



## THE NEED TO INTRODUCE FINANCIAL TECHNOLOGIES FOR THE DEVELOPMENT OF THE BANKING SERVICES MARKET

Abduraximova Dilora Karimovna,  
PhD Tashkent Institute of Finance

### ABSTRACT

In recent years, the importance of introducing financial technologies into the banking ecosystem can hardly be overestimated. Since financial technologies have changed the architecture of the financial services market. This article discusses the main causes and results from the introduction of financial services in the activities of foreign and national banks. As well as a number of recommendations for the development of the banking services market during the transformation of commercial banks in Uzbekistan.

**Keywords:** banking innovations, financial technologies, banking services market, remote banking services, digital banks

### INTRODUCTION

The Austrian scientist Y. Schumpeter, the founder of "Innovation Theory" was the first to use the term "innovation" in scientific and economic literature, and he defines innovation as follows: "Innovation is a new combination of production factors stimulated by the spirit of entrepreneurship." In his opinion, it is innovative activity that serves as a source of income in the economy. He noted that it was the innovative processes that caused the emergence of the dynamics of the economy with a wavy appearance..

S. M. Teiki and M. M. Carvalho gave their views as "the type of innovation that can create value together with complementary innovations".

In recent years, it is also possible to observe the frequent use of the term 'systemic innovations'.

The most common use of the term "systematic innovation" is applied to a situation where the innovation system goes beyond one organization, and the coordination of many innovations at the macro level is attributed to a number of foreign researchers as D.J.Teece, S.Kano, Gopalakrishnan S. and P.Birli, J.Teylek va R.Levit and others.



I.T. Balabanov describes that "banking innovations are the end result of the bank's innovative activities, manifested in the form of new banking products and practices.

E.A. Kazanskaya, on the other hand, defines: "banking innovation is the result of the scientific and technical activities of the bank, the services of a new or evolutionarily specialized banking institution, aimed at meeting the requirements of customers or creating new ones in managing the resource capabilities of the bank"

I.M. Licheva and A.Yu. Klimenko define banking innovations as follows: "includes the process of modernization of banking activities, which includes the creation of new ones aimed at improving products, services, practices, business processes and generating additional income and scale of service and improving customer service".

A number of Uzbek scientists also conducted research in the direction of banking innovations and innovative banking products. For instance, Shoha'zamiy Sh.Sh., Kurpayanidi K.I., Malikova D.M., Bababekova D., Temirov A., Dadajonova M.M., Boboxujaev S. did research in this direction.

For example, F. Yuldashev believes that banking innovations have the following characteristics: innovatsiyalarning qisqa xayot tsikliga ega;

- high speed of popularization of the most successful innovations in the banking industry;
- the possibility of conducting scientific, especially theoretical, research related to the development of banking innovations, even at minimal cost;
- the chain nature of innovation, that is, one innovation creates a need and an opportunity to create another to further meet customer needs.

On the part of Russian scientists, Nikitina A.A, Prosalova V.S., Oxlopkov A. V., Vikulov V.S. approaches deserve attention. But, in our opinion, Prigogine A.I. Special mention deserves the classification that the innovative bank brings to its concept.

A.Prigozhin noted that an innovative bank is a bank in which business processes and technologies are ideally tuned, a detailed long-term strategy for all branches of management has been developed, all established KPI indicators are applied in practice, new products (services) and new channels for their sale, customers are provided with quality service and their satisfaction with banking services is



high, the project and development tasks are actively supported by the banking management<sup>1</sup>.

Although this definition does not fully describe the concept of "innovation bank", it lists the necessary measures for the functioning of the Innovation Bank, and, in our opinion, it is the implementation of these measures that ensures that any bank carries out digital innovation activities.

The founder of the theory of "diffusion of innovations" E. Rogers believes that "diffusion is the process of spreading innovations between members of a social system through certain channels at certain intervals.". He believes that there are 3 main elements in this, namely channels of communication, time and social system<sup>2</sup>.

From the essence of the theory of "diffusion of innovations" by E. Rogers, we can conclude that the process of introducing and using innovations is a process that depends on the environment and time.

Financial Technologies or " Fintech "is used to describe a variety of innovative business models and emerging technologies that have the potential to transform the financial services industry. Financial Stability Board defined FinTech as a "technology-enabled innovation in financial services that could result in new business models, applications, processes or products with an associated material effect on the provision of financial services"(Financial Stability Board, 2017)

The paper is organised as follows. Section 2 presents the research background and theoretical foundation. I. Following this, Section 3 presents the research model. Next, Section 4 presents the research methodology. Thereafter, Section 5 presents the data analysis and results. Section 6 presents discussions of findings, theoretical, practical and policy implications as well as limitations and future research directions. Finally, Section 7 concludes the paper.

