



Creating Innovative Banking Products Through Digitalization of Banking Services

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ABSTRACT

The article covers issues of digitization of banking services and their possibilities as a result of modern banking technologies, relations of foreign and local economists about innovative products, analysis of retail banking practices in Uzbekistan and opportunities of important financial technologies in the world. In addition, the author's conclusions and suggestions on creating innovative banking products and improving them through the digitization of banking services have been developed.

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The introduction and use of modern technologies in banking activities will serve to increase the popularity of banking services. By introducing new services, commercial banks prepare the ground for ensuring their financial stability and competitiveness. Because in the conditions of digital transformation of banks, it is necessary to make it possible to provide services provided by the bank to customers remotely.

In this regard, the Decree of the President of the Republic of Uzbekistan dated February 7, 2017 No. PF-4947 "On the strategy of actions for the further development of the Republic of Uzbekistan" can be

cited. In this decree, special attention is paid to 5 priority areas of development of our country [1]. Among them, in section 3, entitled "Priority directions of economic development and liberalization", the tasks of ensuring the stability of banks and effective use of technologies in service provision are defined in the relevant clauses of parts 3.1 and 3.2.

Also, the adoption of the decision of the President of the Republic of Uzbekistan on September 12, 2017 "On measures to further develop and increase the stability of the banking system of the Republic" is of particular importance [2].

The rapid movement of information flows in the banking practice of Uzbekistan creates the need to improve financial services. Here, in the Decree No. PF-5635 of the President of the Republic of Uzbekistan dated January 17, 2019 " On the state program for the implementation of the strategy of actions on the five priority directions of the development of the Republic of Uzbekistan in the years 2017-2021 in the "Year of active investments and social development" [3] expanding the types of services provided through bank cards, sharply increasing the number of bank cards and equipment serving them (payment terminals, infokiosks and ATMs) in the regions, calculating important performance indicators for the activities of commercial banks in order to improve the quality of banking services, integrating the national payment system with international payment systems , wide introduction of modern information and communication technologies in the relations between the bank and the client, expansion of the possibilities of using remote service systems for bank accounts of bank clients ("SMS-banking", "Internet-banking", "Mobile-banking"), including digital technologies issues of further expansion of financial services based on [4] have been researched.

According to the results of the activities of the banks in 2019 and the priorities of the central bank in the address of the President of the Republic of Uzbekistan Shavkat Mirziyoyev to the Oliy Majlis regarding the development of the banking and financial system, one of the most important directions facing the banking system is the implementation of the transformation process in the activities of banks and the introduction of new types of banking services. was defined [5].

Improving service efficiency in banking practice, establishing effective relationships with customers when introducing new types of services, increasing the competitiveness of commercial banks and using digital technologies in their effective operation, as well as using innovative approaches to providing new banking services to customers, information in the provision of banking products and services it is becoming important to carry out complex scientific and practical research on the application of communication technologies, the reduction of service costs in banks, the development of remote banking services aimed at increasing the competitiveness of commercial banks.

According to P.S.Rose, the convenience of banking service and its connection with the movement of various financial information is the main differentiating feature of banking service. Bank operations are compared to various forms of money transfer in one form or another [6].

D.C.Thuy and N.N.Quang , retail banking services and products are a set of services that aggregate various services and services to individuals directly or indirectly through banks [7].

Based on the research of the economist Z.T.Mamadiyarov, remote banking services are understood to mean that the services offered by banks to their customers are performed remotely using the capabilities of modern banking technologies, rather than face-to-face with their customers in the bank. According to the researcher, the development of remote banking services in the banking system is primarily due to changes in people's lives , the introduction of new information technologies , secondly, it is related to the automation of bank operations [8].

Table 1. Development evolution of banking services

Steps	Years	The main direction of researchers	Authors
Stage 1. Birth stage	1960-1970 years	Activities of banks in financial services	G. Bryan, H.Douglas, S.Derey, D.Revell
Stage 2. Continuity stage	1980s –	To study the functioning of the credit and financial systems of some countries, the possibility of the impact of globalization and the placement of bank capital in the market of banking services, as well as the characteristics of the formation of the quality of banking services in the globalization of banking services.	O.Donnell, E.Ballarín, V.Malpas, F.Derek
Stage 3. Modern stage	Until 1990-2000	Rethinking the strategy of integrated banking services to customers and moving to the strategy of "financial supermarket" and "financial boutique" and the transition from highly specialized banks to universal ones	K.Fabri, D.Djentele, D.Sinki, P.Rose
Step 4. The stage of transition to a new era	2000 to 2010	The concentration of financial management aimed at assessing the competitiveness of banks' marketing activities and banking services, developing theoretical foundations and practical recommendations on quality issues in the service sector, determining the bank's competitive advantages and their implementation.	B. Maroua, S. Mathur, H. Schaefer, E. Shtikel, B.Sh. Hefferman, Dj. K. Van Horn, DJ Key, E. DJ Dollan, F. Kotler, M. Porter, S. Davis
Step 5. A phase based on digitization, automation and innovation	From 2010 to the present	Retail banking services development, customer satisfaction with services, effective customer-oriented marketing, digitalization of banking services, effective use of artificial intelligence, blockchain and other modern financial technologies in the banking system	D.Thuy, N.Quang, T. Lobacheva, VMNgo, D. Pavelková, K. Storbacka, S. Nenonen

