

INNOVATIVE APPROACHES OF REMOTE BANKING TYPES SERVICES IN THE PROCESS OF TRANSFORMATION OF BANKS TO E-COMMERCE

Mamadiyarov Zokir Toshtemirovich,
TSUE, Head of department of “Banking and Investments”, Ph.D, Associate Prof.
E-mail: zokir.mamadiyarov@gmail.com
orcid.org/0000-0002-1508-488X
Tel: +99890370-33-98

ABSTRACT. The article examines the future development trends of remote banking services in the development of e-commerce on the basis of foreign experience. The author's approaches to assessing the effectiveness of banking services, the development of remote banking services and their solutions.

Keywords: banking technology, remote banking services, commercial banks, customer, banking system, payment system, mobile payment, ATM.

INTRODUCTION

In the development of e-commerce, a high attention was paid to the technological development of banks, expanding the range of services, providing fast customer service. This is evidenced by the fact that banks provide a wide range of remote banking services to customers. It should be also noted that in Uzbekistan, as a result of further expansion of banks in this area and the creation of additional conveniences for customers, there is an increase in the number of users of remote banking services.

In particular, the deepening of economic reforms in Uzbekistan, the need for further introduction of modern information and communication technologies in the relationship between the bank and the customer in the context of rapid flow of information, the need to further expand the range of remote banking services based on digital technologies. Therefore, the President of the Republic of Uzbekistan No. signed PD-4947 of February 7, 2017 “The Strategy for further development of the Republic of Uzbekistan”, PD-5635 of January 17, 2019, which includes tasks aimed for the development of remote banking services in commercial banks, Presidential Decree “On the State Program for the implementation of the Action Strategy on the five priority areas of development of the Republic of Uzbekistan in 2017-2021 the “Year of Active Investment and Social Development” and Resolution No. PD-3620 of March 23, 2018 “On additional measures to increase the popularity of banking services”.

As a result, the efficiency and quality of remote banking services will be increased, the scope of customer service of banks and the ability to provide services without territorial boundaries. It leads banks to save on their spending, profit and efficiency. This requires the development of modern financial technologies in the banking system of Uzbekistan, especially in the context of technologically developing economies around the world. In order to do this, first of all, it is necessary to create a regulatory framework in this area.

METHODS

In the process of preparing the scientific article, a comparative analysis of data on remote banking services over the years on the basis of tables, data grouping, forecasting the future development of remote banking services, analysis of the advantages of remote banking services and problems in their improvement. Statistical data were used from commercial banks and the Central Bank of the Republic of Uzbekistan.

THE MAIN PART

Today, e-commerce has radically changed the way businesses and banks do business. Some research shows that in 2019, e-commerce accounted for almost 14% of retail transactions [1]. The recent rapid development of digital technologies has been characterized by the information revolution and the acceleration of the globalization of the economy. In particular, in our country, the concept of “digital banking” is reflected in the regulations. That is, “digital banking” means a bank or its subsidiary that provides banking services remotely using innovative banking technologies (without providing cash services). Remote provision of banking services by digital banks is carried out in accordance with the internal regulations of the bank, considering the requirements of the legislation [2].

In particular, the Address of the President of the Republic of Uzbekistan to the Oliy Majlis on January 24, 2020 emphasizes the need for radical reform of the banking system, transformation of banks, introduction of modern banking practices, management and new services [3].

