

THE IMPORTANCE OF DIGITAL PLATFORMS IN INCREASING THE RANGE OF ONLINE BANKING SERVICES**Mukaddas Jumaniyozova****Tashkent State University of Economics,****Tashkent, Uzbekistan**m.jumaniyozova@tsue.uz

Annotation. This study explores the conceptual, technological, and managerial foundations for the development of smart platforms as an effective instrument for optimizing customer interaction in the field of online banking services. The research underscores that under the conditions of the global digital transformation and the accelerating diffusion of financial innovations, traditional banking models are being replaced by intelligent, data-driven ecosystems characterized by automation, personalization, and integration. Methodologically, the research employs a mixed qualitative–quantitative approach to investigate the motivational and experiential factors influencing customer engagement with online banking services. The findings of the empirical study demonstrate that ease of use, perceived economic value, promotional incentives, and trust in institutional reputation are key determinants of customer satisfaction and loyalty in digital financial ecosystems. Comparative analysis of digital banking platforms in Uzbekistan — including Bankxizmatlari.uz, Depozit.uz, and Bank.uz — reveals rapid growth in user adoption and an ongoing transition from static information portals to interactive, intelligent financial platforms.

The article also presents a conceptual model of a digital platform designed to enhance customer interaction in online banking services. This model integrates data from the Unified State Information System (USIS), banking databases, and open API interfaces to ensure efficient, automated, and personalized service delivery. The study concludes that smart platforms serve as the technological core of next-generation digital banks, providing the necessary infrastructure for intelligent service ecosystems.

Keywords: smart platform, online banking, digital transformation, artificial intelligence, customer experience, financial innovation, Uzbekistan.

Introduction

In the context of the intensive digital transformation of the economy, each financial and credit institution develops its system of interaction with clients based on the principles of mutual benefit and partnership. In this framework, benefit is interpreted not only in terms of financial efficiency, but also from the perspectives of convenience, accessibility, and the minimization of time costs associated with obtaining banking services. The modern organization of banking services, oriented toward the interests of both clients and society as a whole, contributes to achieving substantial economic and social outcomes. The integration of advanced service technologies into banking practice simplifies public access to financial instruments, increases the level of customer satisfaction, and strengthens the competitive position of banks in the market, thereby contributing to the expansion of their client base [1].

In current conditions, the traditional set of banking services is no longer sufficient to fully meet the growing and diversified needs of clients. This circumstance determines the necessity of introducing innovative financial products and improving the methods of their delivery. Consequently, the development and implementation of a comprehensive system of measures aimed at adapting banking activities to new service technologies becomes of particular importance. Equally essential is the adoption of well-grounded managerial decisions that ensure the effectiveness of technological implementation and the sustainable utilization of innovations in the long term.

The COVID-19 pandemic became a catalyst for the accelerated adoption of modern digital technologies in the banking sector, stimulating a significant increase in their utilization by clients. This process was primarily driven by the necessity to ensure **uninterrupted access to financial services** under restrictive conditions, as well as by the potential to **optimize and streamline service delivery procedures**.

The implementation of **innovative technological solutions** has made it possible to substantially **simplify and accelerate customer service processes**, reduce the number of mandatory operations, and **minimize risks for clients** [2]. Consequently, the pandemic period marked a turning point in the evolution of digital banking, highlighting the strategic role of technological resilience and adaptability.

In **Uzbekistan**, the banking sector is likewise witnessing a **dynamic development in the adoption of modern digital technologies**, reflecting global trends toward digital transformation and financial innovation. The integration of mobile applications, online

platforms, and automated service channels demonstrates the country's commitment to building a more inclusive, efficient, and technology-driven financial ecosystem.

It should be noted that, under the conditions of the rapid digital transformation of the global economy, the **banking sector of the Republic of Uzbekistan** is undergoing a **qualitatively new stage of technological modernization**. One of the key directions of this transformation is the **implementation and development of smart platforms — intelligent ecosystems** that ensure a high level of **automation, personalization, and integration** of banking services.

These platforms represent the next evolutionary step in the digitalization of financial systems, enabling the transition from traditional service models to **data-driven, adaptive, and client-oriented infrastructures**. Through the convergence of artificial intelligence, big data analytics, and open banking technologies, smart platforms contribute to enhancing the **efficiency, inclusiveness, and sustainability** of the national financial ecosystem.

