Czech University of Life Sciences Prague

Faculty of Economics and Management

Department of Economics

Bachelor Thesis

Adoption of Online Banking Services in Kazakhstan

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CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

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BACHELOR THESIS ASSIGNMENT

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Business Administration

Thesis title

Adoption of Online Banking Services in Kazakhstan

Objectives of thesis

The primary objective of this thesis is to examine the factors influencing the adoption of online banking services in Kazakhstan. Specifically, the study aims to: Analyze the current state and development trends of online banking in Kazakhstan. Identify key drivers and barriers affecting customers' adoption of online banking services. Evaluate the role of demographic, technological, and cultural factors in shaping consumer behavior. Assess the impact of trust, security, and convenience on the acceptance of online banking. Provide recommendations for banks and policymakers to increase adoption and improve customer experience.

Methodology

The thesis will adopt a mixed-methods approach, combining both quantitative and qualitative research methods: Literature Review: An overview of global and regional studies on online banking adoption, with a focus on developing economies and Kazakhstan. Survey Research: A structured questionnaire will be distributed among banking customers in Kazakhstan to collect primary data on their usage patterns, perceptions, and challenges. Interviews: Semi-structured interviews with bank representatives and financial technology experts to gain insights into industry perspectives. Data Analysis: Quantitative data will be analyzed using statistical tools (e.g., correlation and regression analysis) to test hypotheses on adoption factors. Qualitative responses will be coded and thematically analyzed. Comparative Analysis: Kazakhstan's adoption trends will be compared with other Central Asian and emerging market economies to identify similarities and differences.

The proposed extent of the thesis

40-60 pages

Keywords

Online banking, Kazakhstan, adoption, consumer behavior, financial technology, trust, digital banking, Central Asia

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Recommended information sources

Al-Somali, S. A., Gholami, R., & Clegg, B. (2009). An investigation into the adoption of online banking in Saudi Arabia. Technovation, 29(2), 130–141. https://doi.org/10.1016/j.technovation.2008.07.004

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Declaration

I declare that I have worked on my bachelor thesis titled "Adoption of Online Banking Services in Kazakhstan" by myself and I have used only the sources mentioned at the end of the thesis. As the author of the bachelor thesis, I declare that the thesis does not break any copyrights.

In Prague on 15.03.2026 _____

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Adoption of Online Banking Services in Kazakhstan

Abstract

This bachelor thesis examined the factors influencing the adoption of online banking services in Kazakhstan. It aimed to identify the main drivers and barriers of adoption, assess the role of demographic and technological factors, and evaluate the importance of trust, security, and convenience. The research combined a theoretical review with a mixed-method empirical analysis. Quantitative data were collected through a questionnaire survey among consumers in Kazakhstan, while qualitative insights were obtained from two semi-structured interviews conducted in Russian via Google Meet in February 2026. The findings showed that online banking had become a well-established service, especially among younger and middle-aged users. The main drivers were app functionality, speed, and convenience, while the main barriers were security concerns, lack of trust, and preference for personal interaction. The thesis concluded that further growth depended on usability, customer confidence, and inclusive digital services.

Keywords: online banking, Kazakhstan, adoption, consumer behavior, financial technology, trust, digital banking, Central Asia

Přijetí služeb Online bankovnictví v Kazachstánu

Abstrakt

Tato bakalářská práce zkoumala faktory ovlivňující adopci služeb internetového bankovnictví v Kazachstánu. Jejím cílem bylo identifikovat hlavní faktory podporující i omezující využívání těchto služeb, posoudit roli demografických a technologických faktorů a zhodnotit význam důvěry, bezpečnosti a pohodlí. Výzkum spojil teoretickou část se smíšeným empirickým přístupem. Kvantitativní data byla získána prostřednictvím dotazníkového šetření mezi spotřebiteli v Kazachstánu, zatímco kvalitativní poznatky poskytly dva polostrukturované rozhovory vedené v ruštině přes Google Meet v únoru 2026. Výsledky ukázaly, že internetové bankovnictví se již stalo běžnou službou, zejména mezi mladšími a středně věkovými uživateli. Hlavními faktory adopce byly funkčnost aplikace, rychlost a pohodlí, zatímco hlavní bariéry představovaly bezpečnostní obavy, nedostatek důvěry a preference osobního kontaktu.