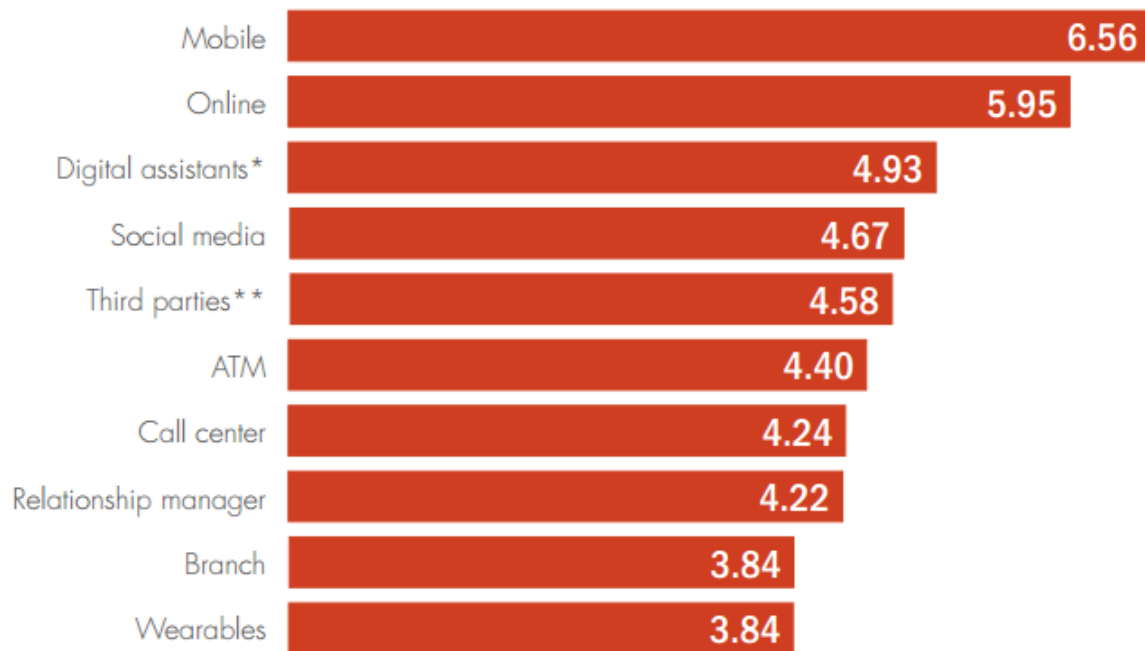
Resolution of the President of the Republic of Uzbekistan dated March 23, 2018 No PD-3620 “On additional measures to increase the popularity of banking services” and the promotion and development of non-direct and mobile technologies, primarily in the areas of social services, transport, trade, catering, especially in the regions. The issues of introduction are given in [4].

In order to develop remote banking services, first of all, it is necessary to identify problems in the development of these services in our country and identify ways to overcome them. Further development of the banking system requires innovations in the field of digital banking, automatic data analysis and improvement of remote service systems.

“Whether organizations decide to explore advanced technologies, open banking practices, or the capabilities of a new payment system, all future banking solutions will be firmly based on accurate information and advanced analysis. The consumer expects you to know them, understand them, and pay attention to them ... and better you can use data and excellent analysis to create an experience” said Jim Marous, head of Digital Banking Report.

Remote banking can expand the range of services in several areas. According to the Efma-Infosys Finacle Digital Banking Report Survey 2018, by 2022, the most important communication channels for the implementation of banking services will be mobile banking, online services, digital assistants, social media, FinTechs and applications, ATMs, Call-center, communication managers, bank branches and carriers. The most popular of these is mobile banking, which is expected to reach 6.56 billion users by 2022. The number of users of online services is 5.95 billion. The number of users of digital assistants, i.e bots, voice devices, etc., is 4.93 billion. forming the body, they formed the leading trinity. Even during this period, the number of users of banking services through bank branches amounted to 3.84 billion. The

establishment of the body indicates the growing importance of new payment systems and new payment technologies (Figure 1).



* Bots, audio devices, etc.

** Channels or applications from third-party manufacturers.

Figure 1. Forecast of communication channels for banking services by 2022[6]

Here are the most important applications in the development of e-commerce in the banking system:

1. Electronic billing

E-billing is one of the biggest benefits that e-commerce has brought to both consumers and companies. Banks now offer the ability to automatically pay your bills through their website or through their application. Companies can send electronic invoices to their customers and receive payments automatically, instead of waiting and cashing out a physical check. The relationship between the ability of banks to send and receive payments in digital form and the growth of e-commerce as the main factor in sales and income in many companies is not a coincidence; it would be almost impossible to effectively have one without the other.

2. ID Confirmation

Banks can and should take identification very seriously. The work of a reliable financial institution is to ensure that the person who spends the money must have access to the funds in the account. It got harder as more technology advanced. But technology has also helped innovate in the ability to verify identity and other credentials so that customers can more securely conduct their e-commerce transactions without the possibility of data theft or leak. This identification process is not just protection for the customer, but also for the retailer or seller. All stakeholders, both banks and e-commerce retailers, are responsible for adhering to customer identity verification and information security standards.