Modern smart platforms represent not merely digital interfaces for service delivery, but **comprehensive intelligent infrastructures** that integrate a wide range of advanced technologies — including **artificial intelligence, machine learning, blockchain, big data analytics, and cloud computing**. Their primary objective lies in the creation of a **unified digital environment** that facilitates seamless interaction among the **bank, the client, and external partners**, where all service processes become **maximally transparent, secure, and user-oriented**. Such platforms transcend the traditional boundaries of banking systems, functioning as **adaptive ecosystems** capable of real-time data processing, predictive analytics, and autonomous decision-making. As a result, they form the technological foundation for the **next generation of financial services**, fostering greater operational efficiency, trust, and inclusiveness within the digital financial landscape.

In Uzbekistan, the development of smart platforms has gained significant momentum in recent years as a result of the implementation of **national strategies for economic digitalization** and the adoption of the “**Digital Uzbekistan – 2030**” concept [3]. The **Central Bank** and the country's **commercial banks** have initiated the introduction of **innovative technological solutions** aimed at enhancing the **efficiency of customer data management**, automating **core business processes**, and expanding **remote service channels**. These efforts reflect a systemic approach to digital transformation within the national financial sector, emphasizing the creation of **intelligent, data-driven infrastructures** that ensure transparency, accessibility, and adaptability of banking services. Consequently, the Uzbek banking industry

is evolving toward a **smart, customer-centric ecosystem**, aligned with global trends in fintech development and sustainable digital growth.

One of the most remarkable outcomes of digital transformation has been the emergence of integrated mobile ecosystems that provide users with the ability to perform a wide range of financial operations — from account opening and loan acquisition to investment and insurance services — all within a single unified platform. These ecosystems embody a holistic approach to digital financial services, combining convenience, interoperability, and technological sophistication. By consolidating diverse financial functions into a cohesive digital environment, they not only enhance the efficiency of service delivery but also reshape the traditional customer experience, fostering greater financial inclusion and engagement in the digital economy.

In the “Strategy for Reforming the Banking System of the Republic of Uzbekistan for 2020–2025”, approved by the President on May 12, 2020, a number of strategic priorities were defined. Among them are the broad implementation of modern information and communication technologies, the automation of business processes in commercial banks, and the creation of necessary conditions for the expansion of remote banking services.

This strategic framework establishes the foundation for a comprehensive digital transformation of the national banking sector, aimed at enhancing institutional efficiency, improving customer accessibility, and strengthening the overall competitiveness of Uzbekistan’s financial system in the global digital economy.

The following measures are planned to be implemented in the course of corporate transformation of commercial banks in the field of introduction of modern information and communication technologies:

- expanding the number and scope of remote banking services, including contactless payments;
- wide use of scoring, remote identification and credit pipeline system;
- strengthening the information security of bank information and systems;
- Widespread introduction of new concepts and technologies in the banking sector (fintech, digital banking).

In accordance with paragraph 2 of the Resolution of the President of the Republic of Uzbekistan dated February 17, 2021, entitled “*On Measures to Create Conditions for the Accelerated Implementation of Artificial Intelligence Technologies*,” a task was established to introduce a remote biometric identification system (Face-ID) for users of banking services that enable the opening of accounts remotely. As a result, the coverage of the client base will be

significantly expanded, extending to remote regions, while operational costs in service delivery processes will be reduced through the optimization and gradual downsizing of branch networks.

In order to ensure the implementation of these tasks, a number of initiatives are currently being undertaken in cooperation with **UZINFOCOM**, the Unified Integrator for the Creation and Support of State Information Systems, the **State Personalization Center**, and the **European Bank for Reconstruction and Development (EBRD)** to develop an information system for remote client identification. At the same time, to foster a competitive environment in this field, commercial banks are conducting pilot testing of software solutions developed abroad. Moreover, collaboration has been established with the **International Finance Corporation (IFC)** to introduce a biometric remote identification system for clients, while the relevant regulatory and legal documents have been published on the official portal **www.regulation.gov.uz**.

