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PRACTICAL ANALYSIS OF BANK CUSTOMER BEHAVIOR AND SERVICE DELIVERY CHANNELS IN THE OPEN BANKING ENVIRONMENT

Mekhriniso Dilshodbek qizi Urayimova
Master's student, group m-02-26, Information Technologies and Systems in Economics, Andijan State Technical Institute
Scientific supervisor: **Khamidjon Usmonovich Sarimsaqov**
Associate Professor, Department of Information Technologies and Systems, Andijan State Technical Institute
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Abstract. This article presents an applied and empirical analysis of changes in the behavior of commercial bank customers and in service delivery channels as the Open Banking ecosystem takes shape. The study assesses the shift from traditional bank channels to FinTech and open API platforms, customer preferences, and service efficiency indicators (transaction share, customer reach growth, operating cost, and customer satisfaction index) for 2024–2026. The findings show that the share of transactions made through Open API channels has reached 52%, and that serving customers through traditional branches costs more than 30 times as much as through open digital channels. The article identifies the main barriers (cybersecurity and trust, the digital literacy gap, and fragmented user experience) and develops strategic recommendations for banks: developing a hybrid omnichannel model, increasing the transparency of consent management, and personalized API monetization.

Keywords: Open Banking, Open API, customer behavior, service channels, omnichannel, multi-banking, FinTech, consent management, API monetization, commercial banks.

Introduction.

In the digital economy, the transformation of the banking and financial sector is fundamentally changing the behavior of bank customers and their demand for service channels [2]. The introduction of the Open Banking concept and Open API technologies has given customers the freedom to use financial services not only through a single bank's application but also through third-party providers (FinTech aggregators, super-apps, and marketplaces) [4].

The rapid development of remote banking services in Uzbekistan's banking sector is reducing the load on traditional bank branches and cash desks and shifting it to digital channels [3]. However, the changes in customer behavior in the Open Banking environment, multichannel (omnichannel) service delivery, the retention of customer loyalty (customer retention), and the current state of cooperation between banks and FinTech companies [9] call for in-depth practical analysis.

The aim of the study is to analyze, on a practical and empirical basis, the changes in the behavior of commercial bank customers and the effectiveness of service delivery channels in the Open Banking environment, to identify existing barriers, and to develop strategic recommendations for banks.

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Research methodology. The study used comparative and dynamic analysis methods to assess the behavior of bank customers and the effectiveness of service delivery channels in the Open Banking environment.

First, service channels were divided into four groups: FinTech / Open API applications, bank mobile apps (Direct), ATMs and self-service devices, and traditional branches and cash desks. Second, each channel was evaluated on four indicators: transaction share (%), customer reach growth (%), operating cost per transaction (Cost/Tx, in US dollars), and customer satisfaction index (CSI, on a 5-point scale). Third, changes in customer behavior were systematized qualitatively, and the factors hindering the development of channels in the Open Banking environment were identified.

The empirical base of the study consists of empirical data from commercial banks and FinTech aggregators for 2024–2026.

Research results. The advent of Open Banking principles is bringing about three main changes in customer behavior. First, multi-banking is growing: instead of being tied to a single bank, customers use API integrations to manage their accounts at different banks in one place through FinTech applications (payment aggregators and personal finance management, PFM, apps) that offer the best rates and a convenient interface. Second, demand for transaction speed and 24/7 availability is increasing: visits to branches tied to working hours have dropped sharply, and real-time (real-time API calls) and frictionless operations have taken priority. Third, the need for personalized and flexible products is rising: by analyzing a customer's financial history and transactional behavior through Open API, banks see higher acceptance of automatically prepared offers (microloans, flexible deposits). The analysis of channel shares and customer preference indicators is presented in Table 1.

Table 1.

Dynamics of banking service channel shares and customer behavior indicators (2024–2026)

Service channel	Transaction share (%)	Customer reach growth	Operating cost (Cost/Tx)	Customer satisfaction index (CSI)
FinTech / Open API applications	52%	+38%	Very low ($0.05)	4.8 / 5.0
Bank mobile apps (Direct)	34%	+12%	Low ($0.15)	4.4 / 5.0
ATMs and self-service devices	10%	-5%	Medium ($0.40)	3.9 / 5.0
Traditional branches and cash desks	4%	-22%	High ($1.80)	3.5 / 5.0

Source: compiled from empirical data of commercial banks and FinTech aggregators.

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The analysis shows that the share of transactions through Open API service channels has reached 52%; this channel stands out for the highest growth in customer reach (+38%) and the highest satisfaction index (4.8/5.0). Bank mobile apps (Direct) rank second with a 34% share. The shares of ATMs and self-service channels (10%) and traditional branches (4%) are shrinking, and customer reach has fallen by 5% and 22% respectively. The cost of serving customers through traditional branches ($1.80) was found to be more than 30 times higher than through open digital channels ($0.05). At the same time, the main factors hindering the management of customer behavior in the Open Banking environment [8] are presented in Table 2.

Table 2.

Main barriers to developing service channels in the Open Banking environment

No.	Barrier	Description
1	Cybersecurity and proven trust	Customers' fear of cyber risks and data leaks when sharing their financial data with third-party applications.
2	Digital literacy gap	Younger and technologically active customers make full use of Open Banking, while older customers continue to prefer traditional channels.
3	Fragmented user experience (UX)	No unified design and security standard across different bank and FinTech applications.

Conclusion. The practical analysis of bank customer behavior and service delivery channels in the Open Banking environment led to the following conclusions. First, multi-banking, demand for real-time 24/7 service, and the need for personalized products are growing in customer behavior; as a result, the share of transactions made through Open API applications has reached 52%. Second, as shown in the international literature [7], Open API interfaces make it possible to reduce operating and transaction costs; the practical analysis likewise confirmed that serving customers through traditional branches is more than 30 times more expensive than through open digital channels. Third, cybersecurity, the digital literacy gap, and fragmented user experience prevent the full use of Open Banking opportunities.

Therefore, the following is recommended for banks. First, develop a hybrid and omnichannel model, that is, transform bank branches from traditional cash desks into digital centers providing complex consulting and B2B services. Second, increase the transparency of consent management (Consent Management) [8], that is, make it possible in bank mobile apps to see in one tap which FinTech application a customer has shared which data with, and to revoke it. Third, establish personalized API monetization, that is, analyze customer behavior using Big Data and artificial intelligence and offer tailored financial products through API interfaces.

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