3. Mobile payments

Mobile commerce, or mobile commerce, is an important part of e-commerce. Mobile

focused commerce has become a new normal for many people who are now able to buy everything from a dog sitter to a plane ticket from their phone. However, the smartphone has become another important e-commerce tool - a digital wallet. Customers can now pay for many of their personal purchases using a smartphone application, whether it be a credit card application supported by a bank or an application such as Apple Pay, which combines payment options for various sources of customer financing in one place for convenient payment. Although mobile payments are more often used to describe personal digital transactions, they are definitely born out of the use of e-commerce in banking operations.

4. Digital banking

E-commerce has enabled applications to make payments and transactions, paving the way for re-education at physical banks. While many large banks with a presence in e-commerce are still personally present in certain communities, many banks were opened as online-only transactions, such as Ally. Mortgage brokers have also joined the only trend in online finance. The fact that users interact with their banking operations, mainly through the application, is consistent with how consumers interact with many other parts of their daily lives, from paying for coffee to ordering products, appointments doctor's prescriptions and more. Banks operating only online can also offer better banking services, often offering customers a better interest rate on savings accounts or loans because of money that the bank itself could save without paying overhead expenses such as rent, etc.

5. B2B innovation

The e-commerce experience has changed the way B2B buyers anticipate buying and selling experiences to go. This has largely been due to the implication of e-commerce in banking in B2C spheres. E-commerce has enabled banks to offer faster account opening, digital invoice payment, and other conveniences that B2C buyers have long enjoyed. B2B buyers have experienced these features in their non-business life and are making demands in the marketplace that their B2B experience is more consistent and matches the rest of modern life. E-commerce and banking, then, have a responsibility to continue to elevate the customer experience.

6. International trade

E-commerce has made it easier for people to bank internationally or pay for goods and services from another country without having to work around banking regulations or exchange rates. Third-party vendors like PayPal work as a go-between for e-commerce retailers and financial organizations and banks.

E-commerce has created many opportunities for banking, and e-commerce applications in the banking sector continue to grow, and retailers and financial institutions are working to create better customer service using technologies that help businesses in both industries increase revenue and strengthen their brand [7] .

T. Ramayah, an associate professor at the University of Sains School of Management in Malaysia, considered the perception of the usefulness of remote banking services as an external factor and pointed out that it is only effective [8]. Muhammad Alafeef, an associate professor at the University of Jerash in Jordan, believes that remote banking services are useful - a degree of confidence that an individual will improve his performance in order to use a particular system [9]. Xiu Feng Lin, a professor at Taiwan National Oceanic University, said that just as mobile is useful in daily life, the use of mobile banking also allows consumers to

make banking transactions anywhere and anytime. The direct use of such services by consumers in everyday and business life has a positive effect on the perception of the usefulness of remote banking services [10].

Nevertheless, there are practical and theoretical problems that need to be addressed in the further development of remote banking services:

First, the types of remote banking services currently available not enough innovations are introduced in the existing and existing ones, i.e. through remote banking services, bank customers are still unable to perform all banking services without a full visit to the bank.

Second, the sharp increase in remote banking services also increases the threat of economic risks. That is, the legitimacy of the services provided to customers, the degree to which they legalize remittances, and so on.

Third, the low level of access to bank customers and their new information technologies and low economic literacy of the population pose certain problems in the development of remote banking services.

Fourth, the creation of an automated system of cashless payments, as a result, requires the search for new modern forms and means that simplify and further accelerate the system of cash circulation.

Fifth, one of the main problems in the development of remote banking services in Uzbekistan is the confidence of the population in the banking system [11].

There is no doubt that the steady increase in the number of customers of commercial banks will serve as a basis for increasing the level of service to them. Therefore, the rapid development of the data transmission network, which consists of a new segment of information and communication technologies, and the rapid penetration of the Internet, which is the fastest source of information, create new opportunities for information exchange.

In general, the success of the ongoing reforms in the Republic of Uzbekistan, in turn, necessitates a radical change in relations in the field of automation of commercial banks.

Their positive solution will serve as a basis for the implementation of practical work in the development of the payment system, e-commerce and remote banking services in Uzbekistan, the national payment system to conduct equal relations with developed countries.

The widespread introduction of innovative information technologies in the banking system has allowed Uzbekistan to form a national payment system in the short term. This system of real-time settlements between business entities ensures the stability of the financial market of Uzbekistan. In addition, it has a significant impact on the effective conduct of monetary policy of the country, the timely implementation of national and international payments, cash flow management.

In order to further expand remote banking services in Uzbekistan and create additional convenience for customers, banks in Uzbekistan are not only opening a number of branches and mini-banks in the regions and districts, but also low-cost remote banking (both for customers and banks).