These measures are primarily aimed at advancing the development of the digital economy in Uzbekistan, ensuring the **rapid growth of the national economy**, and accelerating the **digitalization of banking services** as a means of integrating the country's financial system into the **global economy** and aligning it with the standards of economically developed nations.

The **digitalization of banking services** represents the establishment of **interactive relationships between the bank and its clients** based on **digital information and communication technologies**. As clients increasingly utilize financial services, they begin to recognize the importance of **convenience, quality, and speed of service delivery**, as well as the value of **time efficiency** and **reduced operational costs** achieved through electronic document management.

At the institutional level, **accounting and management systems are becoming increasingly integrated**, while advanced **Customer Relationship Management (CRM)** systems are being developed to enhance the **efficiency and personalization of customer interactions**. These transformations form the foundation for the creation of a **data-driven, customer-centric banking model**, which plays a pivotal role in supporting the sustainable digital transformation of Uzbekistan's economy.

In the past, accessing banking services and visiting bank branches was particularly difficult in remote regions. The introduction of **digital financial services** has made it possible to effectively reach **individuals and legal entities** located in **distant and sparsely populated areas**, where the establishment of traditional bank branches would be economically unfeasible.

Through **digital transformation**, the **business models of banks are being optimized**, enabling greater operational efficiency and adaptability to changing market demands. The **banking and payment segments** are undergoing continuous development — ranging from the expansion of **remote banking services** to fundamental transformations in the **execution of financial operations**.

These changes not only enhance financial inclusion but also contribute to the creation of a **modern, technology-oriented banking infrastructure**, ensuring equal access to financial resources and stimulating economic activity across all regions of Uzbekistan.

The findings of this research are expected to have a significant impact on the ways in which banks enhance service quality and customer satisfaction, by adapting their offerings to the evolving needs of clients while simultaneously addressing existing challenges to ensure sustainable development. This study thus contributes to a deeper understanding of how customer-centric innovation and technological transformation can jointly foster resilience, efficiency, and long-term competitiveness within the modern banking ecosystem.

Результаты предоставят банкам ценную информацию о факторах, влияющих на качество онлайн банковских услуг, и их влиянии на уровень удовлетворенности клиентов. Кроме того, данное исследование заложит теоретическую и концептуальную основу для будущих исследований.

Literature Review

The concept of customer experience has been comprehensively defined by Carbone and Haeckel [7], who describe it as a set of impressions formed by consumers during their interaction with a company's products or services. This experience is inherently subjective in nature, varying from one customer to another, and is often shaped by the discrepancy between the actual perception of a service and the consumer's prior expectations. Importantly, it is the customers' expectations that serve as the key determinant of their overall level of satisfaction [8]. Understanding and managing these expectations therefore becomes a critical component of contemporary banking strategies aimed at enhancing customer loyalty, trust, and long-term engagement within the framework of digital service delivery.

According to Hussadintorn and Coomsap [9], the customer experience encompasses the entire life cycle of interaction — beginning with the moment of purchasing a product or service and extending through the stage of post-purchase support and maintenance. The authors emphasize that at each stage of this cycle, customers continuously compare their current perceptions with past experiences, thereby shaping their attitude toward the brand and forming expectations for future interactions. This dynamic process underscores the cumulative and evolutionary nature of customer experience, highlighting its central role in building brand loyalty, enhancing emotional engagement, and determining the long-term sustainability of customer relationships in the digital economy.

Lemon and Verhoef [10] note that in early research, the concept of customer experience was primarily examined within the framework of physical, sensory, affective, and social dimensions. Subsequently, this model was significantly expanded and refined to include emotional, spiritual, social, and behavioral components, reflecting the evolution of theoretical perspectives on the nature of customer perception.

Nevertheless, there remains a general consensus among scholars that customer experience is a multidimensional and complex phenomenon [11], encompassing a broad spectrum of interrelated factors [12]. In this regard, managerial decisions must be flexible and adaptive, aligning with the dynamically changing expectations of customers and the transformative conditions of the modern market [13].

This understanding emphasizes the need for organizations—particularly within the banking sector—to adopt integrated, data-driven, and customer-centered management approaches, enabling continuous innovation in service design and delivery.

