

Article

Bank Ecosystems Innovative Services Set

Shoymardonov Orzikul Jora oglu*¹

1. TSUE Independent Researcher

* Correspondence: orziqu123456@gmail.com

Abstract: This article discusses the emergence of innovative banking services as a result of the development of business ecosystems in banks, which, in turn, contributes to the increase in the number of banking services and, as a result, to the increase in bank income. It discusses ways to improve the efficiency of bank services within the ecosystem, as well as the prospects for improving the development of the advantages of the business ecosystem in commercial banks. In particular, the article presents the existing problems in improving the efficiency of the business ecosystem in commercial banks based on the introduction of innovations, as well as the author's recommended approaches and proposals for their elimination.

Keywords: Banking, Digital Business, Ecosystem, Innovative Services, Cash Payments, New Types of Services, Facial Recognition Technology, Biometric ATM, Banking Business Ecosystems

1. Introduction

An analysis of the practice of using the business ecosystem in commercial banks operating in our republic to provide online and remote banking services to their customers shows that the adaptation of banking activities and solutions to consumer requirements is rather weak. Since local banks still offer a rather limited range of online services to customers[1].

Also, factors slowing down the spread of digital banks in Uzbekistan include an unadapted regulatory framework and insufficient technological capabilities (data centers, experienced IT specialists, internet coverage and speed, etc.)[2].

The low level of financial literacy of the population, as well as distrust of cashless payments, hinder the rapid spread of digital banking channels. It is also worth noting that the transition of banks to digital services is a long and expensive process, requiring active support from shareholders and significant allocation of funds. However, it is worth noting that whether digital banks can turn these shortcomings into their own advantage is a matter of time, education and resources[3]. The development of the digital economy destroys all the foundations of the traditional banking system. Therefore, it requires traditional banks to implement fundamental reforms. It is important to note that in the digital economy, banks can gain an advantage only if they competently and successfully use their customer data. This, in turn, will become an important way for banking ecosystems to communicate with customers in the future. In addition, if banks provide customers with a variety of financial services, consumers will be able to use banking services anywhere and at any time[4].

Citation: Jora oglu, S. O. Bank Ecosystems Innovative Services Set. American Journal of Economics and Business Management 2026, 9(2), 414-418.

Received: 16th Jan 2026
Revised: 30th Jan 2026
Accepted: 10th Feb 2026
Published: 21st Feb 2026



Copyright: © 2026 by the authors. Submitted for open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license

(<https://creativecommons.org/licenses/by/4.0/>)

International Monetary Fund research also shows that “the share of banks’ non-interest income in developed countries increased from 32 percent to 46 percent between 2020 and 2024, driven by the expansion of fintech and digital payment ecosystems” [5].

The digital payment ecosystem in the banking system of Uzbekistan is not only expanding, but also significantly increasing the level of customer satisfaction. The sharp increase in the number of electronic cards, the expansion of the ATM network, the annual growth in the volume of terminal payments all mean that digital financial services have become the main tool in the daily payment practices of the population, and banks are actively using innovative platforms to improve the quality of customer service[6].

It shows that digital transformation in commercial banks of Uzbekistan is reaching a qualitatively new level, that is, the number of new banking services introduced during 2020-2024 increased from 8 to 25, and the share of digital products in their composition increased from 20 percent to 65 percent, which indicates that banks are prioritizing the development of remote and innovative services tailored to customer needs, and the service portfolio is being redirected from traditional models to a digital ecosystem.

Analysis of Literature on the Topic

Research work related to the business ecosystem of commercial banks has been studied in some aspects by many leading domestic and foreign economists.

Dutch economist Marta Szymanowska has studied various aspects of banking ecosystems, including the impact of financial innovation and the role of banks in the economy [7].

Economist A. Ivanov has argued that the concept of an ecosystem in banking business creates a number of conveniences by integrating multiple services related to a common value for the client into a single user interface [8].

R. Kapoor, A. Gaver, M. Cusumano, G. Parker, M. Van-Alsteen focus on platform-based business ecosystems in their research and distinguish between product-based ecosystems and platform-based ecosystems [9].

The banking ecosystem includes not only the bank itself and its customers, but also various partners and service providers. These can be fintech companies, payment systems, insurance companies, financial data aggregators, and other market participants.

