World Economics & Finance Bulletin (WEFB)
Available Online at: https://www.scholarexpress.net
Vol. 14, September 2022
ISSN: 2749-3628,

IMPROVING THE USE OF MODERN INFORMATION TECHNOLOGIES IN COMMERCIAL BANKS

Axmedova Dilafruz Elshodovna
Senior lecturer of Tashkent Institute of Finance

Article history:

Received: 17th July 2022
Accepted: 17th August 2022
Published: 30th September 2022

Abstract:

Digital banking technologies and their content and elements are widely covered in the article. The scientific views of foreign and local scientists on banking technologies have been deeply studied, analyzed and author's opinions have been expressed. In addition, scientifically based proposals have been developed for the effective use of banking technologies and further improvement of their efficiency

Keywords: Banking technologies, information technologies, mobile banking, credit, risk, computer, card, NSDT, USSD, NFC.

INTRODUCTION

During the consistent reform of the financial sector, a number of measures were implemented, and as a result, the necessary legal conditions were created for conducting advanced banking business and strengthening the competitive environment in this sector.

In particular, the Laws of the Republic of Uzbekistan "On the Central Bank of the Republic of Uzbekistan", "On Banks and Banking Activities", which conform to international standards and create an attractive legal environment for foreign investments in the financial sector. Updated laws "On regulation of currency" and "On payments and payment systems" were adopted.

At the same time, the analysis of the current situation in the banking sector reveals a number of systemic problems that prevent the development of the banking sector in accordance with economic reforms and the needs of society, such as the high level of state intervention in the banking sector, the insufficient quality of management and risk management in state-owned banks, the low level of financial intermediation in the economy. indicating its existence[1].

Today's technological advances have reached remote control and artificial intelligence technologies[2].

There is almost no field that has not been affected by such advances in technological development. In particular, technologies such as information, computer, communication, medicine, transport, social spheres (education, medicine, culture, art, etc.) and economy (agriculture, industry, construction, service, transport and communications), as well as in the banking sector, are widely used.

LITERATURE ANALYSIS

IT enables rapid redesign of operations by developing banks and their relationships. Instead, the internal and external business activities of the banking sector are further developing with the development of IT, and the banking system can be cited as the most affected area.[3].

In other words, the IT sector is developing and making a significant contribution to ensuring the stability of banks in the era of increasing global competition. [4]. In general, elements such as IT technologies, their use in the banking sector, software and communication tools constitute "banking technologies".

In the economic literature and scientific studies, different views and explanations are given to "banking technologies". For example: M.V. According to

[1] Decree of the President of the Republic of Uzbekistan on the strategy of reforming the banking system of the Republic of Uzbekistan for 2020-2025, No. PF-5992 dated 12.05.2020 ttps://lex.uz/uz/docs/4811025?ONDATE=30.12.2021&ONDATE2=18.10.2021&action=compare

[2] Melikov Otabek Makhmadaminovich "Digital banking technologies and their specific features and ways of their effective use" Scientific electronic journal "Economy and innovative technologies". No. 4, July-August, 2021, p. 290

[3] Saeid Khajeh Dangolania. The impact of information technology in banking system (A case study in bank Keshavarzi Iran) // Procedia - social and behavioral sciences, Vol. 30, 2011. – 13-16 p.

[4] Goyal J., Singh M., Singh R., Aggarwal A. Efficiency and technology gaps in Indian banking sector: Application of meta-frontier directional distance function DEA approach // The Journal of finance and data science, Vol. 5 (2019), 156-172 p.

World Economics & Finance Bulletin (WEFB)
Available Online at: https://www.scholarexpress.net
Vol. 14, September 2022
ISSN: 2749-3628,

Dubinin[5], banking technologies are various telecommunications, information technologies, computer networks, software products, internal procedures, risk management models, etc. used in banks.

RESEARCH METHODOLOGY AND EMPIRICAL ANALYSIS

In this study, statistical tables and graphs, analytical comparison, logical and comparative analysis, grouping methods and research works of foreign and local scientists on the subject were widely used..

ANALYSIS AND RESULTS

It should be noted that the above concept of banking technology did not exist before in some sources, that is, it is said that it was founded in the period of today's scientific and technical development.

However, history and scientific studies show that banking technologies have existed since the beginning of banking, albeit in a simpler form**.**

In recent times, computers have been improving to such an extent that it gives banks the potential they could only dream of, and the bank's customers great opportunities. The changes brought by new technologies to banks will not only have a great impact on the managers, employees and customers of banks, but will also make it possible to deliver banking products and services more conveniently and efficiently than ever before, thus creating new competitive bases.[6].

Banking technologies include the creation of a customer service system for individual operations and the bank as a whole, a set of tools (including technical tools) for carrying out operations, for example, plastic cards, interactive customer service or anything else. The field of banking technologies includes automation tools and information systems, working with modern payment systems, implementation of cross-industry interactions, management technologies and security systems, telecommunications and many other things, without which a bank cannot be imagined today.

Today, it is impossible to imagine solving any problems related to banking operations and managing processes without banking technologies, because the requirements for the speed of decision-making have changed dramatically in the last few years, in the course of banking operations the computer software used has improved and the amount of data has increased.