Methodology

1.1. Qualitative Analysis

We employed a sequential mixed-method approach [14]. The study began with the collection of qualitative semi-structured data aimed at exploring the motivational factors and customer experiences associated with the use of online banking services. The adoption of a qualitative research design was essential in this context due to the limited body of literature addressing experiential factors influencing exclusively digital banking environments.

This methodological choice allowed for a deeper understanding of the subjective perceptions, attitudes, and behavioral drivers shaping customer interaction with digital financial

platforms, thereby providing a solid foundation for subsequent quantitative analysis. Furthermore, due to its distinctive characteristics — functioning in a fully virtual environment — this context differs significantly from prior research on digital services provided by traditional banks. In addition, our study specifically focuses on young customers aged 20 to 45, who represent the primary user segment of digital banking platforms.

To obtain precise and representative insights, a statistical survey was conducted among clients utilizing online banking services in Uzbekistan. The study employed a convenience sampling method to identify the motivational factors influencing customer engagement and to examine their experiential perceptions when interacting with digital banking services.

This approach allowed for a more nuanced understanding of the behavioral and attitudinal dynamics of young users within the rapidly evolving digital financial ecosystem of Uzbekistan.

Therefore, the participants were selected based on their prior experience with digital banking services. A total of twenty participants were chosen: ten individuals aged 20 to 35 and ten individuals aged 36 to 45, representing the demographic composition of the core user segment targeted by online banking services. The gender distribution of participants was deliberately balanced to minimize potential gender bias and to ensure the reliability and representativeness of the findings. This sampling design provided a well-structured foundation for analyzing user perceptions and behavioral patterns across different age cohorts within Uzbekistan's evolving digital banking environment. The initial set of questions encompassed **three main thematic stages**:

1. the **client's motivation** for subscribing to **remote (online) banking services**;
2. the **customer's experience** during the use of remote banking services — including perceived **difficulties, advantages, and benefits**, as well as their **willingness to recommend** such services and their **intention to continue** using online banking in the future;
3. the **identification of the banking application** most frequently used by clients.

This structured approach enabled the researchers to obtain comprehensive insights into **motivational drivers, user satisfaction, and behavioral intentions**, providing a nuanced understanding of customer engagement with digital banking platforms.

The initial data collection process was completed. The obtained data were analyzed using open and manual coding techniques to ensure a comprehensive analysis and interpretation of the findings [15].

Table 1. Results of the Customer Survey

Cod	Description	Sample Quotes	Key Phrases
Economic Value	In the context of digital banking, the component of economic value is viewed as cost reduction and savings.	“I use Uzumbank because it offers free transactions and cash withdrawals at any ATM, which saves me time”.	Free transactions, time savings, financial solution, accessibility.
Ease of Use	Ease of use refers to the simplicity of learning and operating the system.	“In my opinion, it’s not difficult and very convenient for any transactions.”	Simplicity, convenience, usability.
Social Influence	A way in which someone begins a new activity under the influence of other people.	“From an advertisement on Instagram — when I first saw it there, I became interested in trying it.”	Recommendation, suggestion.
Company Reputation	It ensures the company’s capability, integrity, and goodwill, thereby helping to increase trust, especially when users have no direct experience interacting with the company.	“Uzumbank gives me more confidence.”	Product development, security.
Promotion	This is the value of discounts or incentives offered by digital banks in dynamically generated promotional messages.	“I like that I pay only 650 sum for transportation — that’s one of the reasons why I use it.”	Cost reduction, advantages, and benefits.
Functional features	A competitive tool that helps companies	“In the end, I chose Uzumbank — in	Additional value, simplicity.

	differentiate their products from competitors. The variety of features meets users' needs, increasing their satisfaction.	my opinion, it's really interesting because it's the only app of its kind in Uzbekistan. Secondly, it helps save money."	
Curiosity	The desire to learn and discover something new.	"At first, I wanted to try a digital bank because it used the latest technologies."	Digital payments, transformation, innovation.
Reward	A strategy or policy of recognizing users' contributions through financial and non-financial incentives to obtain benefits. In this study, these refer to rewards provided directly by digital banks. Example: cashback on transfers to other banks made on Mondays.	"I like using Uzumbank because it offers cashback when transferring to other banks."	Cashback, cost reduction.

