

## **Importance of Financial Technologies and Digitalization of Banks in the Field of Banking Services**

**Diyor Makhkamov**

*Master of Banking and Finance Academy of the Republic of Uzbekistan*

**Abstract:** This article discusses the use of financial technologies in the commercial banking sector of Uzbekistan. Ways, problems and prospects of digitalization of commercial banks' services are highlighted. Also, the scientific-theoretical basis of providing both modern and remote banking services in commercial banks and the economic importance of digital banks were studied, suggestions and recommendations were formulated on the involvement of financial technologies by commercial banks in the context of the digitization of the banking system.

Also, the essence, characteristics, principles of the digital economy, the experiences of developed countries in the field of commercial banking and the possibilities of the emergence of digital banks in our republic were studied.

**Keywords:** digital commercial banking, electronic transactions, mobile communication, internet, neo-commercial banking, commercial commercial banking, commercial banking services, remote commercial banking services, modern commercial banking services, digital technologies, customer segment.

### **Introduction**

for 2022-2026 is intended New of Uzbekistan development strategy done increase is also inclusive and high economic to swell reach with the poor man two equal to reduction in the economy competition surface bringing, entrepreneurship to subjects equal to conditions create, market to relations to ' lakanli tooth acceleration, national of the economy competitiveness increase, private investments size sharp increase and business of circles confidence more is being strengthened. ([www.president.uz](http://www.president.uz))

Information technology (IT) and artificial intelligence are entering the commercial banking industry, making it more mobile and flexible. The needs of customers, the benefits provided, and the way financial services are provided are changing. IT companies began to play an important role in the financial services market, offering traditional commercial banking products in a new, modern format. Commercial banks need to invest heavily in commercial banking innovation to stay relevant. All this requires them not only to change the way they provide their services and interact with legal entities and individuals, but also to qualitatively reshape operational processes, their management methods and approaches, and corporate culture. The main financial technologies that allow to change commercial banking activities in accordance with the requirements of the digital economy are summarized.

The penetration of digital technologies into all areas of society has already reached a certain level and continues to grow due to the increasing number of mobile technologies. I studied the current business model of commercial banks and found out that in order to make changes, it should be accelerated for their permanent inclusion in the Information Society and digital

economy, and it would be appropriate to gradually move to the formation of the financial ecosystem through the use of modernized digital technologies. Due to the rapidly changing expectations of users in all segments of the commercial banking system, in addition to classic commercial banking services, commercial banks are promoting customer-oriented business models and strive to provide the best service and meet customer needs. According to the data of the Central Commercial Bank, in 2022, 4,225 individuals used remote commercial banking services, and as of January 1, 2021, this figure reached 13,748. With the increase in the number of mobile applications, the advantages of the QR-code system, and most importantly, the improvement of the literacy of the population on the use of digital financial services, the scope of the use of digital technologies in the commercial banking system is increasing. (www.cbu.uz)

### **Literature review**

It is natural that the introduction of innovations in the practice of commercial banks has brought drastic changes in the financial and credit sector, because innovations first of all imply the introduction of innovative products, services and digital technologies by our commercial banks. At the same time, the introduction of such ecosystems became possible in the conditions of sufficiently developed IT systems that allow to collect and process a lot of information about users online and offline, to establish effective communication through any available channels, and provide many services remotely. (Dyachenko O. 2018. Financial ecosystem: vse v odnom. National Commercial Bank Journal (NBJ). 2018. 5:)

Traditional in-house tools for building products do not provide the speed and quality required, so financial and technology companies are actively involved. This is unusual for the conservative commercial banking sector and requires a change in the method of assessing the partnership institution (Polyokov I. 2015).

My comment concept of business ecosystem I learned i.e Also, the integration of several services related to the overall value for the customer into a single user interface creates a number of conveniences. I learned (Ivaanov, A. Ekosistema 2018).

From this point of view, remote commercial banking services are services offered by commercial banks to their customers, not face-to-face with their customers in a commercial bank, but remotely using the capabilities of modern commercial banking technologies. (ZT Mamadiyarov, 2020)

In order to further improve the commercial banking business in modern conditions, it is emphasized that the wide use of "artificial intelligence" (artificial intelligence) and digital technologies to improve the services provided to customers by small and large financial technology companies. (Azlarova A.A., Abdurakhmanova M.M. 2019)

The results show that motivation and ease of use in digital technologies are directly influenced by the use of web applications and software used in the digitalization process. (Bastar A., Eliana F., Syabarrudin A., Emur A. 2020)

The rise of the Internet has led to increased competition from traditional incumbent manufacturers with online platforms from digital entrants. However, it is unclear how these two types of competing yet interdependent actors will coexist in a new platform-based ecosystem. Our analysis reveals a process characterized by three sequential steps: (1) selective cooperation, (2) allied competition, and (3) selective copying. These steps illustrate how switching between different multi-step strategies covering market segments, products, and technology components is an appropriate solution for incumbent manufacturers to adapt to entrant platforms. (Cozolina A., Corbo A., Aversa P. 2021)

### **Research methodology**

Qualitative data collected during the research was analyzed using quantitative and non-quantitative methods. Analyze our quantitative data on the introduction of digital commercial banking business models to commercial banks in our republic using descriptive and differential

statistics methods. In particular, we enrich our research with the help of data graphs and visualization methods.