## RESEARCH METHODOLOGY

This study explores two methodological approaches: a systematic review of relevant scientific literature and analysis of data from the Central Bank and the State Committee on Statistics of the Republic of Uzbekistan, as well as the World Bank data on the development of financial access and economic development.

<sup>1</sup> Prigojin A.I. Novovvedeniya: stimuli i prepyatstviya. - M.: Politizdat, 1989. - 270 s.

<sup>2</sup> Rogers E. M. Diffusion of innovations. New York: Free Press, 1962. – 367 p.



The research methodology differs from others in that it combines international and national indicators of financial access and economic development. This allows comparing criteria from two different sources.

## ANALYSIS AND RESULTS

In order to analyze the impact of innovations in the form of financial technologies, we first need to consider the advantages and disadvantages of this object. For this purpose in the table 1 it is provided SWOT-analysis of fintech.

**Table1. SWOT-analysis of fintech**

| <b>Strengths</b>   | <b>Weaknesses</b>  |
|--|--|
| Fintech offers: <ul style="list-style-type: none"><li>- significant potential to enhance efficiencies,</li><li>- reduce costs,</li><li>- modernise financial infrastructure,</li><li>- enable more effective risk management and expand access to financial services across a range of different areas including lending, payments, personal finance, money transfer, and insurance.</li></ul> | <ul style="list-style-type: none"><li>- High risk of fraud</li><li>- financial risks associated with consumers</li></ul>   |
| <b>Opportunity</b>   | <b>Threats</b>   |
| <ul style="list-style-type: none"><li>- solutions to some of the key drivers of de-risking such as 'Know Your Customer' policy;</li><li>- eliminating the need for corresponding banking relationships altogether;</li><li>- to promote financial inclusion</li><li>- to help banks to maintain the status quo.</li></ul>  | <ul style="list-style-type: none"><li>- Cybercrime can potentially undermine the integrity of the entire financial system.</li><li>- many small and developing countries lack the capacity and infrastructure to safeguard cybersecurity.</li><li>- many Fintech start-ups are too focussed on launching their product quickly, without paying due attention to security measures.</li><li>-a potential abuse of Fintech, without proper regulation and also some legitimate concern about market competition.</li></ul> |

The advantages of Fintech are manifold. By making the interaction between consumers and financial services as well as between financial service providers easier and simpler. And what about disadvantages? The privacy of personal information provided by consumers online is under the spotlight these days. The



recent data breach at Facebook is a case in point. This issue is particularly relevant for the Fintech sector as is the risk of fraud or financial risks associated with consumers not fully understanding the new financial products.

The 'de-risking' phenomenon has become an existential threat to many small states in the Commonwealth, especially in the Caribbean and the Pacific. Fintech could potentially offer solutions to some of the key drivers of de-risking such as 'Know Your Customer' policy, or eliminate the need for corresponding banking relationships altogether.