From Table 1, it can be seen that clients who used online banking services mainly preferred digital banks. However, in our research, we also considered fintech products and banks' mobile applications. Clients were primarily interested in platforms that offered promotion and rewards. Based on this, let us conduct a comparative analysis of banks and clients.

1.2. Comparative analysis.

Figure 1 presents the comparative dynamics of indicators of various commercial banks in the Republic of Uzbekistan. The analysis of the chart allows for several meaningful conclusions to be drawn regarding the structure and scale of their activities.

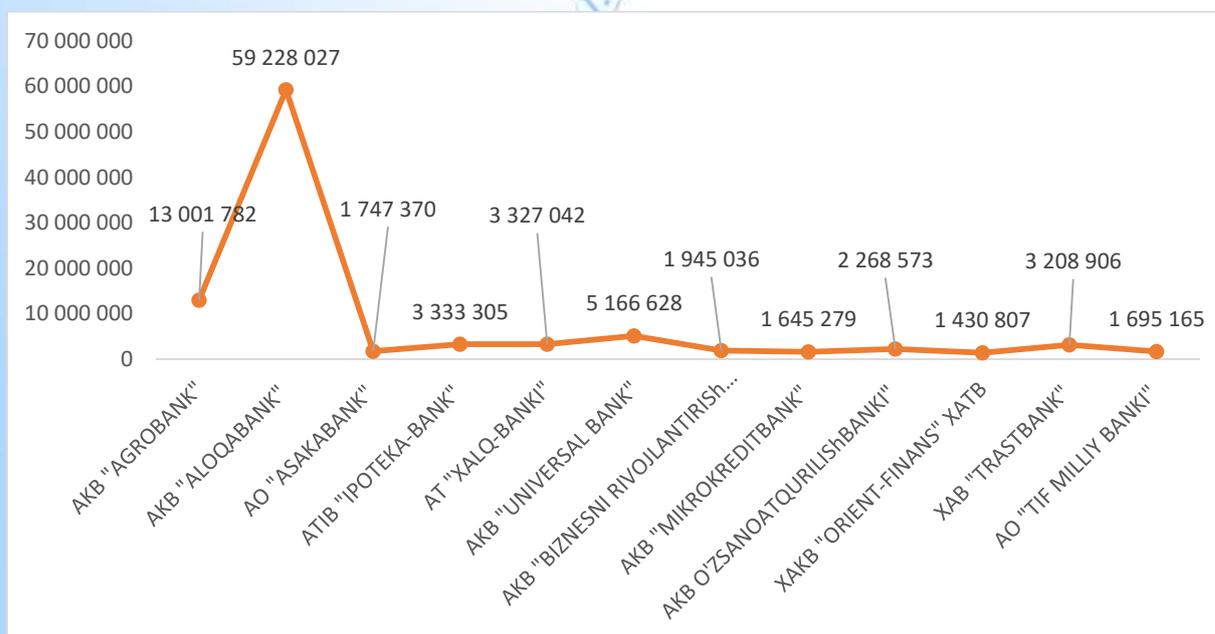


Figure 1. Dynamics of Users of Various Commercial Banks in Uzbekistan

From Figure 1, it can be seen that the indicators of JSC "Asakabank" are significantly higher. This indicates a high concentration of financial resources and the active role of this bank in the national banking system. In second place in terms of indicators is JSCB "Agrobank," which maintains stable positions in serving the agricultural sector of the economy. The analysis of the figure suggests an uneven distribution of financial potential among the banks of Uzbekistan, while the dominant role of "Asakabank" emphasizes its strategic importance within the national banking system.

For the convenience of using online banking services in Uzbekistan, the following platforms are utilized: **Bankxizmatlari.uz** — an online portal for financial services; **Depozit.uz** — an independent online platform; and **Bank.uz** — an informational and financial resource.

Table 2. Dynamics of the Number of Portal Users for the Period 2022–2025 Based on Open Indicators from Google Trends.

	2022	2023	2024	2025
bankxizmatlari.uz	310000	520000	850000	1320000

depozit.uz	180000	410000	720000	1150000
bank.uz	620000	710000	890000	1050000

From Table 2, it can be observed that there has been a steady increase in the audience across all three platforms, reflecting the active digitalization of Uzbekistan's banking sector and the growing public interest in online financial services. The combined audience of the three portals has increased by nearly 2.7 times, with an average annual growth rate of approximately 36–42%, which significantly exceeds the average figures for the fintech market across the CIS region.