Klíčová slova: online bankovnictví, Kazachstán, přijetí, spotřebitelské chování, finanční technologie, důvěra, digitální bankovnictví, Střední Asie

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1 Introduction

The rise of online banking services has become a significant topic in today's finance sector. Digital technologies are changing how people manage money, communicate with banks, and access financial services. In many countries, online banking is no longer an extra option; it is now a standard part of daily banking. It offers customers speed, convenience, flexibility, and constant access to their accounts. However, the adoption rate varies greatly between countries and social groups. This makes the issue especially important for economies undergoing rapid digital changes. Kazakhstan stands out in this context. Over the past decade, the country has made noticeable progress in building digital infrastructure, financial technologies, and banking innovations. Still, the growth of online banking does not rely solely on technology. It is also influenced by customer trust, security concerns, digital skills, personal habits, demographic traits, and the wider economic and cultural context. Hence, studying online banking adoption in Kazakhstan is valuable from both theoretical and practical perspectives. It helps us understand how consumers respond to financial innovations in a developing market and offers insights for banks, policymakers, and tech providers aiming to improve service quality, boost financial inclusion, and assist in modernizing the national banking system.

The main goal of this bachelor thesis is to explore the factors that influence the adoption of online banking services in Kazakhstan. To achieve this goal, the thesis focuses on several related objectives. First, it aims to examine the current state and recent trends of online banking in Kazakhstan, considering the broader changes in the banking sector and the increasing importance of digital services. Second, the thesis sets out to identify the key drivers and barriers that impact customers' willingness to use online banking. These may include perceived convenience, speed of transactions, ease of use, trust in digital systems, and concerns about privacy and cybersecurity. Third, the study assesses the role of demographic, technological, and cultural factors in shaping customer behaviors and attitudes toward online banking services. Another objective is to evaluate how trust, security, and convenience affect acceptance and regular use of online banking among customers. Finally, based on the research findings, the thesis aims to provide practical recommendations for commercial banks and relevant institutions to promote wider adoption, enhance customer

experience, and tackle the obstacles that still limit the use of online banking services in Kazakhstan.

To achieve these aims and objectives, the thesis employs a mixed-methods approach that combines quantitative and qualitative research techniques. The theoretical section relies on a literature review of international and regional studies related to online banking adoption, digital finance, and consumer behavior, focusing especially on developing economies and the Central Asian context. The empirical part includes a survey conducted with 100 banking customers in Kazakhstan who are over 18, designed to collect primary data on customer usage patterns, perceptions, preferences, and challenges linked to online banking. Additionally, semi-structured interviews gather expert views from a bank representative and a financial technology specialist to enrich the statistical findings with practical insights. The quantitative data is analyzed using statistical methods, including correlation and regression analysis, to examine relationships between various adoption factors. The qualitative data from interviews is interpreted through thematic analysis to identify common opinions and real-world concerns. A comparative perspective connects Kazakhstan's experience to wider trends in Central Asia. Through this methodological blend, the thesis aims to offer a thorough and balanced understanding of online banking adoption in Kazakhstan.

2 Objectives and Methodology

2.1 Objectives

The primary objective of this thesis is to examine the factors influencing the adoption of online banking services in Kazakhstan. Specifically, the study aims to: analyze the current state and development trends of online banking in Kazakhstan as the primary objective; identify key drivers and barriers affecting customers' adoption of online banking services; evaluate the role of demographic, technological, and cultural factors in shaping consumer behavior; assess the impact of trust, security, and convenience on the acceptance of online banking, and provide recommendations for banks and policymakers to increase adoption and improve customer experience.

2.2 Methodology

The thesis adopts a mixed-methods approach, combining both quantitative and qualitative research methods:

1) Literature Review: an overview of global and regional studies on online banking adoption, with a focus on developing economies and Kazakhstan, as well as the part addresses the theory behind the topic.

2) Questionnaire analysis: a structured questionnaire was distributed among 100 banking customers above 18 years old in Kazakhstan to collect primary data on their usage patterns, perceptions, and challenges.

3) Interviews: semi-structured interviews with 1 bank representative and financial technology expert to gain insights into industry perspectives.

4) Data Analysis: quantitative data is analyzed using statistical tools (e.g., correlation and regression analysis) to test hypotheses on adoption factors. Qualitative responses will be coded and thematically analyzed.

5) Comparative Analysis: Kazakhstan's adoption trends are compared with other Central Asian economies to identify similarities and differences.

3 Literature Review

3.1 Online Banking: History, First Adopters and the Current State

Online banking usually refers to the provision of banking services through digital channels. These channels allow customers to access accounts, transfer money, pay bills, monitor balances, and manage financial products without needing to visit a branch. While the term is often linked to the internet era, its origins date back further. Banking started to digitalize with electronic processing, card systems, and the spread of ATMs. A significant milestone occurred in 1967 when the first ATM was introduced in London, enabling customers to withdraw cash outside regular banking hours (Anesti, 2004). In the 1980s, banking became more accessible in homes with telephone and home banking solutions. By 1985, the Bank of Scotland had launched an early electronic home banking service. In 1994, Stanford Federal Credit Union introduced one of the first banking websites, marking a key shift toward internet-based banking. The following year, Security First Network Bank in the United States gained recognition as the first internet-only bank, proving that banking could operate through digital access instead of a traditional branch network (SCN Education BV, 2001).