### **Analysis and results**

Digital commercial banking is a combination of online commercial banking and mobile commercial banking. Using digital commercial banking services can help you reduce your costs as it not only saves you money but also your time.

Online commercial banking means accessing commercial banking services from your device through a commercial banking website. It allows you to check your balance and pay your electricity bill by logging into your commercial bank account. If, through my online commercial banking portal, I can access additional commercial banking features, such as applying for a loan or credit card at many commercial banks. The provision of remote commercial banking services is a set of services that provide the opportunity to perform various commercial banking operations remotely. For this, it is enough to use a computer or mobile phone without visiting a commercial banking institution. Remote technologies allow the client to use commercial banking services with maximum convenience and to minimize time and financial costs in the process of working with a commercial bank. Remote commercial banking services analysis when I did, I found out that its development will lead to the emergence of various services of a new size and a new form in the system of commercial banking services. The remote service system can be divided into two types according to the nature of the services provided to customers:

- informative;
- transaction.

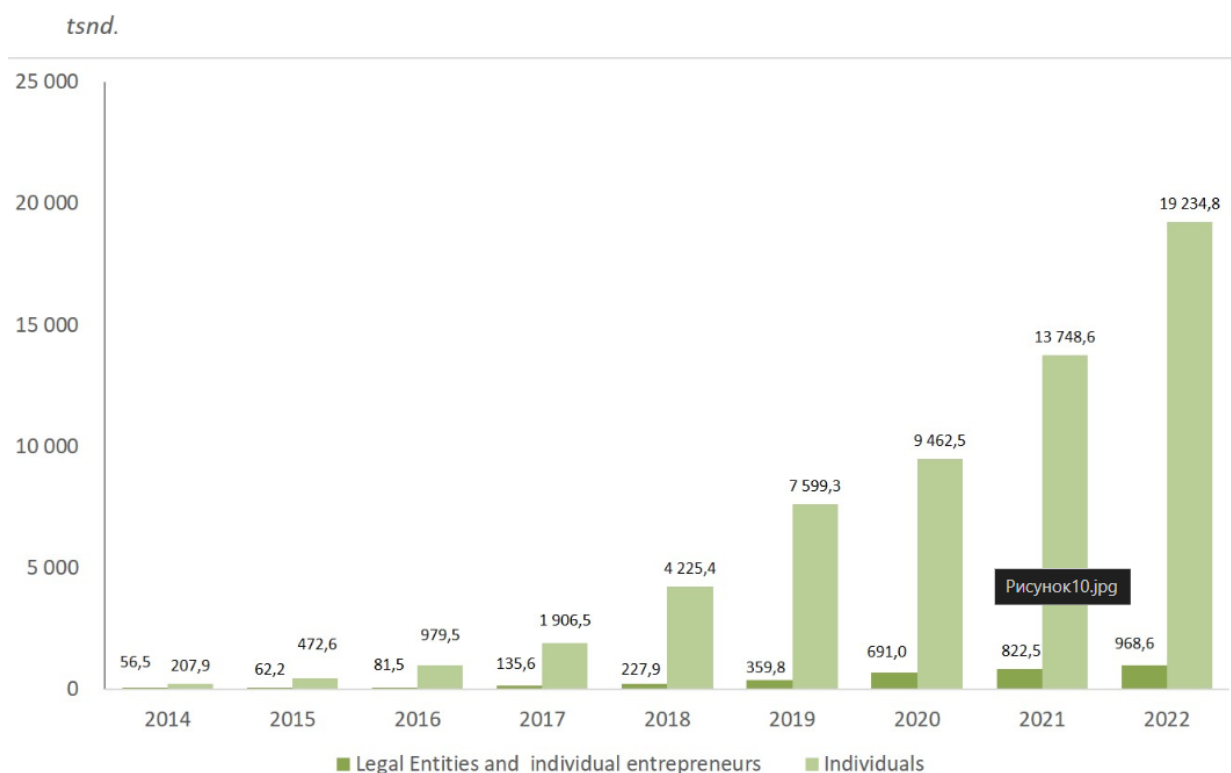
Informational commercial banking is focused on providing customers with financial information, while transactional commercial banking provides an opportunity to perform financial transactions. The main principle of remote commercial banking services is the remote exchange of various information between the client and the commercial bank. In this case, the security of this operation is ensured by the commercial bank. Through the Internet commercial banking service, the client can:

- ❖ transfer payments;
- ❖ monitoring the stages of payment;
- ❖ makes it possible to access all the operations like getting all the reports at any time.

