



# Some Issues of the Formation and Development of Banking Innovations in the Republic of Uzbekistan

**Shomurodov Ravshan  
Tursunkulovich**

Candidate of Economic Sciences, Associate Professor, Department "Finance-Credit", Tashkent institute of Finance, Tashkent city, Uzbekistan. E-mail; [r.shomurodov@mail.ru](mailto:r.shomurodov@mail.ru)

**Kodirova Madina  
Abdugappor kizi**

Master student of the department "Banking", Tashkent institute of Finance, Tashkent city, Uzbekistan.

## ABSTRACT

The article explores some theoretical issues of formation and foreign experience in the development of banking innovations, customer service by commercial banks in the context of the introduction of the digital economy. Also, the current state and further development of remote banking services in commercial banks in the context of the introduction of digitalization of banking services are considered. In addition, the authors outlined ideas, scientific proposals and recommendations for the development of banking innovations in the Republic of Uzbekistan.

## Keywords:

Digital technologies, information technologies, innovations, banking technologies commercial banks, digital economy, banking innovations, banking services, banking products.

## 1. Introduction.

In developed countries, innovations are also widely used in the banking system. The leaders of banking innovations in the digital economy are Germany, Japan, the USA, South Korea and the UK. Today, there are cardinal changes in the conduct of the banking business.

The latest Moody's study concluded that it "sees no prospects for banks that ignore high technology" The development of modern banking technologies is already refusing a revolutionary impact on the global banking industry.

In our opinion, the concept of "innovation" is interpreted as "the end result of innovative activity, embodied in the form of a new or improved product, or a technological process introduced on the market, used in practice, or in a new approach to social services".

Banking innovations are a powerful tool for the economic development of the country.

Commercial banks that use new technologies in their work attract more customers and make more profits, unlike others that risk losing their customer base and risk their profits. Therefore, each bank builds its relationship with the client, based on the principles of partnership.

In today's world, leading banks strive to endlessly improve the quality of their banking services while reducing the cost of their maintenance. The range of banking and financial services is expanding every year, new types of products and services are constantly appearing on the market. This factor serves to intensify competition between banks for each client. Therefore, each bank builds its relationship with the client, based on the principles of partnership.

In addition, the significant changes that have occurred over the past decades in the banking system of Uzbekistan and other countries, namely those related to the emergence of new types of services and

technologies of the banking sector, actualize the problem of increasing the competitiveness and efficiency of providing banking services.

In the applied aspect, this issue becomes very relevant in view of the global economic instability during the COVID-19 coronavirus pandemic, which generally negatively affects the global banking sector, including the banking system of Uzbekistan.

## 2. Literature review.

The development of market relations requires commercial banks to introduce innovations in remote servicing of various categories of customers. In particular, in the Action Strategy for five priority areas of development of the Republic of Uzbekistan in 2017-2021, special importance is given to deepening the reform and ensuring the stability of the banking system, the level of capitalization and deposit base of banks, strengthening their financial stability and reliability [1].

As part of the analysis of banking innovations, it is necessary to consider the concepts of the payment system, innovations, the prerequisites for its occurrence, and also to present works that address these issues.

So, these issues were considered in the scientific works of foreign scientists, such as G.Galileo, G.Hegel, I.Kant, N.Copernicus, K.Linnaeus, E.Agoshkova, B.Akhlibininsky, L.Bertalanffy, I.Blauberg, N.Viner, M.Mesarovich, F. Peregudov, F.Tarasenko, S.Sarkisyan, Y.Urmantsev, Y.Chernyak, W.Ashby and others.

Well-known foreign scientist economist prof. O.I.Lavrushin emphasizes that banking innovation "is a synthetic concept of the purpose and result of a bank's activities in the field of new technologies aimed at generating additional income in the process of creating favorable conditions for the formation and deployment of resource potential through the introduction of innovations that help clients to make a profit" [2].

Foreign scientist economist prof. I.T.Balabanov interprets the term banking innovation as "the end result of a bank's

innovative activity, developed in the form of a new banking product or operation, and innovative activity is a "systemic process of creating and implementing innovations" [3].

Also, prof. P.V. Semikova emphasizes "Banking innovation is an innovation in the form of a new banking product or operation, which is the result of the bank's innovative activity" [4].

After analyzing the definitions of the above-named scientists, economists, we can give the following definition of the term "banking innovation". Thus, "Banking innovation is new technologies that transform banking business processes with the aim of automating them, strengthening control and reducing costs to provide a faster, better and more competitive service for customers."