The first users of online banking were in technologically advanced economies with high internet access, developed retail banking sectors, and customers comfortable with digital communication. Early adopters were typically younger or middle-aged urban professionals who valued time savings, flexibility, and quicker access to services. Banks had strong reasons to promote digital channels, as online transactions were cheaper to process than branch services and could ease the burden on physical networks. In the late 1990s, countries like the United States, the United Kingdom, Australia, and Sweden became clear examples of this shift (Vidal & Vidal-García, 2016). Reports from that time indicated that banks in Australia and Sweden were already competing for online customers. The internet channel was increasingly seen as a new area of retail banking strategy rather than just a trial. During this period, adoption relied on a favorable mix of household internet access, trust in digital systems, and familiarity with formal banking. Consequently, online banking initially spread in environments where both infrastructure and trust in institutions were relatively strong (Chang & Dutta, 2012).

A second major phase began with the rise of smartphones and mobile apps. If the 1990s made banking available through desktop internet access, the period after 2007 made digital banking constant, portable, and an integral part of daily life. The growth of smartphones, mobile internet, and app-based interfaces transformed online banking from an occasional service for specific transactions to a regular aspect of personal financial management (Sundaram et al., 2019). Customers could increasingly handle payments, transfers, budgeting, savings, and even loan applications from one device in real time. This change also shifted customer expectations. Users began to expect speed, intuitive design, personalization, instant notifications, and seamless integration with other digital services, rather than just comparing online banking with branch visits. Evidence from around the world shows that this change wasn't only in high-income countries. (Sundaram et al., 2019) The World Bank's Global Findex 2025 reports that 79 percent of adults globally had an account in 2024, while 61 percent of adults in low and middle-income economies made or received a digital payment that same year. This indicates that digital finance has moved beyond being a niche service used by a small segment of the population. It's now part of a larger change in the financial sector (Sabbaghi, 2025).

From a functional standpoint, online banking became attractive because it addressed several long-standing limitations of traditional banking. Digital channels lessen the importance of distance and business hours, speed up routine transactions, and often improve transparency by providing real-time visibility of balances, payment history, and service options. The World Bank's digital financial services framework outlines the main benefits of digital finance in terms of cost, speed, transparency, security, and convenience (Sabbaghi, 2025). Additionally, digitalization can promote wider financial inclusion when connected to enabling infrastructure like payment systems, digital identification, interoperable networks, and supportive regulations. In practice, online banking evolved from a simple information channel into a multifunctional platform. What used to mean checking a balance on a website now often includes peer-to-peer transfers, merchant payments, utility payments, government transactions, savings products, remote onboarding, biometric login, and customer support through chat or app services. For these reasons, the current concept of online banking is closely linked to a broader digital ecosystem, not just a single website or narrow service (Zhang et al., 2018).

The literature on online banking adoption usually explains customer behavior through a blend of technological, psychological, and socio-economic factors. Much research still draws from the Technology Acceptance Model, which highlights perceived usefulness and perceived ease of use. Simply put, customers are more likely to adopt digital banking if they believe it helps them manage their finances efficiently and if the interface is easy to understand (Zhang et al., 2018). However, later studies clarified that banking cannot be treated like a neutral technology product. Financial transactions involve money, privacy, and personal risk, which means trust and perceived security are more significant than in many other digital services. Recent comprehensive reviews indicate that trust, security, and concerns about cyber risks are vital factors in studying banking adoption. Other studies highlight accessibility, system reliability, cost, awareness, social influence, and digital literacy as important conditions affecting the intention to use. While the importance of these factors may vary by country, the overall trend remains stable: adoption increases when convenience and usefulness are high, and perceived risk is manageable (Barredo et al., 2024).

The current state of online banking is best described as mature but uneven. In many markets, it has become the main channel for everyday retail banking, yet this does not mean that adoption is universal or complete. There are significant gaps between urban and rural users, younger and older customers, digitally confident and digitally excluded groups, and countries with strong payment infrastructure versus those with weaker connectivity and institutional trust (Fenu & Pau, 2015). Digital expansion also brings new vulnerabilities. Cybersecurity threats, fraud, phishing, weak authentication, low digital financial literacy, and fragmentation among payment platforms can undermine confidence even within advanced systems. International organizations increasingly view the future of online banking as not just a technological issue but also one of governance, consumer protection, interoperability, and inclusion. In this sense, the current state of online banking shows a dual reality. On one hand, it's already a normal and often preferred channel for millions of customers. On the other hand, its broader and more stable adoption still hinges on trust, clear regulations, reliable infrastructure, and the ability of banks to create services that various groups can effectively use (Jana et al., 2021).