And T.M.Koraliyev distributes banking operations, deposit-loan, account keeping and bookkeeping, consulting and mediation, factoring, leasing operations [9]. According to F.I. Mirzayev, "banking services are a traditional branch of banking business aimed at increasing the income of banks, as well as meeting the needs of private and corporate banks, as well as the economy" [10].

Introduction of remote management methods and service provision of commercial banks is one of the main trends in world practice. Accordingly, M.Muminova developed an innovative method of asset securitization, automation, "New Privat" and innovative methods of remote management by directing them to asset operations. The proposed "New Privat" method will expand the possibilities of

introducing modern services into the banking system. The introduction of new services will create opportunities to attract customers and increase the bank's income. This system is introduced mainly to attract large customers. It is based on research that banks act as financial facilitators in managing the funds of large clients and are able to profit from it [11].

Table 1. Some information on retail practice in the banking system of Uzbekistan [12]

Years	Balance of loans to individuals, (billion soums)	Balance of deposits attracted from individuals (billion soums)	The number of individuals using the remote banking service (in thousands)	Number of bank cards in circulation (thousands)	Number of info kiosks and ATMs (in units)	Number of payment terminals (in units)
2020 1st quarter	43487	22242	9685	21105	10438	417192
2020 2nd quarter	47390	24758	11224	23283	11104	430534
2020 3rd quarter	51465	25306	11579	24077	11456	437231
2020 4th quarter	54888	27404	13749	25776	11800	438410
2021 1st quarter	56758	27821	14997	22607	12294	440132
2021 2nd quarter	61816	30748	16542	23725	12298	438909
2021 3rd quarter	65496	32929	17777	25208	12710	434971
2021 4th quarter	69496	37306	19266	27106	12940	433384
2022 1st quarter	70982	44332	21020	28333	13381	432933
2022 2nd quarter	77610	54755	23339	29942	16830	434395
2022 3rd quarter	87034	30082	26480	31821	19318	432269
2022 4th quarter	100949	68749	28844	34196	20379	434018
2020 Change compared to Q1, in percent	+132%	+209%	+198%	+62%	+95%	+04%

According to Table 1, the number of bank plastic cards as of the 1st quarter of 2020 is 21 million. If it was 105 thousand, by the 4th quarter of 2022 it will be 34 million. reached 196 thousand. During this period, it increased by 62 percent. The number of payment terminals increased by 4% and made 434,018 units. The number of infokiosks and ATMs increased significantly by 95 percent and amounted to 20,379. But the number of individuals using remote banking services is growing rapidly. As of the 1st quarter of 2020, it was 9,685,000 units, and by the 4th quarter of 2022, it reached 28,844,000 units.

The balance of deposits attracted by commercial banks from individuals is 22242 billion as of the 1st quarter of 2020. amounted to 68,749 billion soums by the 4th quarter of 2022. amounted to soum. This indicates an increase of 209 percent during this period. The balance of loans to individuals increased by 132 percent during this period and reached 100,949 billion as of the 4th quarter of 2022. amounted to soum.

From the data of table 2 below, we can see the volume of loans allocated by commercial banks to the population in national currency.

