3	3	4	5	
<b>annual growth, in%</b>	70	103	123	115	<b>2</b>
<b>Russia</b>	10	9	9	11	
<b>annual growth, in%</b>	101	92	94	96	<b>4</b>



Based on the results of the correlation analysis (Table 3), the following conclusions can be drawn: 1. In general, there is a correlation between the level of use of digital banking products (RBMD) and GDP. The correlation between these indicators will increase depending on the level of economic development of the country.

2. There is a strong enough link between the RBMD and GDP per capita. That is, the use of digital financial services serves to increase the welfare of the population.

3. The RBMD may not always serve the financial stability of the country. For example, an increase in the RBMD with a highly developed financial system and infrastructure will help reduce NPL (non-performing loans).

The chosen development strategy should include country-specific features. In particular, a comparison of the strategy of digitization processes in the banking system of Russia, Kazakhstan and Uzbekistan has shown that the creation of digital financial infrastructure has become one of the main goals of countries.

**Table 3**

**Analysis of the relationship between macroeconomics and some innovative banking products through Spirman color correlation**

<i>Indicator name</i>	<b>Group of countries</b>	<b>RT, percent</b>	<b>IT, percent</b>	<b>MTI, percent</b>
<i>Relation to the amount of GDP (in US dollars)</i>	All country and territories (157-160)	0.4233	0.5017	0.3715
	High profitable angels (43)	0.3795	0.4775	-
	All country and territories (157-160)	0.8381	0.8768	0.6402
<i>GDP per capita, amount (in US dollars) dependence</i>	past average and low income countries (58-61)	0.3280	0.4378	-0.2732
	High average income countries (36)	-	0.4080	0.4245
	High profitable angels (43)	0.7392	0.6660	0.4958
<i>Economic stability indicators</i>	All country and territories (149-153) inflation percent	-0.3399	-	-0.2502
	All country and territories (147) unemployment, percent		-0.1693	
	All country and territories (108-110)	-0.3282	-0.3736	-0.2924
<i>NPL (motionless) loans) with dependence</i>	Past average and past profitable countries (38)			0.3871
	<b>High profitable countries (40)</b>	<b>-0.4726</b>	<b>-</b> <b>0.4819</b>	<b>-0.5084</b>

The Mule ESB system, which combines various specialized programs that are part of the evolutionary-modular model of digital transformation of banks, can adapt the information between them by changing them through adapters.

In the context of the state policy of modern socio-economic reforms, it is proposed to implement the strategy of innovative digital development of the national banking and



financial system in 3 (three) stages: first stage (2021-2023) - creation of hybrid financial infrastructure, integration of all payment systems;

the second stage (2024-2026) - full digitization of the banking and financial infrastructure, the establishment of a national bank with the closure of national commercial banking units, as well as the integration of other segments of the financial market with banks and the formation of large financial ecosystems;

the third stage (2027-2030) - the full integration of financial infrastructure into key sectors and industries of the economy, and this system will become a subsystem of a single economic system, all financial ecosystems will be integrated into a single smart digital bank, coordinated and controlled by a single macro regulator.

To implement these steps, it is necessary to create an appropriate smart digital ecosystem infrastructure, coordinate the activities of multidisciplinary banks with a remote service system and transform banks.

As innovative banking products that are new to the mortgage market of our country, it is expedient to use digital financial technology types (including models of digital financial and mortgage technologies based on traditional and Islamic mortgages) in the activities of local banks. Necessary measures have been taken to transform the existing banking system in the country into a smart digital banking system and implement it. It is also necessary to introduce an effective model of macro-regulation that will ensure the harmonious operation of all aspects of the banking system in the formation of effective economic mechanisms and economic growth at the heart of the ongoing reforms in the country, relevant recommendations and suggestions were made.

## **CONCLUSION**

Based on the bibliographic analysis of the terminological apparatus and theoretical and methodological basis of the new banking products, the concepts of "Smart Digital Bank" and "Neobank", as well as the concepts of "Banking Financial Technology", "Innovative Banking Products" and "Smart Digital Financial Technology" scientifically based and a newly supplemented classification and description was given.

It was scientifically substantiated that the model of coordination and control of integrated platforms of "Neobank" operations in the market of innovative banking products by the state macro-regulator would be the most effective and rational theoretical and methodological solution.

While banking products are central to the economic system, the digital banking market is a barometer of the economic situation in which all components organize and adjust their actions, and through it perform the function of redistribution of financial resources, each element of financial flows using the banking financial system. interdependent and regulates it in accordance with the state macroeconomic policy. Therefore, the positive impact not only on the banking system, but also on the economy as a whole was justified through the introduction of effective innovative banking products. A visual model for this process was created based on existing economic theories.



Availability anywhere and at any time, low time cost, availability of low-cost fast transactions, high profitability are the positive effects of innovative banking products, 50 adults are less willing to use digital technologies, technical requirements such as computer, smartphone, internet connection, network system the presence of defects was found to have a negative effect on them.

Under the influence of infrastructural and technological factors, the positive shift in performance is not easy, especially since changes in customer behavior are not easy, and financial technology alone does not increase the level of access to financial services. In order for them to be highly effective, the need to adapt them to the passive groups of the economy, namely women, the elderly and the poor, was justified.

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