3.2 Online Banking in Central Asia: Overview

In Central Asia, online banking has developed alongside the global trend toward digital finance. However, the situation in the region varies significantly. The five countries - Kazakhstan, Uzbekistan, Kyrgyzstan, Tajikistan, and Turkmenistan - share some historical traits, such as their post-Soviet backgrounds and the ongoing need to upgrade financial systems. Yet, they differ greatly in income levels, internet access, market competition, banking depth, and regulation. Thus, online banking in Central Asia cannot be seen as a single regional model (Zokir, 2026). It is more accurate to view it as distinct national paths moving at different speeds. Recent work by the Asian Development Bank highlights key issues like digital payments, open banking, and updating regulations as crucial for the region. Stronger digital finance can foster trade, e-commerce, and financial inclusion, but the region still faces obstacles like uneven internet access, limited interoperability in some markets, and varying consumer confidence in digital financial tools (Mamadiyarov, 2024).

Kazakhstan stands out among Central Asian countries for its strong use of online banking. According to World Bank data from 2024, 87.0 percent of adults in Kazakhstan had an account. Additionally, 85.0 percent made or received digital payments in the past year, 70.1 percent completed a digital merchant payment, and 92.2 percent owned a personal mobile phone. Statistics from the National Bank of Kazakhstan show that this isn't just about having access; people are actively using these services (Mamadiyarov, 2024). By November 2025, internet and mobile banking accounted for 79.6 percent of non-cash transactions and 89.6 percent of their total volume (Begimkulov, 2025). An OECD report on mobile payments in Kazakhstan noted that cashless transactions had surged twenty-four times over the last five years, with internet and mobile banking dominating both transaction numbers and values. The widespread ownership of accounts, high mobile penetration, and everyday use indicate that online banking in Kazakhstan has progressed beyond basic adoption, becoming a normal aspect of daily economic activity (Ergasheva & Oltinov, 2025).

Uzbekistan follows a different but also significant path marked by rapid reform and growth. The World Bank's 2024 data says 87.3 percent of adults had an account, 81.2 percent had a digitally enabled account, and 95.4 percent owned a personal mobile phone. These figures suggest that Uzbekistan has the basic conditions for large-scale digital finance. The

banking sector is undergoing wide-ranging reforms aimed at modernization and increased competition (Ivanova & Kim, 2022). An EBRD report noted that over 2.4 million people in Uzbekistan accessed digital retail banking services thanks to improved digital offerings. This growth in online banking reflects not just a statistical trend but also ongoing changes in the banking sector. Essentially, Uzbekistan is shifting from building infrastructure to integrating digital channels into customer service and the broader modernization of finance (Mamadiyarov, 2024).

Kyrgyzstan occupies a middle position in the region's online banking landscape. Recent World Bank data shows that 72.3 percent of adults had an account in 2024, and 67.5 percent made or received a digital payment in the past year. Mobile access is relatively strong, with 96.0 percent of adults owning a personal mobile phone and 89.8 percent having a smartphone. These numbers indicate a solid technical foundation for digital finance (Begimkulov et al., 2024). However, the country's banking capacity and consumers' spending power lag behind Kazakhstan, which may explain why fewer people are using online banking services or seeking more advanced products. The Kyrgyz experience illustrates that digital adoption does not solely depend on national income. When mobile access is widespread, online banking can still grow fast, particularly for services like transfers, payments, and everyday finance. In a country with difficult geography and a significant reliance on remittances, mobile and online banking also help to minimize distance and transaction challenges (Begimkulov et al., 2024).

Tajikistan shows a more complex situation, illustrating that digital finance can develop even with stricter constraints. In 2024, 59.8 percent of adults had an account, and 57.1 percent made or received digital payments, according to World Bank data. However, smartphone ownership is significantly lower at just 15.6 percent, creating a bottleneck in the wider adoption of app-based banking. Notably, a large share of adults has a mobile money account, suggesting that digital financial activities might be growing through mobile-first channels rather than the traditional model of gradually moving online. The IFC's support for Alif Bank reflects this trend (Akhrorova, 2022). In 2021, the IFC announced efforts to expand remote access, digital onboarding, and tech-based financial services in Tajikistan, following regulatory changes that allowed for remote onboarding of low-risk products starting in 2020. This indicates that while Tajikistan's digital finance sector is still

developing, innovation is occurring through focused partnerships and mobile-oriented solutions rather than through uniform banking upgrades across the board (Akhrorova, 2022).