2. Methods

The article used scientific abstraction, grouping, comparison, retrospective and prospective, empirical analysis and other methods. The article, using the method of scientific abstraction, highlights the scientific and practical significance of improving the theoretical organizational and legal foundations of the ways to use the business ecosystem in commercial banks. Also, using the method of comparative analysis, the organizational and legal foundations of methods for increasing the efficiency of the business ecosystem in commercial banks based on the introduction of innovations in world practice and developed countries were compared with the existing foundations in our country, and appropriate conclusions were drawn[10].

3. Results and Discussion

The article analyzes the services offered by banks to customers and their development.

In our article, we analyze the Picture 1. activities of commercial banks operating in our republic within the framework of the ecosystem. In particular, the fact that Asia Alliance Bank JSCB has introduced a biometric ATM based on face recognition technology as part of the development of the digital ecosystem is a major step forward in the development of the industry. The new solution allows customers to withdraw cash and replenish their electronic wallet without a bank card and PIN code[11].

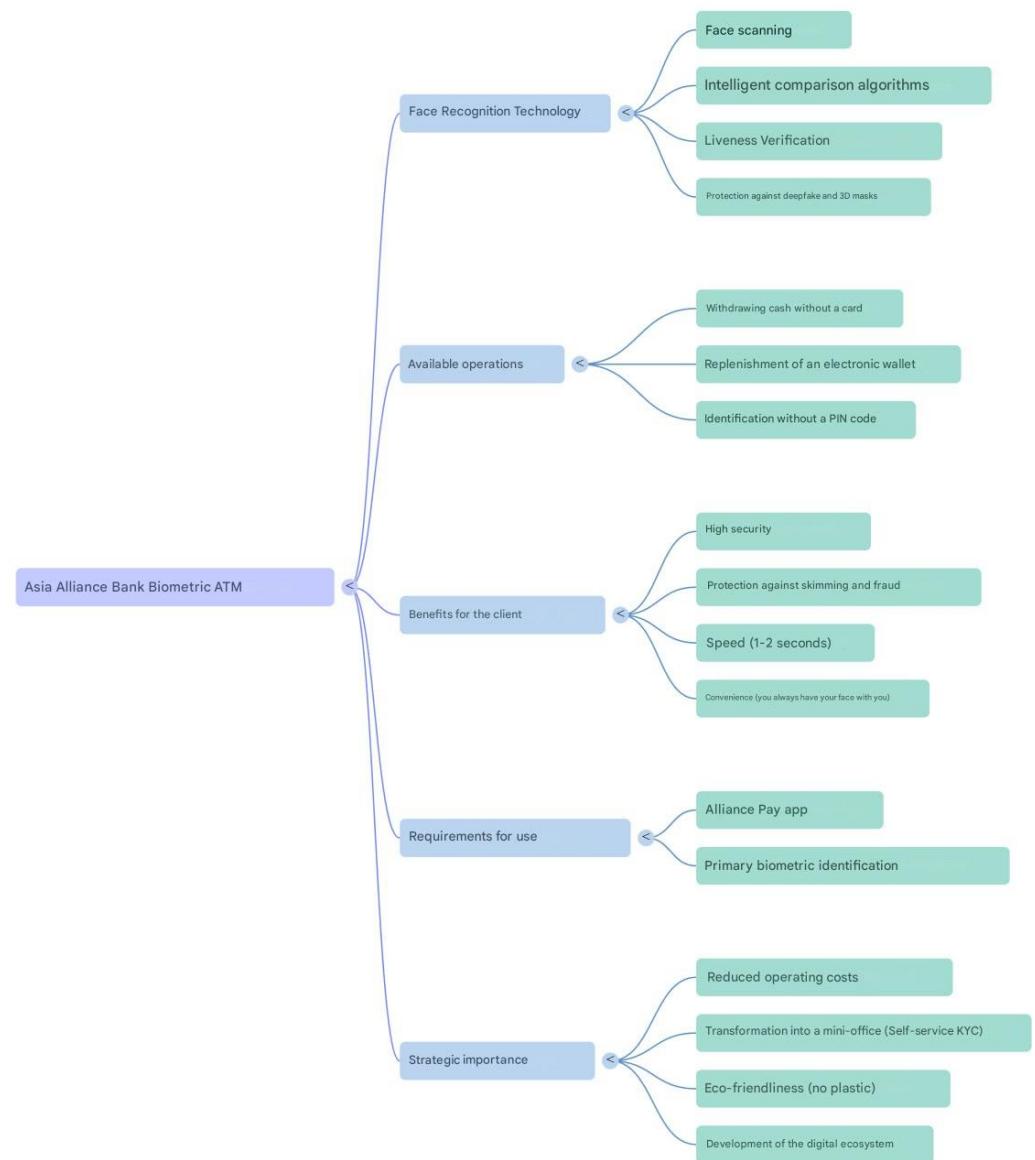


Figure 1. Structure of the biometric ATM service of Asia Alliance Bank JSCB

As part of the development of the digital ecosystem, Asia Alliance Bank JSCB has launched a biometric ATM with facial recognition. The new solution allows customers to perform transactions without a bank card and PIN using face recognition technology[12].

In this article, we will get acquainted with the process and stages of this banking service. At this stage, customers can withdraw cash from their account and replenish their electronic wallet. To use the service, you must download the Alliance Pay mobile application and undergo initial biometric identification.

A biometric ATM is a modern self-service device that uses facial recognition to securely identify a customer. A high-resolution camera scans the face, after which intelligent algorithms compare the image with biometric samples in the bank's database.