The experience of developed countries also shows the need to improve services. Commercial banks are developing the infrastructure of information systems by boldly applying the achievements of information technology to banking activities on the basis of strong, reliable and high-performance platforms, creating excellent programs based on them.

The introduction of new banking products and services using modern information technologies creates conditions for the expansion of the banking services market in Uzbekistan. As the market economy develops in Uzbekistan, commercial banks also need to diversify their activities by increasing the range of remote banking services they provide to customers.

Remote banking services cannot be imagined without terminals, ATMs and kiosks. These simple-to-use devices today serve as a kind of mini-bank-office, ending the traditional interaction between the customer and the cashier. At present, it is possible not only to withdraw cash from these external means, but also to make various payments for goods and services. It should be noted that customers can use any bank terminal, ATM and kiosk 7/24, 7 days in a week.

Table 1
Ranking of commercial banks by number of ATMs [12]

№	Bank name	01.01.2020		01.01.2019		Change		
		Q-ty	Share (%)	Q-ty	Share (%)	Growth (%) (+/-)	Share (+/-)	Place (+/-)
1	JSCB «Kapitalbank»	2 669	29,0%	2 650	38,6%	0,7%	-9,6%	→ 0
2	JSCB «Agrobank»	1 025	11,1%	617	9,0%	66,1%	2,1%	→ 0
3	JSCB with FC «Hamkorbank»	797	8,7%	605	8,8%	31,7%	-0,2%	→ 0
4	JSC People's Bank	578	6,3%	108	1,6%	435,2%	4,7%	↑ 11
5	National Bank for FEA	503	5,5%	439	6,4%	14,6%	-0,9%	→ 0
6	JSCMB «Ipoteka-bank»	450	4,9%	181	2,6%	148,6%	2,3%	↑ 3
7	JSCB «Invest Finance Bank»	425	4,6%	521	7,6%	-18,4%	-3,0%	↓ -3
8	JSCB «Qishloq qurilish bank»	350	3,8%	238	3,5%	47,1%	0,3%	→ 0
9	JSCB «Uzpromstroybank»	340	3,7%	146	2,1%	132,9%	1,6%	↑ 2
10	JSICB «Ipak Yuli Bank»	337	3,7%	243	3,5%	38,7%	0,1%	↓ -3
11	«Turon Bank» JSCB	332	3,6%	276	4,0%	20,3%	-0,4%	↓ -5
12	JSCB «Asaka»	232	2,5%	167	2,4%	38,9%	0,1%	↓ -2
13	JSCB «Asia Alliance Bank»	231	2,5%	136	2,0%	69,9%	0,5%	↓ -1
14	JSC «Aloqabank»	210	2,3%	126	1,8%	66,7%	0,4%	→ 0
15	PCJSCB «Orient Finance»	183	2,0%	67	1,0%	173,1%	1,0%	↑ 2
16	PJSB «Trustbank»	131	1,4%	131	1,9%	0,0%	-0,5%	↓ -3
17	JSCB with FC «Savdogarbank»	128	1,4%	95	1,4%	34,7%	0,0%	↓ -1
18	JSC Mikrokreditbank	89	1,0%	34	0,5%	161,8%	0,5%	→ 0
19	PJSCB «Universalbank»	71	0,8%	23	0,3%	208,7%	0,4%	→ 0
20	«Poytaxt Bank»	37	0,4%			0,0%		
21	PJSCB «Davriy-bank»	21	0,2%	21	0,3%	0,0%	-0,1%	↓ -1
22	PJSCB «Ravnaq-bank»	20	0,2%	14	0,2%	42,9%	0,0%	↓ -1
23	PCJSCB «Hi-Tech Bank»	9	0,1%	2	0,0%	350,0%	0,1%	↑ 1
24	JSC Turon bank	9	0,1%	9	0,1%	0,0%	0,0%	↓ -1
25	JSC «KDB Bank Uzbekistan»	8	0,1%	8	0,1%	0,0%	0,0%	↓ -2
26	«Uzagroexportbank» JSC	7	0,1%	1	0	600,0%	0	↓ -1
27	JSC «Ziraat Bank Uzbekistan»	5	0,1%	0	0	0,0%	0	→ 0
28	PJSC «Madad Invest Bank»	5	0,1%	1	0,0%	400,0%	0,0%	↓ -2
29	JSCB «Tenge Bank»	1	0,0%			0,0%		
30	Bank Sederat Tashkent	0	0,0%	0	0	0,0%	0	↓ -3
Total in the banking system:		9203	100,0%	6859	100,0%	34,2%		