Turkmenistan is the least clear case among the region. Comparable public data is scarce, and the World Bank's Little Data Book on Financial Inclusion 2025 notes that Turkmenistan was not included in the 2024 dataset. This lack of data complicates cross-country comparisons and is itself significant. Where reliable data is lacking, it becomes harder to accurately assess adoption trends, barriers, and customer behavior. This makes it challenging to discuss Turkmenistan with the same detail as Kazakhstan, Uzbekistan, Kyrgyzstan, or Tajikistan (Durdieva et al., 2023). More broadly, the absence of comparable data highlights an important point for the entire region: digital finance is influenced not only by infrastructure and demand but also by the transparency of the financial system, regulatory openness, and the degree to which institutions share clear information about market trends.

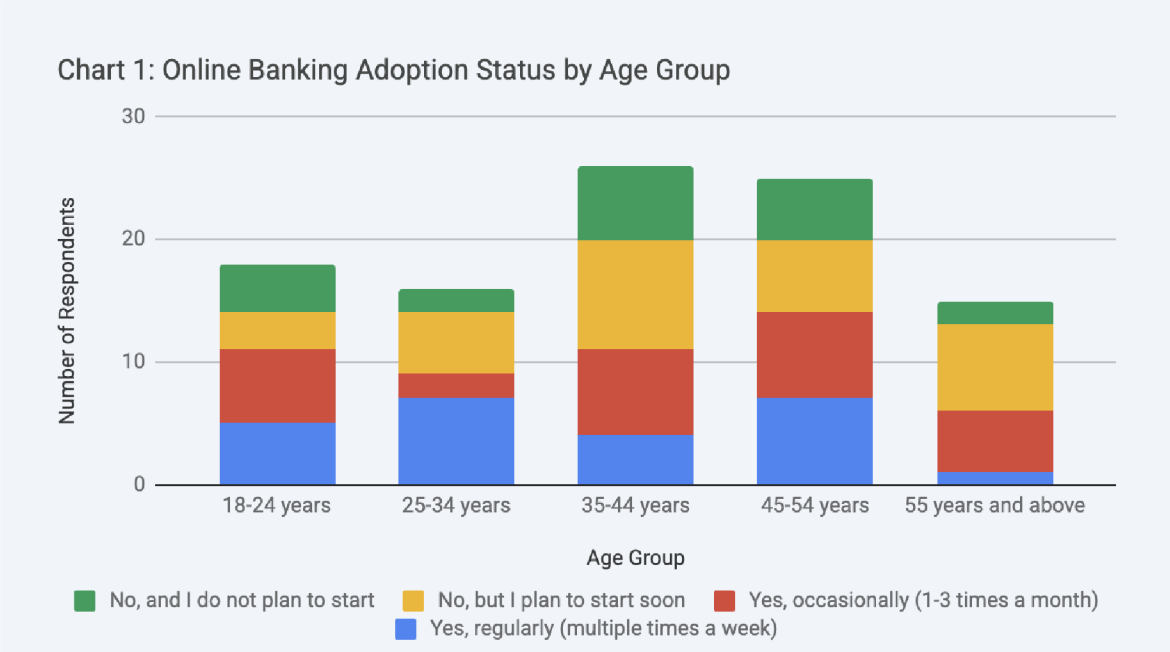
Overall, the Central Asian experience reveals both similarities and differences. All countries face common challenges, such as the digitalization of payments, mobile connectivity, the push to modernize financial services, and the growing relevance of non-cash transactions. Yet, they are at different stages. Kazakhstan shows widespread adoption and regular use, while Uzbekistan is rapidly reforming and scaling up. Kyrgyzstan illustrates how strong mobile access can drive significant digital uptake even in a lower-income context Ivanova & Kim, 2022). Tajikistan reflects a constrained but evolving mobile path. Turkmenistan remains the least visible case due to data gaps. For a study focused on Kazakhstan, this regional comparison is valuable. It situates Kazakhstan within a broader Central Asian context while showing that its relatively advanced digital banking environment is not simply a regional standard. Instead, it results from better infrastructure, greater customer engagement, and quicker institutional responses than are evident in much of the surrounding area (Ivanova & Kim, 2022).

4 Practical Part

4.1 Questionnaire Analysis

The questionnaire took place in February 2026, and Google Docs were used as the primary software for analyzing the responses. The responses were originally collected through Google Forms platform, and the respondents were engaged based on the snowball sampling. The sample is not representative, but it is balanced from the demographic perspective. The section provides the overview of the main questions, as well as the replies from the participants. Figure 1 shows the answers for the first question.

Figure 1. Chart 1.