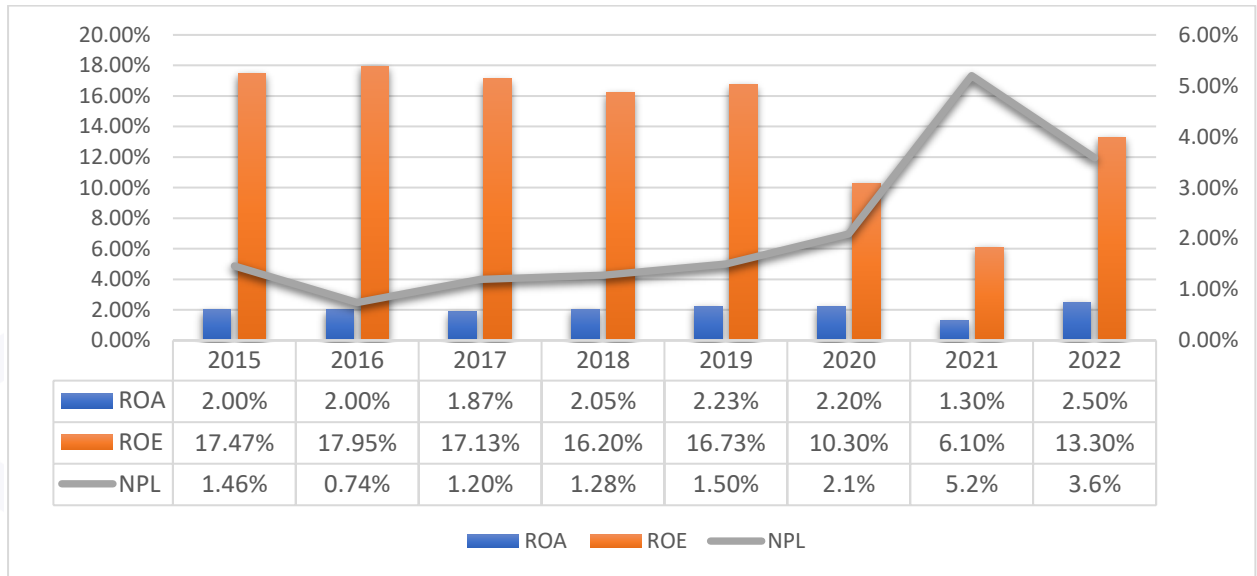
The declining cost of internet services and growing mobile and smartphone penetration in small and developing countries also provide an excellent opportunity to leverage Fintech to promote financial inclusion amongst the estimated two billion people who remain without access to formal financial services. Kenya's M-Pesa is one commonly cited example.

While many Central Banks are actively promoting Fintech through 'sandbox' approaches, the existing regulatory barriers are helping banks to maintain the status quo. The Fintech and the traditional banking sector, however, need not always compete but can also complement and learn from each other, forging new partnerships for the efficient delivery of financial services.

Cybercrime can potentially undermine the integrity of the entire financial system. This is perhaps the main reason why some Central Banks are reluctant to embrace Fintech more broadly. In the Commonwealth, many small and developing countries lack the capacity and infrastructure to safeguard cybersecurity. There are also concerns that many Fintech start-ups are too focussed on launching their product quickly, without paying due attention to security measures.

Then, there is a potential abuse of Fintech. Without proper regulation, easy access to finance can encourage risky behaviours like excessive borrowing and high personal debt accumulation. There is also some legitimate concern about market competition. A few early entrants in the market can get too large too soon and can wield considerable monopolistic power. On the other hand, too many entrants providing similar services can also crowd the market and make supervision more difficult. This is especially true for many small and developing countries where the rise of the sector can stretch already limited regulatory and supervisory capacity.

We will also be able to analyze the main indicators of the banking system in order to clarify how the transformation with the help of fintech affects the banking system.



**Figure 1. Main indicators of the banking system of Uzbekistan.**

Data Fig.1. illustrate that until 2020, such indicators as return on assets and capital have developed steadily. Also, the level of problem loans was about 2%, which is quite a good indicator compared to other neighboring countries such as Kazakhstan and Kyrgyzstan. Apparently, the quarantine measures of the COVID 19 pandemic shocked both the economy and the country's banking system. However, this also happened in other countries of the world. But starting from 2021, the indicators began to improve dramatically, even the NPL level decreased from 5.2% to 3.6%. And profitability has doubled. But this was facilitated not only by the development of the country's economy, but also by the introduction of financial technologies, thanks to which banks provided high-quality and inexpensive services in the shortest possible time. In addition, the minimal participation of bank employees and the provision of services remotely increased those willing to use banking services.

## DISCUSSION

Although such economists as J. Schumpeter and E. Rogers believed that innovation is the factor that contributes to the development of the country, but





such an event as the Covid 19 pandemic cannot pass without consequences for the development of the economy, including the banking system.

But these innovations affect the rapid recovery of the economy and the development of the banking services market.

## CONCLUSION AND PROPOSALS

Based on the results of the above analysis, the following conclusions can be drawn:

1. On the part of banks, loans of the type of high-risk operations will be used to further reduce the human factor in Amalieti. It is also necessary to ensure the transparency of the lending system from targeted decentralized funds, which is part of the state social settlement sièsat, and the provision of analytical information to be processed by a system programmed in a certain time mode.
2. In addition to the effective mobilization of domestic resources, it is advisable to create systems that provide access to domestic fintex companies and start-ups not only within the country, but also to direct investments from outside. This requires direct investment in national private banks, fintex companies and start-ups.
3. In order to further develop domestic banking services and improve the efficiency of investments, it is advisable to introduce small fintex systems and integrate large banking products.

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