The dynamics of user growth confirm the transition from static informational portals to next-generation smart platforms that enable interactive, personalized, and trust-based engagement between banks and clients.

An important aspect of smart platform development is the transition from traditional transactional models to interactive and proactive service systems based on behavioral and contextual data analysis. Such platforms are capable not only of responding to customer requests but also of offering individualized financial solutions in real time. This contributes to strengthening user trust, enhancing the population's financial literacy, and fostering a culture of cashless payments.

A particularly significant factor in the development of smart platforms is their integration with governmental and interbank systems such as the **Billing System, Uzcard, Humo**, and the **Open Banking** platform, which ensures open access to financial data and fosters the creation of a competitive environment. Thus, Uzbekistan is gradually transitioning from a closed banking architecture to an open digital ecosystem, where the key determinants of success are speed, transparency, and the intelligence of technological solutions.

The modern transformation of the banking sector is characterized by a shift from the traditional linear model of customer service to an ecosystem-based model of digital interaction founded on the principles of open data, Application Programming Interface (API) integration, and cross-platform interoperability. At the core of this model lies the concept of the Open Digital Banking Ecosystem, which enables sustainable, flexible, and personalized interaction between banks, clients, and external digital participants — including fintech companies, government institutions, payment providers, and marketplaces.

The digital platform being developed to enhance the efficiency of customer interaction for online banking services represents a next-generation integrated information and

communication system. It ensures personalized, automated, and secure data exchange between the bank and the client, based on artificial intelligence technologies, big data analytics, and open API interfaces. Figure 2 illustrates the operational mechanism of the conceptual model of the digital platform.

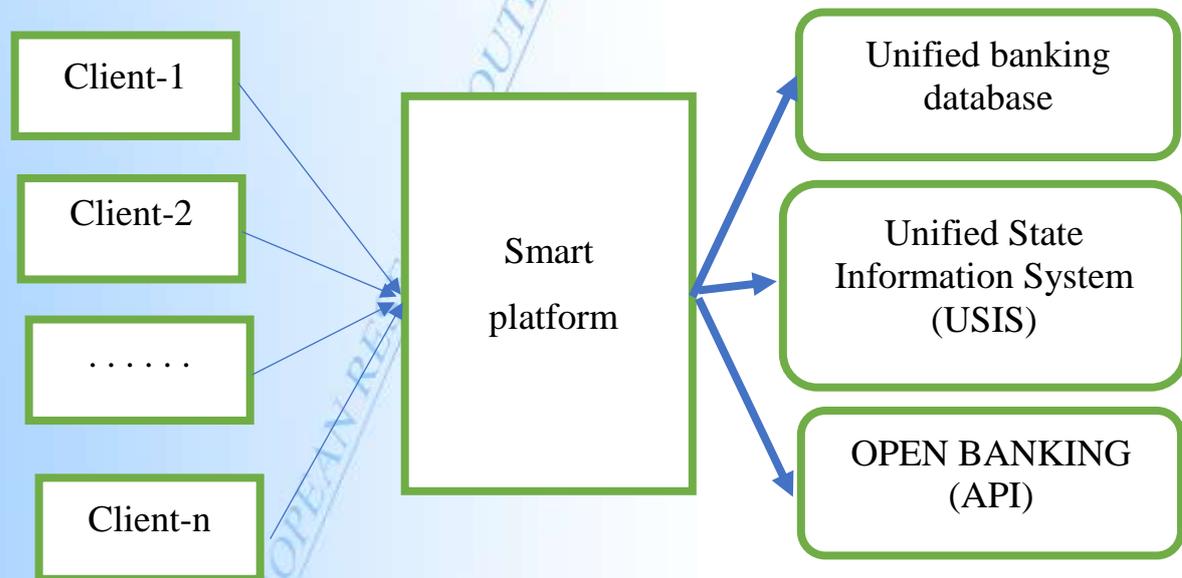


Figure 2. Conceptual Model of the Digital Platform for Customer Interaction in Online Banking Services.

Let us examine the operational mechanism of the conceptual model of the digital platform for online banking services. The functioning mechanism of the proposed digital platform is based on the integration of three key informational sources — the unified banking database, the Unified State Information System (USIS), and open API interfaces (Open Banking).