Source: own analysis based on primary data

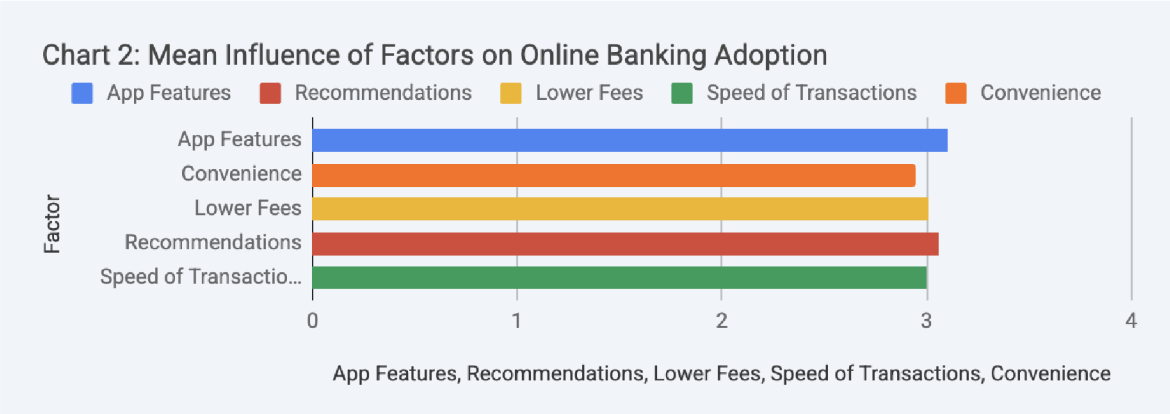
Figure 1 directly addresses the core thesis objectives of analyzing the current state of adoption and evaluating the role of demographic factors in consumer behavior. The bar chart illustrating Online Banking Adoption Status across different age segments provides foundational data on the penetration and distribution of digital financial services in Kazakhstan.

The current state of adoption is clearly segregated by age. Regular (multiple times a week) use is highest among the 25-34 years group and strong in the 18-24 and 45-54 age groups. This suggests that the primary key driver for this segment is likely convenience and familiarity with technology (a factor to be confirmed by Chart 2). Conversely, the 55 years and above demographic shows the lowest regular adoption rate, identifying age as a significant demographic barrier that contributes to market inertia.

However, the analysis also reveals a crucial aspect of the development trend. The 'No, but I plan to start soon' category is highest in the 35-44 and 55 years and above groups. This segment represents the market's immediate growth potential. Their current non-adoption is temporary, driven by a potential lack of knowledge or confidence rather than absolute resistance. This finding is critical for the thesis's recommendations, as it suggests that the market is still maturing and that targeted efforts like digital literacy training or simplified onboarding (which can also address the technological factor) will yield high returns in these groups.

Furthermore, the segment 'No, and I do not plan to start' identifies the most resistant users. This group is significant across all middle-aged segments, particularly the 35-44 and 45-54 groups. Their resistance is less likely to be purely technological and may be rooted in strong preference for traditional banking, a key cultural factor (Chart 6 will explore this), or deep-seated trust and security concerns (Chart 4). For the thesis, this chart not only confirms that age is a major determinant but also segments the non-adopters into addressable (plan to start) and highly resistant (no plan to start) groups, which is vital for providing specific, targeted recommendations. Figure 2 shows the second figure.

Figure 2. Chart 2.



Source: own analysis based on primary data

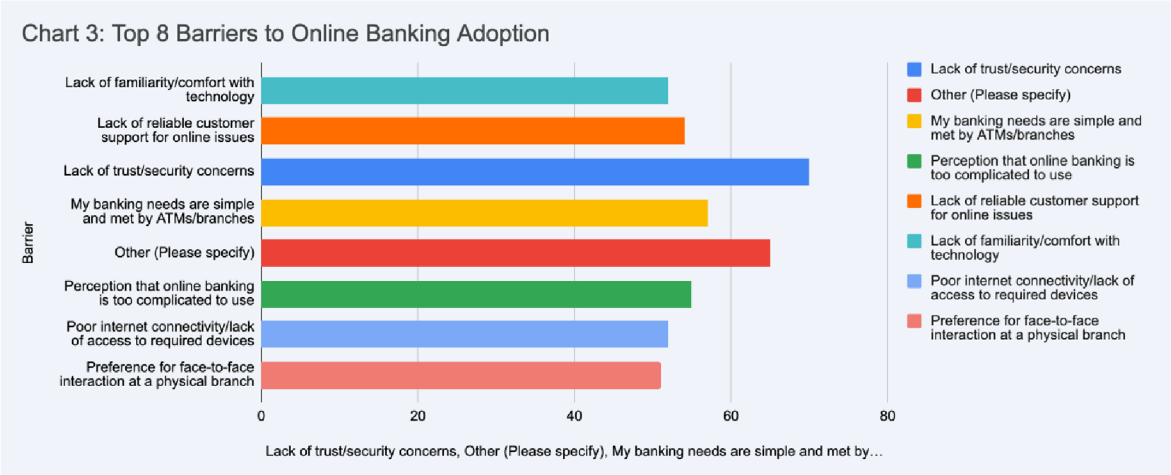
The results show that while all factors exhibit a moderate level of influence (mean ratings clustering around 3.0), the most powerful driver is App Features (Mean: 3.10). This finding strongly suggests that the technological factor—the quality, variety, and functionality of the mobile application or website—is the single most important element influencing a customer's decision to adopt the service. This goes beyond mere convenience; customers are not just seeking simple access, but rich, reliable functionality.