Internet-commercial banking allows the client to connect to the desired commercial bank website via the Internet, prepare money transfers from his account number and send them to the commercial bank, and see the money coming into his account.

In the figure below, you can see that in 2022 there were twice as many users as in 2020. Especially during the pandemic, the number of users has increased dramatically.

In order to use the mobile applications, it is necessary to first obtain a commercial bank card issued in your name from a voluntary commercial bank (if you do not have a commercial bank card). Currently, two types of commercial bank cards (HUMO and UZCARD) are issued by commercial commercial banks.



**Fig. 1 Number of legal entities and individuals using remote commercial banking services systems (www.cbu.uz)**

currently used plastic cards, individuals must perform the following actions in order to make purchases through the mobile application:

- in order to get a plastic card, apply to the designated commercial bank through the mobile application using a passport confirming identity (it is possible to order online only with the websites of commercial commercial banks)
- top up a card from a commercial bank with funds (through the "cass'-in" function of a commercial ATM or by visiting commercial banking service centers);
- activating the SMS-notification or telegram-notification service by connecting (attaching) the account of the commercial bank card to one's mobile phone number by visiting a commercial bank or, if not, through a commercial ATM and infokiosks;
- Download mobile applications of commercial commercial banks or payment organizations from the Internet application "Google Play market" for a mobile phone with the Android operating system or from the Internet application "Appstore" for a mobile phone with the IOS operating system - registration in these mobile applications, that is, the received commercial bank card number and pass identification by entering the secret code received on the mobile phone after entering the validity period;
- set a secret code to access the mobile application for security purposes. No commercial banking brokerage fees are charged for these transactions.

These other financial institutions have restrictions on which accounts can be deposited and the amount that can be transacted through mobile commercial banking. Mobile commercial banking depends on internet availability or data connection to a mobile device. ( What is digital commercial banking? Meaning, types and benefits” SDK.finance® website. Copyright © 2022 TechFin)

Often the following operations and activities (all traditional commercial banking services are available 24/7 via mobile phones, computers and compatible smart devices, no need to be a customer at a commercial bank branch).

- Obtaining commercial bank statements,
- You can withdraw cash,
- Money transfers,
- Manage a checking or savings account,
- deposit accounts,
- credit management,
- calculations,
- Controlling,
- Monitoring of transaction records.

Undoubtedly, digital commercial banking software makes all traditional services easier to access, understand and manage. This approach allows commercial banks to test lower risk concepts before migrating parts of their old business to the new system. Notable examples include Goldman Sachs' Marcus, RBS' Bó and YONO, India's state-owned commercial bank, which amassed over 26 million customers and became profitable in 18 months. The following statistics confirm the assumption that digital transformation will be a priority for commercial banks in 2021.” (After signing the Decree of the President of the Republic of Uzbekistan No. 38 "On Measures to Fundamentally Improve the Activities of the Central Commercial Bank of the Republic of Uzbekistan" No. In Uzbekistan, "Anortijorat Bank" and "TBC Commercial Bank" were registered as digital commercial banks This means that a digital commercial bank client can use commercial banking services 24/7. high flexibility of banking operations is provided. Traditional and online commercial banks—also known as direct commercial banks—both offer you access to your account online and the ability to transfer money or perform other tasks with a few clicks of the cursor or a tap on your phone's screen. Again that's it I found that both are subject to the same laws and regulations, and online- only accounts are guaranteed by the Federal Deposit Insurance Corporation (FDIC) just like traditional commercial bank accounts. Security is generally the same, with both types using measures like encryption to protect your funds and identity.

Here, the term "Digitization" refers to the conversion of information into digital form. However, in business, digitization means two types of changes in operating models:

The first is to transfer communications to a digital channel; the second is the automation of continuous operations. These changes are closely related. The commercial banking sector of the Republic of Uzbekistan is moving forward like the commercial banking sector in developed countries.

Service delivery models are changing significantly as a result of digital technologies (artificial intelligence, blockchain, R2R lending), as well as the development of an interconnected network economy. Sectoral joining regarding In my study, financial organization i.e commerce from banks I learned that the barriers to entry of other participants are decreasing year by year, and the integration of financial services and products into the commercial banking sector, based on the autonomy of telecommunications and IT companies. In my research on demand, the demand for commercial banking innovations is mainly determined by its consumers. The main demands of consumers are to reduce the time of performing commercial banking operations, the ability to work them in 24/7 mode, more convenient use of commercial banking products and services, and to increase the possibilities of using commercial banking services as well as other services using a single commercial banking interface. These requirements motivate the development of innovations in the commercial bank. Today, the rate of development of new technologies, ideas and models is very high, therefore, the main factors of competitiveness and customer retention are the quality of services and the speed of bringing them to the market.