The concept of "traditional banking" and the science of the same name are now turning into "banking technologies" and the science about them. Because today, not theoretical, but practical methods of providing banking services and technical means of their implementation are in the first place.

That is why banking technologies play an important role in the modern world of communication. They are a set of information and telecommunication technologies.

[5] Дубинин М.В. Банковские технологии: сущность, история развития и перспективы // Финансы и кредит. №34 (274), 2007. – 58 с.

[6] Sharma A., Kansal A. Technological infovations in banking sector: impact, behaviour and services // International journal of information & computation technology. Volume 4, Number 9, 2014. – 886 p.

World Economics & Finance Bulletin (WEFB)
Available Online at: https://www.scholarexpress.net
Vol. 14, September 2022
ISSN: 2749-3628,

Figure 2. Banking technologies used in world banks today

Let's briefly comment on some technologies and software packages in the banking system**:**

Automated Teller Machine (ATM). It's an automated teller machine, a technology that's used all over the world. An ATM helps customers have access to cash whenever they need it. The PIN code provided by the bank is used to identify the client. To use this service, the client must have a bank account, debit or credit card. Money can be withdrawn from anywhere in the world

Mobile Banking. Mobile banking is the newest technology used in the field of banking provided to customers. Customer must have a smartphone, tablet or personal digital device. A program compatible with the operating software of Windows, Android, IOS and other mobile phones has been developed.

Internet Banking. The customer can access account balance inquiry, make payments, money transfers, international money payments, standing orders and direct will be able to create and update debit payments and check recent transactions.

Video Teller Machine (VTM): a new and innovative service provided by banks. The customer is remotely connected to a customer service representative through VTM for all banking transactions. All branches of VTM offer banking services to clients.

SIM Application-toolkit: This is shown as a standard SIM with an interactive menu programmed to allow the client to interact. The interaction is between the client and the network, and the exchange is carried out by inputting information to the client through an interactive menu and program.

Near Sound Data Transfer (NSDT): This is a fast, secure and convenient contactless payment technology used in mobile banking using any mobile phone.

RFID Technology. The bank card is equipped with a payment chip and the payment is made by simply holding the card in front of the RFID reader and the payment is made automatically.

Telephone Banking or Interactive Voice Response (IVR). Telephone banking is an information technology that allows the client to interact with the system after calling a special number provided by the bank.

Wireless Application Protocol (WAP). This is a technology used in mobile banking, where the customer connects to the bank's website via the Internet using a browser on his mobile phone.

Unstructured Supplementary Service Data (USSD). This is an SMS service with a menu and a fixed session. This is the default for all phone models. The customer must choose from a list of options in the menu to continue, as opposed to using sentences to respond. The main advantage of USSD: the client responds quickly by selecting appropriate options from the menu. USSD allows communication between the client, the mobile network and the bank.

Contactless Payments using Near Field Technology (NFC). It is a form of mobile communication and wireless payment using two-way radio wave communication and smart mobile devices running compatible software and located in close proximity to each other. NFC is a short-range, high-frequency technology that allows data to be exchanged between devices at a distance of 10 cm. NFC is built on RFID technology. Allow wireless communication and data exchange between devices. The device is active or passive modes.

Mobile Money. It is called mobile wallet, mobile payment and mobile money transfer. Mobile money service is used all over the world, mostly in Africa for those with or without bank accounts. The service is provided by mobile operators in cooperation with

World Economics & Finance Bulletin (WEFB)
Available Online at: https://www.scholarexpress.net
Vol. 14, September 2022
ISSN: 2749-3628,

commercial banks. Mobile money accounts can also be linked to a customer's bank account.

CONCLUSIONS AND DISCUSSIONS

In a word, it can be said that the use of modern digital information technologies and their software in the banking sector not only gives a competitive advantage in the market of banking services, but also has positive effects such as reducing administrative costs, increasing labor productivity, and reducing excessive time consumption. there are also secrets.

REFERENCES:

1. Decree of the President of the Republic of Uzbekistan on the strategy of reforming the banking system of the Republic of Uzbekistan for 2020-2025, No. PF-5992 dated 05.12.2020 ttps://lex.uz/uz/docs
2. Melikov Otabek Makhmadaminovich "Digital banking technologies and their specific features and ways of their effective use" scientific electronic journal "Economy and innovative technologies". No. 4, July-August, 2021, p. 290
3. Saeid Khajeh Dangolania. The impact of information technology in banking system (A case study in bank Keshavarzi Iran) // Procedia - social and behavioral sciences, Vol. 30, 2011. – 13-16 p.
4. Goyal J., Singh M., Singh R., Aggarwal A. Efficiency and technology gaps in Indian banking sector: Application of meta-frontier directional distance function DEA approach // The Journal of finance and data science, Vol. 5 (2019), 156-172
5. Дубинин М.В. Банковские технологии: сущность, история развития и перспективы // Финансы и кредит. №34 (274), 2007. – 58 с.
6. Тарасова В.И. Межрегиональный центр банковских и финансовых технологий / Банковские и финансовые технологии для реального сектора экономики: сборник статей под ред. – М. 2000. – 134 с.
7. Галаган А.А. От купца до банкира: история предпринимательства российского. – М.: Ось-89, 1997. – 167 с.