The primary objective of this digital platform is to ensure efficient, secure, and personalized interaction between clients and banks within a unified digital environment.

The digital platform serves as an information and communication intermediary between the client and the banking system.

Main functions of the platform:

1. Reception and classification of user requests;
2. Verification of data authenticity through the Unified State Information System (USIS);
3. Search for optimal banking services via the unified banking database;
4. Exchange of transactional data with partner systems through Open Banking (API).

It should be noted that the use of digital financial technologies enhances the potential for active collaboration among the state, payment service providers, and clients. Continuous analysis of customer demands and needs facilitates the implementation of innovative service delivery methods by banks and contributes to the development of new, attractive financial products.

At present, the mobile applications of banks for individual customers incorporate all essential banking services, including payment execution, card blocking and unblocking, microcredit acquisition, online deposit operations, and online currency conversion. As of July 1, 2024, the number of users of remote banking service systems increased by 7.5 million people (41%) compared to the same period in 2020, reaching a total of 19.4 million users.

To foster the development of innovative services, the **Tap-to-Phone** system (commercially known as “*Onetouch*”) has been introduced. As a result, business entities — including self-employed individuals and delivery service providers — have gained the ability to accept payments via smartphones using NFC technology. Within the framework of expanding contactless payment technologies and enhancing user convenience, a new service has also been implemented that allows customers to make payments at retail and paid service outlets without using a bank card, through the **Humo Pay** application (based on the NFC system) integrated into mobile devices.

In order to ensure the effective utilization of these opportunities and to provide greater convenience for banking clients, the methods for improving the smart platform are elaborated in this research. The foundation of the smart platform lies in the implementation of artificial intelligence systems, which enable the provision of convenient online banking services to customers. During the service delivery process, the platform employs **Big Data analytics** to analyze large volumes of information, thereby recommending the most suitable and efficient banking services for each client.

Conclusions

Based on the aforementioned research and analytical findings, the following conclusions can be drawn. Despite the progress achieved, the development of smart platforms faces a number of challenges. Among these are the need to improve the regulatory and legal framework, ensure cybersecurity, develop data storage and processing infrastructure, and train qualified IT specialists for the banking sector. In the long term, it is expected that the role of

artificial intelligence and neural network algorithms in managing financial flows and risks will continue to strengthen. Furthermore, the functionality of smart platforms will expand through integration with blockchain networks and the advancement of smart contracts. This evolution will lead to the formation of a new model of banking operations, in which humans and digital systems interact in a mode of intelligent partnership.

Thus, the development of smart platforms for banking services in Uzbekistan has become a strategic direction in the digital transformation of the financial sector. These platforms constitute the technological foundation of the intelligent bank of the future — one capable of ensuring sustainable growth, inclusiveness, and innovative competitiveness within the national economy.

References

- [1] Ababa, A. (2018). Dashen Bank Launches "AMOLE. The new ethiopian digital wallet. PR newswire association LLC. Retrieved 21/10/2025 from https://www.prweb.com/releases/dashen_bank_launches_amole_the_new_ethiopian_digital_wallet/prweb15648028.htm.
- [2] Hussein, A.S., Sumiati, S., Hapsari, R., Abu Bakar, J.: Bank 4.0 experiential quality and customer loyalty: a serial mediating role of customer trust and engagement. TQM J. (2022).
- [3] M. Jumaniyozova and M. Ikramov, "Using an Advanced Platform for Online Trade in Uzbekistan," 2025 International Conference on Technology Enabled Economic Changes (InTech), Tashkent, Uzbekistan, 2025, pp. 1304-1311, doi: 10.1109/InTech64186.2025.11198445.
- [4] Abidov Abdujabbar, Karimov Botirjon. Experimental Results of Econometric Modeling of Economic Processes. NEW2AN/ruSMART 2023, LNCS 14543, pp. 86–94, 2024. https://doi.org/10.1007/978-3-031-60997-8_9
- [5] Chauhan, S., Akhtar, A., & Gupta, A. (2022). Customer experience in digital banking: A review and future research directions. International Journal of Quality and Service Sciences, 14, 311–348. <https://doi.org/10.1108/IJQSS-02-2021-0027>
- [6]
- [7] Carbone, L.P.; Haeckel, S.H. Engineering Customer Experiences. J. Mark. Manag. 1994, 3, 8–19. [[Google Scholar](#)]
- [8] Suchánek, P.; Králová, M. Customer satisfaction, loyalty, knowledge and competitiveness in the food industry. Econ. Res. Ekon. Istraz. 2019, 32, 1237–1255. [[Google Scholar](#)]