Table 2. Information on loans granted by commercial banks to residents in national currency [12]

years	total	mortgage loan		car loan		microloan		microcredit		education, consumption, overdraft, etc	
		amount	share	amount	share	amount	share	amount	share	amount	share
2020	28466.6	9121.9	32.0%	5586.8	19.6%	5836.2	20.5%	3672.7	12.9%	4248.9	14.9%
2021	40520.9	9794.2	24.2%	8497.6	21.0%	9950.8	24.6%	6865.6	16.9%	5412.7	13.4%
2022	65288.5	14371.2	22.0%	19599.7	30.0%	16696.1	25.6%	9160.6	14.0%	5460.8	8.4%
The change is in percent	229%	158%	-	351%	-	286%	-	249%	-	129%	-

In recent years, the share of auto loans among retail loans has been increasing. In 2022, the share of auto loans in total loans to individuals exceeded 30%, and during these three years, they achieved an increase of 351%. The next place was occupied by microcredit, which accounted for 25.6% of total loans in 2022 and achieved a growth of 286% during these three years. Microloans provided on a non-target basis reduce the demand for consumer credit and overdraft loans. Because microloan allocation is easy, fast and online, although the percentage is a bit high, it is becoming a convenient resource for the population. This can be seen from the decreasing volume of loans for education, consumption, overdraft and others.

From the data in Table 3, it can be said that the US is the country that allocates the most investments to the financial technology industry, with 47% of the investments allocated for financial technologies worldwide. In terms of the number of users of these financial technologies, the USA is the leader with 329 million. the user is using the possibilities of these technologies.

Table 3. Top-10 ranking of financial technologies [14]

State	Place	Type of financial technology used	Number of users
USA	1	Payments, B2B fintech, Security	329 mln.
Great Britain	2	ch allenger banks, personal finance & wealth, lending, blockcha in	67.5 mln.
Singapore	3	wealth management, digital banking, SME	5.8 mln.
Lithuania	4	Payments, lending, banking	2.8 mln.
Switzerland	5	Cryptocurrency & Blockchain, wealth management, crowdfunding	8.6 mln.
Netherlands	6	Digital payments, alternative lending, investment	17.1 mln.
Sweden	7	Digital payments, SME, Neobanks	10 mln.
Australia	8	Digital payments, personal finance alternative lending	25.3 mln.

Canada	9	Crypto and blockchain, lending, insurance	37.5 million
Estonia	10	Digital payments, personal finance, alternative lending	1.3 mln.

The following factors influence the development of banking services:

1. Legal basis;
2. State policy towards banks;
3. The state of social and financial literacy of the population;
4. Location of the bank;
5. Definition of the bank;
6. The set of services provided by the bank;
7. Etiquette and culture of customer service;
8. Professional-qualification level of employees [14].

Modification of existing remote banking services is a change in the technological parameters of traditional services, which leads to a general expansion of the list of various regions of the offered remote banking services.

Providing completely new services that are radically different from existing ones. The development and implementation of these services is related to increased competition between banks and non-bank credit and financial organizations, the development of new segments of financial markets, as well as the development of information technologies and the emergence of new technological opportunities.

The development of additional services is also important. Often, this includes new remote banking systems, modern methods of communication, the development of advisory services for the use of a follow-up team, and the provision of comprehensive support in case of problematic situations.

In conclusion, it can be said that today the introduction of innovative technologies into the market of banking services increases competition. Taking this into account, it is necessary to set the main direction of providing services on competitive terms in the marketing plan of banks. Interbank competition in the financial market of the republic is characterized by the exact similarity of banking services provided during the transition of the economy, and sets strict requirements for the quality of customer service. In this environment, banks are faced with the task of taking adequate measures to retain and expand customers.

Also, when choosing banks by customers, the main factors are taken into account: the variety of banking services, the cost of services (tariffs, vehicle fees) and interest rates for credit resources. In order to reduce the risk of a sudden decrease in income due to changes in the amount of commissions and interest rates for the provided services, banks should constantly analyze the situation in the financial market and take measures to adequately change the tariff rates of the provided services. However, the main activity of banks in this direction is to increase the level of diversification of banking services and the quality of banking services, incorporating high technology. This activity strengthens the stability of commercial banks in the future, protects them from bankruptcy and serves as a basis for creating a model suitable for their market relations.

Based on the results of the research conducted on this article, the following suggestions can be made:

- it is possible to improve the variety of banking services in three directions: modification of existing services, provision of completely new services that are fundamentally different from existing ones, development of additional services;
- innovations in the banking sector are reflected in the development of remote banking services, the widespread use of card technologies in the use of the latest software, as a new technological support for working with clients and banking products;
- Internet speed should be increased to high speed so that customers can work quickly in the programs intended for providing remote banking services in the commercial banks of our republic;
- to reduce costs in all branches of commercial banks, it is necessary to increase self-service 24/7 smart offices;
- it is necessary to develop remote banking services and create new normative legal documents taking into account specific conditions regarding them and improve the existing ones.
- In the banking system of Uzbekistan, the wide use of mobile phone capabilities plays an important role in the landscape of banking technologies.

Conclusion, the implementation of the above proposals will improve the provision of remote banking services in commercial banks and increase the number of customers.

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