The commercial banking sector is considered to be a driving force behind the introduction of



digital and technological innovation solutions and a supplier of personnel to other sectors. Large commercial banks implementing digital transformation will have opportunities to expand the range of services provided within the framework of the system they have created. Medium and smaller commercial banks will become segmented participants outside the systems of large commercial banks. Non-commercial banking participants (telecommunications and IT companies) provide more and more financial services and become a full-fledged competitor of traditional commercial banks. Customers, in turn, will have the opportunity to receive additional services in the fields of telecommunications, retail trade, education, and health care at service-providing commercial banks. Through privatization, offerings are coordinated, the speed of commercial banking operations is dramatically increased, and competition in the industry is intensifying as the number of financial technology companies and non-profit banking organizations increases. As a result, the profitability of traditional commercial banking services is decreasing, and market participants are faced with the question of looking for new sources of income. A new source of income was created in cooperation with digital commercial banking products and IT companies we believe that it can be in innovative products.

The analysis shows that many commercial banks have already built their own marketplaces for entrepreneurs, but it was not enough. Therefore, today, the opportunity to really increase your income by providing non-standard financial services is of particular relevance. Creating a financial ecosystem is becoming an important step in increasing the competitiveness of financial and credit organizations and, at the same time, the way they fight for the client. At the same time, the introduction of such ecosystems will be possible only if there is a sufficient level of development of IT systems that allow to collect and process a lot of information about users online and offline, to establish and provide effective communication through any available channels. Many new remote banking services are being developed. According to the information of the Central Commercial Bank of the Republic of Uzbekistan, within the framework of measures to improve the competitive environment in the commercial banking system and expand the participation of foreign investors in 2020, one of the largest commercial banks of the state of Georgia, TBC Tjorat Bank, in Tashkent., the joint-stock company "Anar Commercial Bank" providing digital commercial banking services started its activities, and 20 organizations were granted licenses to perform the activities of payment organizations. In 2020, commercial commercial banks established 409 basic commercial banking services offices providing basic commercial banking services, and their number reached 866. Commercial banks established 691 24/7 independent commercial banking service centers, bringing their number to 1452. (www.cbu.uz)

In 2020, a total of 128.3 trillion will be paid through the instant payments system. about 5.4 million soums. transactions, including more than 232 thousand 2 trillion to the treasury. budget payments of soums were made. In order to further expand the payment infrastructure, by March 1, 2021, the total number of commercial ATMs and infokiosks was increased to 12,289 units, and the total number of terminals was increased to 440,300 units.

## **Conclusion**

It should be noted that a strategy for the digital development of commercial commercial banks should be developed, and shareholders should have the opportunity to control the implementation of activities related to the strategic development of commercial commercial banks. In our opinion, the reasons for the increased commercial interest of commercial commercial banks in expanding the digital ecosystem through non-commercial banking services are as follows:

First, competition in the traditional commercial banking market is increasing. The share of the population that is not covered by them is decreasing. Undoubtedly, there is a high probability of redistribution of customers between commercial banks in this situation. At the same time, the market share of non-commercial banking participants - micro-firms, retail chains, mobile

communication operators - is expanding. In the conditions of such competition, it is important to develop effective means of struggle for commercial banks.

Second, commercial banks are trying to find additional sources of income, which can be diversified by offering new services that are not typical for commercial banks. In our opinion, the main issue for commercial banks in the new conditions based on digital technologies is to deepen the relationship with customers. First of all, trust must be established between the customer and the commercial bank, so that the customer will get a package of all services by staying with the commercial bank, and naturally, the customer will not waste time looking for other commercial banks.

Third, digital ecosystems create strong barriers to market entry. Commercial commercial banks delaying the process of digital transformation find themselves in a difficult situation in terms of improving the main product and offering additional financial and non-financial services to the market. Thus, in the context of the digital economy, commercial commercial banks are increasingly focusing on finding new opportunities to gain priority in the fierce competition. By using the technological possibilities of big data analysis, commercial commercial banks are mainly creating customer-oriented offers, commercial banks are creating value (value) that satisfies their customers, and most importantly, bringing the customer into the process of value creation and launching a new product together. In our opinion, all this will lead commercial commercial banks to change their business models. The integration of the commercial bank customer into the value chain will lead to a gradual transition to customer flow management through digital commercial banking product flow management, resulting in the full formation of the digital commercial banking ecosystem.

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