V.Sagatovsky, as "a finite set of functional elements and relations between them, distinguished from the environment, in accordance with certain goals within specific time intervals" [5], A.Chirkov, as a complex of elements, object properties and their relations), reflected in the consciousness of the subject [6], etc.

The improvement of payment systems and the prospects for their implementation in banking practice were devoted to the work of foreign scientists and economists N.Baidukova, G.Beloglazova, A.Voronin, V.V.Davydov, Sh.Egiazaryan, O.Korobeynikova, Yu.A.Obayeva, M.Obratsov, N.Savinskaya, E.Khomenko and others. In addition, academic economists of Uzbekistan such as T. Karaliyev, Sh.Abdullaeva, A.Omonov, T.Bobakulov, Z.Kholmakhmadov and others devoted a lot of work to maintaining and improving cashless payments in Uzbekistan.

However, despite a significant number of studies devoted to theoretical, methodological and applied problems that arise in the process of developing cashless payments, in the context of the introduction of information and innovative technologies in the banking system, in our opinion, the theoretical and methodological support of this process has not been fully formed.

## 3. Research methodology.

At the stage of widespread use of innovations in today's banking and financial system, economic research methods such as data collection, analysis, synthesis and logical thinking of the electronic money system have been widely used to improve the services of commercial banks in the country.

#### 4. Analysis and discussion of results.

The globalization of all processes affects the emergence of new models and digital technologies. Therefore, today the banking industry is rapidly changing under the influence of a number of global challenges: changing consumer preferences of customers; the emergence of new technologies and the pace of implementation of existing ones; decrease in the marginality of the global banking sector and increased regulatory requirements; competition from FinTech companies.

In today's world, leading banks strive to endlessly improve the quality of their banking services while reducing the cost of their maintenance. The range of banking and financial services is expanding every year, new types of products and services are constantly appearing on the market. This factor serves to intensify competition between banks for each client. Therefore, each bank builds its relationship with the client, based on the principles of partnership.

The globalization of the world economy has radically changed the processes of development of the financial market in general and commercial banks in particular, giving them an innovative focus. In the context of the COVID-19 pandemic, international banking practices are undergoing fundamental changes in the system of cashless payments, taking into account digital technologies.

Thus, digital technologies have made it possible to move from a product-oriented approach to a customer-oriented one. The leaders in terms of banking innovation in the digital economy are Germany, Japan, the US, South Korea and the UK. The reverse side of this process is the growth of Internet fraud, which is one of the main modern banking risks [7].

Improving the system of cashless payments in the banking system directly depends on the development of new banking products. Banking innovations are a powerful tool for the socio-economic development of society. Under the influence of many economic and social factors, banking products and services are evolving. During the pandemic, the Central Bank of Uzbekistan and commercial banks are expanding cashless payment systems and Internet banking, mobile banking, and SMS banking are becoming more accessible to customers.

It should be noted that the introduction of foreign experience in banking innovations in the banking system directly depends on the development of new banking products and services. Banking innovations are a powerful tool for the socio-economic development of the country. Under the influence of many economic, political and social factors, banking products and services are evolving in the world.

In an analysis of 121 world banks in 2012, it was concluded that fingerprints are the most popular biometric technology. New studies conducted on already 184 banks from 35 countries gave the same result [8].

In developed countries, innovations are also widely used in the banking system. The leaders of banking innovations in the digital economy are Germany, Japan, the USA, South Korea and the UK. The reverse side of this process is the growth of Internet fraud, which is one of the main modern banking risks.

Today, commercial banks in Uzbekistan have already begun to offer interesting banking products through a mobile application. The commission for transfers of funds between cards issued by "Kapitalbank" itself is 0%, transfers from a card to a card of another bank - 0.5%. The commission for a transfer from an Uzcard card of any bank to Humo "Kapitalbank" is 0%, as well as a transfer from a Humo card of any bank to Uzcard "Kapitalbank".

It should be noted that biometrics in banking is most popular in developing Asian countries such as India and Indonesia. This continent accounts for 52% of banking