Following closely are Recommendations (Mean: 3.06), Lower Fees (Mean: 3.01), and Speed of Transactions (Mean: 3.00). The high ranking of Recommendations underscores the significant role of cultural factors and social proof in the adoption process, especially in a market like Kazakhstan where personal trust and peer validation can outweigh institutional marketing. The prominence of Lower Fees highlights the market's price sensitivity and the fact that economic advantage is a tangible driver. Finally, Speed is a critical component of the overall convenience and technological expectation.

The relatively lower influence of Convenience (Mean: 2.95), when compared directly to App Features and Speed, suggests that "Convenience" as a generic concept is less of a differentiating driver than the specific, functional aspects of the technology. For the thesis's recommendations, this data is actionable: banks should prioritize investment in feature development, app stability, and transaction speed over generic marketing of "anytime, anywhere" access. To significantly increase adoption and improve the customer experience,

the focus should be on rolling out features that provide tangible utility, such as advanced budgeting tools, digital loan applications, or seamless integration of multiple services, as these are the true key drivers the market responds to. Figure 3 shows the third chart.

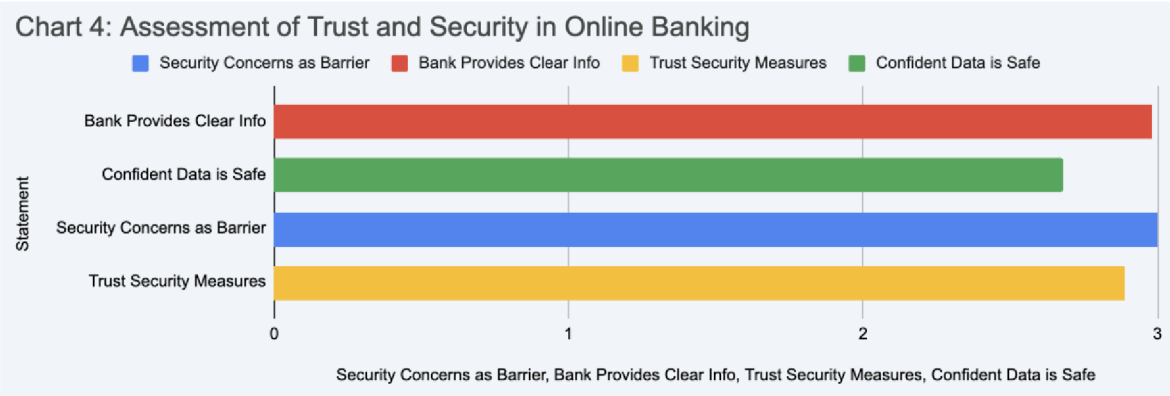
Figure 3. Chart 3.



Source: own analysis based on primary data

Figure 3 directly addresses the thesis objective of identifying key barriers affecting customer adoption of online banking. The data shows that the primary impediment, selected by 70 respondents, is Lack of trust/security concerns. This finding is critical for the objective of assessing the impact of trust and security, confirming it is the single greatest psychological hurdle to digital adoption in Kazakhstan. Closely following this is the segment whose My banking needs are simple and met by ATMs/branches (57 respondents) and those with a Preference for face-to-face interaction (51 respondents). These points highlight significant cultural factors and inertia against change. Furthermore, technological barriers such as Lack of familiarity/comfort with technology (52 respondents) and Perception that online banking is too complicated (55 respondents) remain influential. For thesis recommendations, the focus must shift from basic functional improvements to aggressive, transparent security communication and targeted digital literacy programs to dismantle these key technological, cultural, and trust-related barriers. Figure 4 continues to the fourth chart.

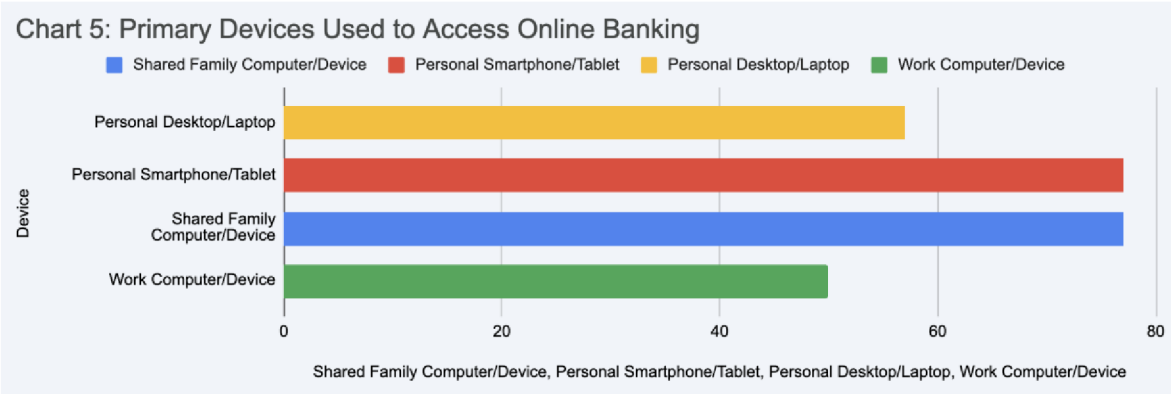
Figure 4. Chart 4.