In addition, the system checks the "liveness" of the image and is protected against forgery, including "deepfake" and "3D" masks, which is an important aspect.

The use of biometrics provides a number of key advantages: high security by eliminating fraud with cards and PIN codes, protection against skimming, as well as maximum convenience and speed - the authentication process takes only 1-2 seconds.

The introduction of these technologies will also help reduce the bank's operating costs and open up opportunities for the development of new services, such as issuing

virtual cards or restoring access to services. Biometric services will create a single interaction environment and create the basis for remote identification, cardless cash transactions and turning an ATM into a full-fledged mini-office with self-service KYC functions without visiting bank branches[13].

Today, the development of these technologies is especially relevant, as the Central Bank of the Republic of Uzbekistan is preparing to introduce a single QR code that will allow paying for purchases at points of sale without cards, using a smartphone. This will form a habit among people not to carry bank cards, which, in turn, will help improve the environment and reduce carbon emissions by reducing the use of plastic. However, the downside of such a habit may be the inability to withdraw money or make a payment with a smartphone without power when necessary. In this case, the facial recognition technology of Asia Alliance Bank JSCB is the optimal way out of the situation, because “the face is always with you.”

“The Picture 2. launch of a biometric ATM is an important step towards fully digital self-service, where customers will have access to their funds in the easiest and most natural way possible”. It also provides various retail services to its customers within the banking ecosystem in our country.

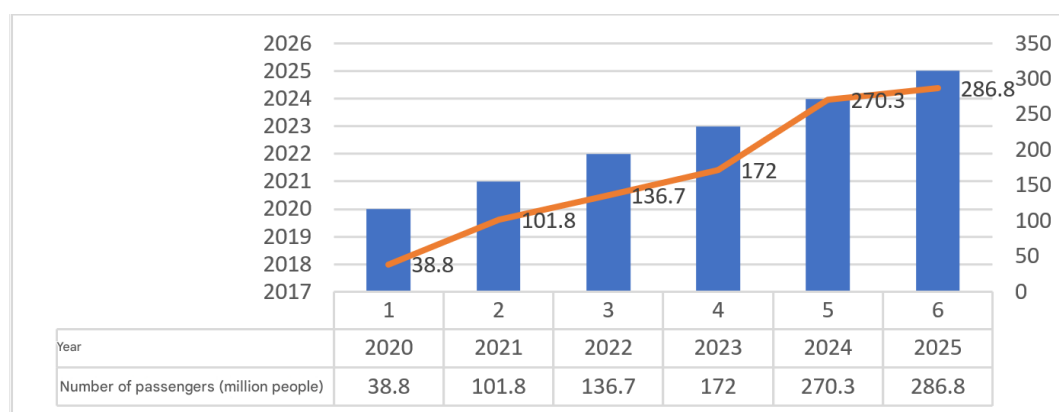


Figure 2. Dynamics of the number of passengers from the metro

The possibilities of using public transport through existing bank cards of customers are expanding. In particular, in 2025, a total of 286.8 million passengers were transported through the metro alone. This figure increased by 6.1% compared to 2024. During this period, an average of 785.6 thousand passengers used the metro per day. This figure is as follows by year:

Key indicators of transactions carried out through taxi aggregators and driver activity have been disclosed at the end of 2025. Over the past year, a total of 479 million passenger transportation services were provided, with a total turnover exceeding 9.6 trillion soums. The structure of payments still shows the predominance of cash:

- Cash payments: 6.7 trillion soums (70.2 %);
- Cashless payments: 2.8 trillion soums (29.8 %);
- Average check value: 20,082.5 soums.

Currently 224 taxi aggregators Fully integrated with tax authorities' information systems[14].

From the above analysis, it can be concluded that there is a demand for public transport and taxi services using bank plastic cards or other innovative methods. It turned out that the existence of this demand allows banks to increase their income by developing new types of services and directing them to customers.

During the research, we got acquainted with the activities of various banks within the ecosystem. According to them, various tools are used to ensure the safety of customers' funds on their plastic cards. In particular, we can mention the launch of an antivirus function in the mobile application service "Xazna" of JSC "Xalq Bank".

These capabilities allow the system to automatically send alerts if malicious or suspicious software is detected on the app users' phones, which helps reduce the risk of financial fraud.

Given the recent increase in fraud cases via bank cards and mobile applications, such a protection mechanism is an additional layer of security for customers[15].

4. Conclusion

1. Despite the great success of our country's commercial banks in implementing a new business model today, it is necessary to study the experience of foreign financial institutions in order to take a more comprehensive approach to implementing an innovative business model.
2. As a result of our research, it became clear that commercial banks of our country today provide their clients with the latest and most advanced information-based online banking services. Also, remote technologies allow the client to use banking services as conveniently as possible and minimize time and financial costs when working with the bank. The main principle of remote banking is the remote exchange of various information between the client and the bank. At the same time, the bank ensures the security of this operation.

REFERENCES

- [1] S. Karimov, *Digital Transformation of Banking Systems in Uzbekistan*, Tashkent: Finance Publishing, 2021.
- [2] R. Tursunov, "Development of Innovative Banking Services in the Digital Economy," *Economics and Innovative Technologies*, vol. 4, no. 2, pp. 45–52, 2022.
- [3] D. Yuldashev, *Fintech and Modern Banking Infrastructure*, Tashkent: Science and Technology, 2020.
- [4] M. Abdullayev, "Formation of Banking Ecosystems in Commercial Banks," *Banking and Finance Review*, no. 3, pp. 18–27, 2023.
- [5] A. Kholmatov, *Digital Banking Services and Customer Experience*, Tashkent: Iqtisodiyot Publishing, 2022.
- [6] N. Islomov, "The Role of Financial Technologies in Expanding Banking Services," *Journal of Finance and Accounting*, vol. 5, no. 1, pp. 60–68, 2021.
- [7] B. Rasulov, *Innovative Management in Commercial Banks*, Tashkent: University Press, 2019.
- [8] O. Rakhimov, "Ecosystem Approach in the Development of Financial Services," *Uzbek Economic Bulletin*, no. 6, pp. 72–80, 2023.
- [9] T. Mamatov, *Electronic Payment Systems and Banking Innovation*, Tashkent: Aloqachi Publishing, 2020.
- [10] F. Saidov, "Digital Platforms in the Banking Sector," *Modern Economics*, vol. 7, no. 4, pp. 90–99, 2022.
- [11] J. Mukhamedov, *Strategic Development of Commercial Banks*, Tashkent: Finance Institute Press, 2018.
- [12] S. Yusupov, "Customer-Oriented Banking Ecosystems," *International Journal of Business in Central Asia*, vol. 2, no. 3, pp. 33–41, 2021.
- [13] Central Bank of the Republic of Uzbekistan, *Annual Report 2023*, Tashkent, 2024.
- [14] Ministry of Digital Technologies of the Republic of Uzbekistan, *Digital Economy Development Strategy*, Tashkent, 2022.
- [15] Association of Banks of Uzbekistan, *Innovative Banking Services Review*, Tashkent, 2023.