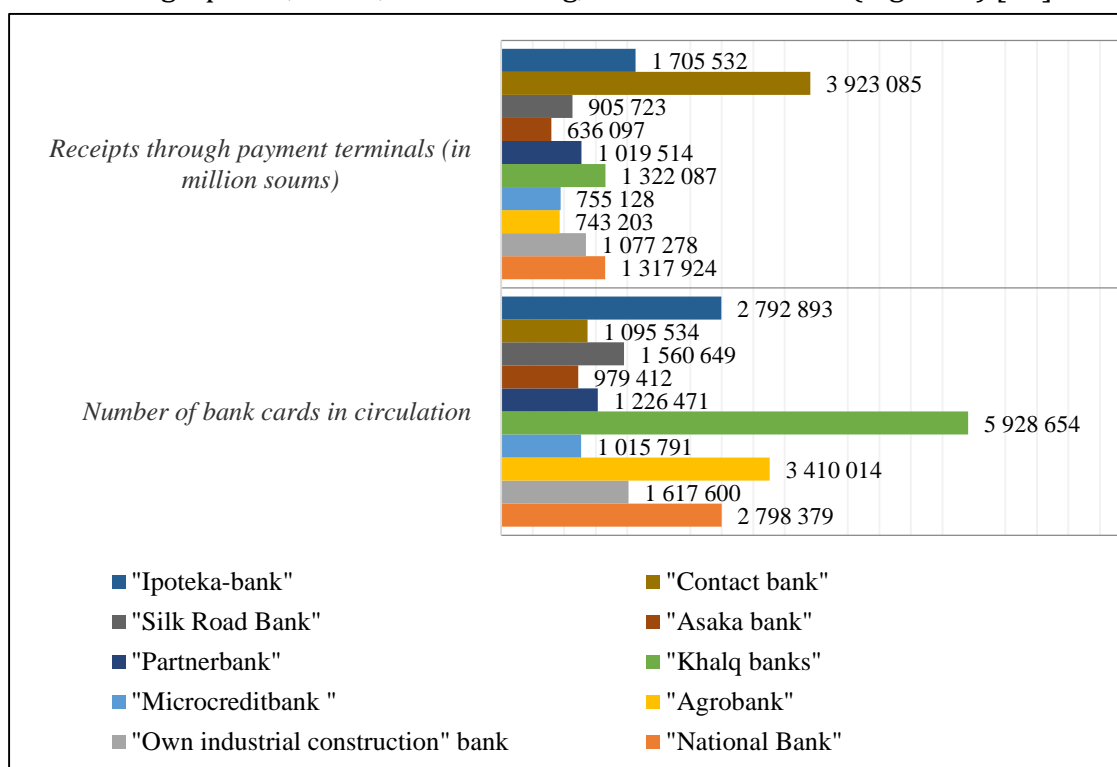
transactions using biometric data. America comes in second with 32%, followed by Europe (9%), Africa (6%) and Australia (1%). Japan maintains a network of more than 80,000 biometric terminals, which are used by more than 15 million customers [9].

The market economy constantly imposes new requirements on banks to develop new operations in which the client is interested. According to KPMG forecast, by 2030 banks in the physical sense will disappear for customers - they will use only electronic assistants [10].

Well-known biometric authentication methods are fingerprints, voice, iris scanning,

palm scanning or hand geometry, dynamic signature [11].

To date, commercial banks in Uzbekistan are carrying out large-scale work and additional measures to increase the availability of banking services throughout the country. In particular, it was created for bank customers to download mobile applications and make settlements in a matter of seconds for various payments and ensured their security. As a result of these measures, the number of users of remote banking services increased more than 7 times from 2 million people in 2016 to 14.6 million people by the end of 2022 (Figure 1) [12].



**Figure 1. Information on circulating bank plastic cards, terminals, terminals and infokiosks of the 10 largest banks operating in the Republic of Uzbekistan as of March 1, 2022 [13]**

As we can see, the range of services provided by banks has significantly improved, in terms of the volume of plastic cards, the Khalq Bank has issued 5 928 654 plastic cards, and in terms of payment by terminals, Contact Bank is at the top. This shows that the banks are currently developing rapidly.

We can also see a significant increase in the number of terminals installed and terminal