- [9] Hussadintorn Na Ayutthaya, D.; Koomsap, P. Improving Experience Clues on a Journey for Better Customer Perceived Value. In *Transdisciplinary Engineering for Complex Socio-Technical Systems*; Hiekata, K., Moser, B., Inoue, M., Stouffs, R., Šćekić, S.I., Eds.; IOS Press: Amsterdam, The Netherlands, 2019; pp. 53–62. [[Google Scholar](#)] [[CrossRef](#)]
- [10] Lemon, K.N.; Verhoef, P.C. Understanding customer experience throughout the customer journey. *J. Mark.* 2016, 80, 69–96. [[Google Scholar](#)]
- [11] Godovykh, M.; Tasci, A.D.A. Customer experience in tourism: A review of definitions, components, and measurements. *Tour. Manag. Perspect.* 2020, 35, 1–10. [[Google Scholar](#)] [[CrossRef](#)]
- [12] Chepur, J.; Bellamkonda, R. Examining the conceptualizations of customer experience as a construct. *Acad. Mark. Stud. J.* 2019, 23, 1–9. [[Google Scholar](#)]
- [13] Heinonen, K.; Lipkin, M. Ordinary customer experience: Conceptualization, characterization, and implications. *Psychol. Market.* 2023, 40, 1720–1736. [[Google Scholar](#)] [[CrossRef](#)]
- [14] Sanchez-Franco, M. J. (2009). The moderating effects of involvement on the relationships between satisfaction, trust and commitment in e-banking. *Journal of Interactive Marketing*, 23(3), 247–258. doi:10.1016/j.intmar.2009.04
- [15] Saldana, J. (2015). *An Introduction to Codes and Coding. The coding manual for qualitative researchers.* (2nd Ed). Thousand OaksUA:Sage.
- [16] Abdujabbar Abidov. Simulation Modeling of Reliability of Packet Switching Unit. In: Koucheryavy, Y., Aziz, A. (eds) *Internet of Things, Smart Spaces, and Next Generation Networks and Systems. NEW2AN 2023. Lecture Notes in Computer Science*, vol 13772. Springer, Cham., p. 38-45. https://doi.org/10.1007/978-3-031-30258-9_4 -19p.
- [17] D. Mirzaaxmedov, A. M. Ibragimovna, O. N. O. Ugli and I. D. Erkinovna, "Analyzing Market Dynamics: An in-Depth Statistical Study of Real Estate Valuations in Tashkent City's Residential Sector Using Advanced Data Analytics Techniques," 2025 International Conference on Technology Enabled Economic Changes (InTech), Tashkent, Uzbekistan, 2025, pp. 1312-1318, doi: 10.1109/InTech64186.2025.11198376.
- [18] Vafoev, B.Homidov, H. Ablazov, L. ECONOMETRIC MODELING of PANEL DATA COLLECTED BASED on DRONE TECHNOLOGIES ACM International Conference Proceeding ACM International Conference Proceeding SeriesPages: 343 – 354 DOI: [10.1145/3584202.3584252](https://doi.org/10.1145/3584202.3584252)

[19] Qulmatova S. Xatamov O. Yusupova D. Issues of digitalization of machine and tractor fleets in agricultureю E3S Web of Conferences July, 040475 th International Scientific Conference on Construction Mechanics, Hydraulics and Water Resources Engineering, CONMECHYDRO 2023. (Scopus).

[https://www.e3s](https://www.e3sconferences.org/articles/e3sconf/pdf/2023/38/e3sconf_conmechhydro23_04047.pdf)

[conferences.org/articles/e3sconf/pdf/2023/38/e3sconf_conmechhydro23_04047.pdf](https://www.e3sconferences.org/articles/e3sconf/pdf/2023/38/e3sconf_conmechhydro23_04047.pdf)