According to Table 1, the number of installed ATMs is 2669, not in have large number of branches JSC People's Bank, JSCB "Agrobank" and the National Bank for FEA, but in the

JSCB “Kapitalbank”, which occupies the first place in the ranking. However, the banks with the highest growth in 2019 compared to 2018 were JSCB “Uzagroexportbank”, 600% for a year, JSC People's Bank by 435.2%, JSCB “Madad Invest Bank” by 400.0%, PCJSCB “Hi-Tech Bank” by 350.0% and PJSCB “Universalbank” by 208.7% the number of ATMs increased. The leading commercial banks in terms of the number of installed ATMs are after JSCB “Kapitalbank”, JSCB “Agrobank”, JSCB with FC “Hamkorbank”, JSC People’s Bank and National Bank for FEA.

The need for innovative forms of cashless payments is constantly growing. Entrepreneurs and the population are more eager to save money, spend less time and effort, to conduct financial transactions using high information technology, to obtain information. Given this need, commercial banks are taking measures to expand the range of remote banking services, while effectively using the capabilities of the global Internet. It should be noted that this direction has become one of the priorities of the world banking system and the national banking system.

The digital transformation of banking institutions opens up many new opportunities for customers, individuals, small companies and large corporations, as well as the banks themselves. Smart strategy and continuous improvement can lead to several advantages:

- Convenience

Personal and company bank accounts are available at any device, the only things you need are an Internet connection and a few taps on the screen. This brings more customer satisfaction as they are able to constantly keep on track of their account balance and manage the information on their personal profile (add new mailing address, e-mails, telephone numbers, etc.). In addition to this, there is no need to go to the bank to get checks as they can be instantly sent to your email address.

- 24/7 Service

Online banking services are available 24/7 all year round, even at the weekends. There is no need to stay in lines and wait for the bank to open in order to conduct certain operations. It’s a huge advantage that comes with digital solutions.

- Time-Saving

Another advantage, you save a lot of time as you have access to the account from home. It is extremely convenient as previously you could waste an hour or two at the bank to make simple operations, and now it is done seamlessly from home or any other place where there is an Internet connection.

- Automated Transfers

Direct banks can provide unlimited automated transfers (accept payroll deposits or provide automatic bill payment) with no additional fees for the services even to outside financial institutions.

- Easier Management

Online accounts can be easily managed, although they require more information than traditional banks. Customers can add information themselves or directly contact online assistants to provide support on the current issue. What is more, payee information is retained within the system, there is no need to re-enter data for the following payments, etc.

Although the benefits are impressive, and they greatly facilitate the work, there are some disadvantages that follow the process. Here are the main ones:

- Safety problems

Cybersecurity is one of the most important issues that companies and institutions are trying to overcome. Even sophisticated software that protects preliminary data cannot fully protect accounts from scammers, phishing, hacker attacks, etc.

- Services

Currently, not all banks can offer a wide range of online services. However, there are some that require your presence in traditional banks.

- Transactions

Complex transactions may also require a presence in a bank office. In addition, international transactions are not possible with all digital banks.

The number of shortcomings is quite small, and it is only a matter of time before they disappear. The advantages overcome the disadvantages and significantly facilitate everyday operations, reduce costs, save customers time and allow to provide services efficiently [13].

Digital technologies are impacting every aspect of banking. Many financial institutions are pursuing digital transformation efforts to capture the benefits of these technologies, while also hoping to keep up with fintech and big tech competitors. Unfortunately, progress in these transformation efforts continues to be slow and inconsistent.

CONCLUSION

In conclusion, the expansion of the functional capabilities of remote banking systems, in turn, will allow to carry out a wide range of operations through remote identification systems. While remote identification simplifies banking services, it requires security measures to monitor banking operations. For clients, it is necessary to perform banking services without providing paper documents, to be able to use one branch of the bank as a client, other branches, and in the future, to use other banking services.

In turn, commercial banks will be able to attract new customers and increase competition in the financial market by reducing the cost of providing services through remote banking. As a result, the implementation of these activities will increase the bank's income.

In general, all the measures taken will be very important for the future operation of the banking system. At the same time, remote banking services are now emerging as the systems that will shape the future of banking.

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