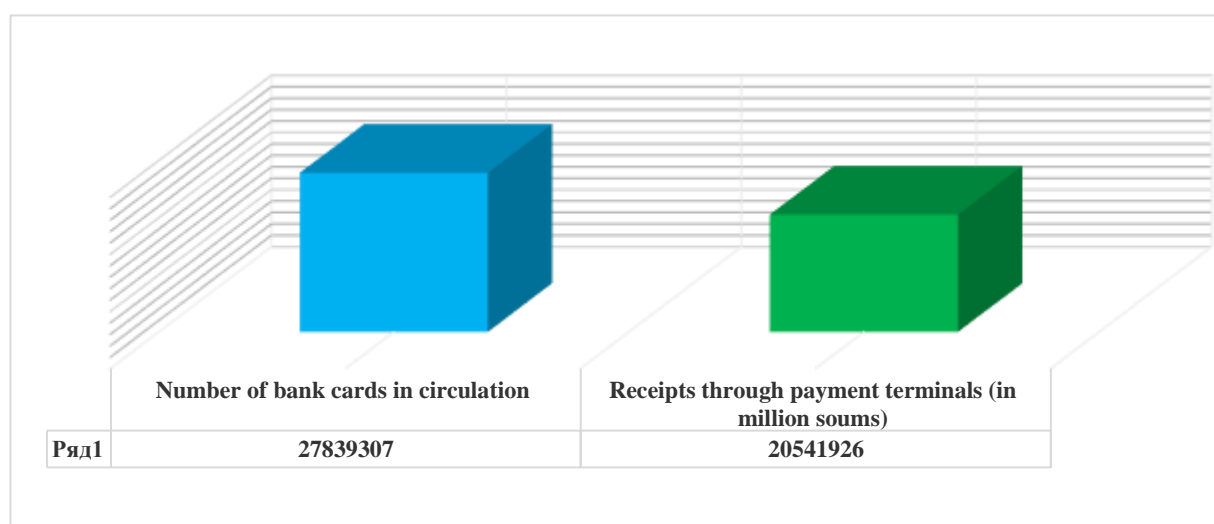
services compared to the last three years. This will create favorable conditions for the population and entrepreneurs using banking and financial services, as well as facilitate faster cash flow (Table 1)

Table 1

**Information on current terminals and installed terminals of 10 largest banks operating in the Republic of Uzbekistan as of March 1, 2022 [14]**

No	Commercial banks	Integrated payment terminals	Number of terminals and infokiosks installed
1.	"National Bank"	40 346	655
2.	"Own industrial construction" bank	33 472	470
3.	"Agrobank"	43 392	1 971
4.	"Microcreditbank"	23 402	252
5.	"Khalq banks"	51 462	1 373
6.	"Partnerbank"	31 742	785
7.	"Asaka bank"	15 382	257
8.	"Silk Road Bank"	24 047	537
9.	"Contact bank"	12 897	275
10	"Ipoteka-bank"	42 094	634

As shown in the table above, the Khalq Bank has issued 51 462 terminals in terms of the number of terminals, while Agrobank has the highest number terminals with 1 971.



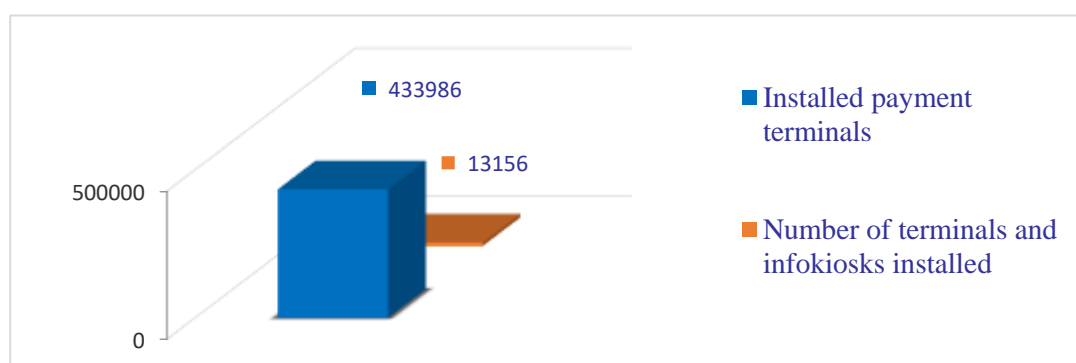
**Figure 2. The total rate of payments by plastic cards and terminals of 33 banks operating in the Republic of Uzbekistan as of March 1, 2022 [15]**

In the above data, we can see the total performance of 33 commercial banks in terms of e-services, and we can see that these services have grown significantly over the past three years. Increasing the range of innovative

services in the banking and financial system, creating conditions for the population to use banking services - this is recognized as one of the priorities of banking. These analyzes show that operational work is being carried out in

the banking and financial system of our country. This, in turn, increases the demand for

banking services.



**Figure 3. The number of terminals in 33 commercial banks of the Republic of Uzbekistan and the total number of payments through the terminal, as of March 1, 2022 [16]**

**Table 2**  
**The number of users of remote banking services as of March 1, 2022 [17]**

No	Bank	Legal entities and individual entrepreneurs	Individuals	The total
1	"National Bank"	79 136	1 349 188	1 428 324
2	"Own industrial construction" bank	50 005	2 873 354	2 923 359
3	"Agrobank"	171 502	3 225 930	3 397 432
4	"Ipoteka-bank"	134 955	1 893 903	2 028 858
5	"Microcreditbank"	52 146	740 270	792 416
6	"Khalq banks"	67 190	3 074 547	3 141 737
7	"Partnerbank"	97 927	1 280 260	1 378 187
8	"Trastbank"	33 915	169 243	203 158
9	"Capitalbank"	35 066	353 271	388 337
10	Invest Finance bank	24 457	366 323	390 780

Based on the analysis of trends in the field of digital technologies, we can draw the following conclusions on improving the system of cashless payments through banking digital technologies.

## 5. Conclusions and suggestions.

1. Innovation is currently not just one of the phenomena that determine economic growth, development and structural changes. Innovations have become a characteristic feature and essence of modern development in all spheres of the economy, including banking.

2. For large-scale innovations, a fundamentally new level of interaction between big business, the state, science and technology entrepreneurs is needed. In fact, large companies and basic research are the sources of most global innovation.

3. The transition to digital technologies is rapidly developing not only for transactional operations, but also for the implementation of banking products, as well as their further support. Improving banking innovations in the banking system directly depends on the development of new banking products. Under the influence of many factors, the evolution of banking products and services is taking place.

4. Developed countries have many years of experience in introducing, developing and improving the system of cashless payments based on innovation and digital technology. In addition, an analysis of the best practices of developed countries shows that the system of cashless payments has been improved under the influence of innovative ideas and technologies.

5. In today's world, leading banks strive to endlessly improve the quality of their banking services while reducing the cost of their maintenance. The range of banking and financial services is expanding every year, new types of products and services are constantly appearing on the market. This factor serves to intensify competition between banks for each client. Therefore, each bank builds its relationship with the client, based on the principles of partnership.

6. In the context of the COVID-19 pandemic of economic instability, it is very important for banks to find a way to retain existing customers and attract new ones. In the conditions of fierce competition, the role of the process of introducing innovations to improve cashless payments is increasing.

#### Literatura/Reference:

1. Decree of the President of the Republic of Uzbekistan No. UP-4947 dated February 7, 2017 "Action strategy in five priority areas of the Republic of Uzbekistan in 2017-2021".
2. O.I. Lavrushin, N.I. Valentseva [i dr.]; Banking: ed. O.I. Lavrushin. - 12th ed., revised. — M.: KNORUS, 2016. — 752 p.
3. Banks and banking / Ed. Doctor of Economics, prof. I.T. Balabanov. - St. Petersburg: Peter, 2001. - p.172.
4. Semikova P. Banking innovations and a new banking product // Banking technologies. - 2009. - No. 11. -p.12.
5. Sagatovsky, V.N. Fundamentals of systematization of general categories / V.N.Sagatovsky. - Tomsk: Tomsk Publishing House. un-ta, 1973. S. 211.
6. Chirkov, A.V. Problems of implementation of the legislation on the national payment system in terms of the responsibility of banks in settlement legal relations / A. V. Chirkov // Banking law. - 2013. - No. 5. - P.65.
7. Shcherbakov S. S. Banking innovations in the digital economy and assessment of the innovative potential of Russian banks // Belgorod: OOO Agency for Advanced Scientific Research (APNI), 2020. P. 30-34. URL: <https://apni.ru/article/1089-bankovskie-innovatsii-v-tsifrovoj-ekonomike>
8. Biometrics for payments. New science: transaction security. UL New Science [newscience.ul.com/NS](https://newscience.ul.com/NS) TS Article 2014. p. 7.
9. Nathaniel Karp Biometrics: The Future of Mobile Payments. U.S. Economic Watch. July 20, 2015, p. one.
10. Banks-invisible-banks of the future. <https://home.kpmg/ua/ru/home/media/press-releases/2019/09/banki-nevidimki-bankibudushshego.html>.
11. Gunajit Sarma Internet Banking: Risk Analysis and Applicability of Biometric Technology for Authentication. International Journal of Pure and Applied Sciences and Technology, 2010, no. 1, pp. 67–78.
12. Information from the official site [www.cbu.uz](http://www.cbu.uz).

13. The drawing was created by the author on the basis of data from the site [www.cbu.uz](http://www.cbu.uz).
14. The drawing was created by the author on the basis of data from the site [www.cbu.uz](http://www.cbu.uz).
15. The drawing was created by the author on the basis of data from the site [www.cbu.uz](http://www.cbu.uz).
16. The drawing was created by the author on the basis of data from the site [www.cbu.uz](http://www.cbu.uz).
17. The drawing was created by the author on the basis of data from the site [www.cbu.uz](http://www.cbu.uz).