Source: own analysis based on primary data

The mean agreement scores, measured on a 5-point scale (where 3.0 is neutral), indicate a general lack of strong conviction among respondents regarding the safety of digital banking. The statement "Security Concerns are a Barrier" scored the highest at 3.00, confirming that this anxiety is at the forefront of the consumer mind, neither overwhelmingly agreed upon nor dismissed. Crucially, agreement is lowest for "Confident Data is Safe" (2.68) and "Trust Bank Security Measures" (2.89). Scores below the neutral point of 3.0 signal a leaning toward disagreement, revealing a deficit in customer confidence regarding the actual safety of their data and the bank's protective systems. The moderate score for "Bank Provides Clear Security Info" (2.98) suggests that communication efforts are insufficient. For the thesis, these low trust scores highlight the single largest obstacle to increasing adoption, necessitating recommendations that prioritize transparent security protocols and enhanced customer education to bridge the confidence gap. Figure 5 continues to the fifth chart.

Figure 5. Chart 5.



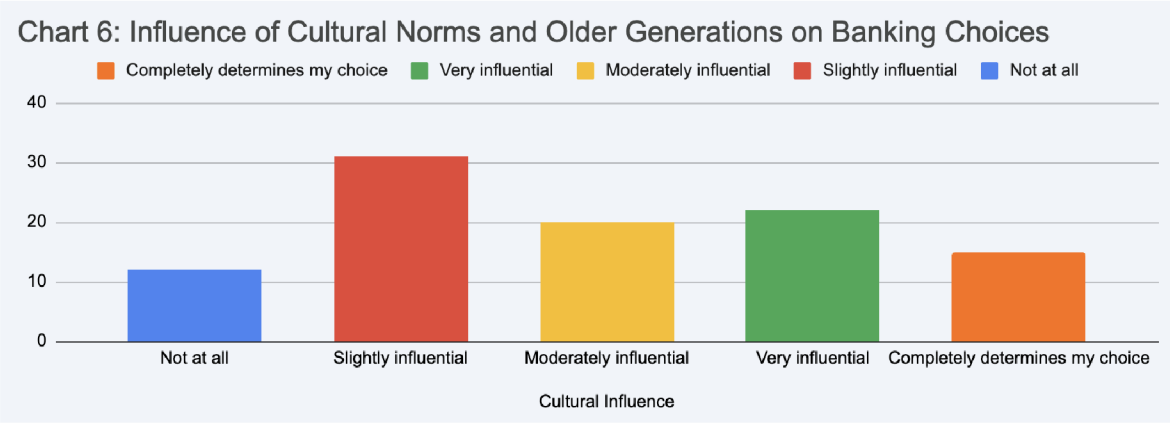
Source: own analysis based on primary data

The data clearly shows a strong preference for mobile access, with both Personal Smartphone/Tablet and Shared Family Computer/Device tied as the most frequently used devices (77 respondents each). The prominence of the smartphone confirms that convenience and the "always-on" nature of mobile technology are successful key drivers of adoption, establishing a primarily mobile-first context for online banking in Kazakhstan.

The high usage of a Shared Family Computer/Device (77 respondents) is a notable technological factor that carries potential implications for both security and user experience. While it facilitates access, it also introduces shared device risks, which ties directly back to the major barrier of "Lack of trust/security concerns" identified in Chart 3. Banks must ensure their security recommendations and two-factor authentication processes are robust and easily implemented even on non-personal devices to mitigate these shared access risks.

Conversely, traditional access via Personal Desktop/Laptop (57 respondents) and Work Computer/Device (50 respondents) is less frequent. This pattern validates the decision by financial institutions to focus resource allocation on mobile application development. For the thesis's recommendations, the implication is clear: technological investments should prioritize optimizing the mobile experience, ensuring app stability, and providing feature parity with website services. Furthermore, any technological recommendations must acknowledge and address the unique security challenge posed by shared device usage to bolster customer confidence and increase overall adoption. Figure 6 proceeds to the sixth chart.

Figure 6. Chart 6.



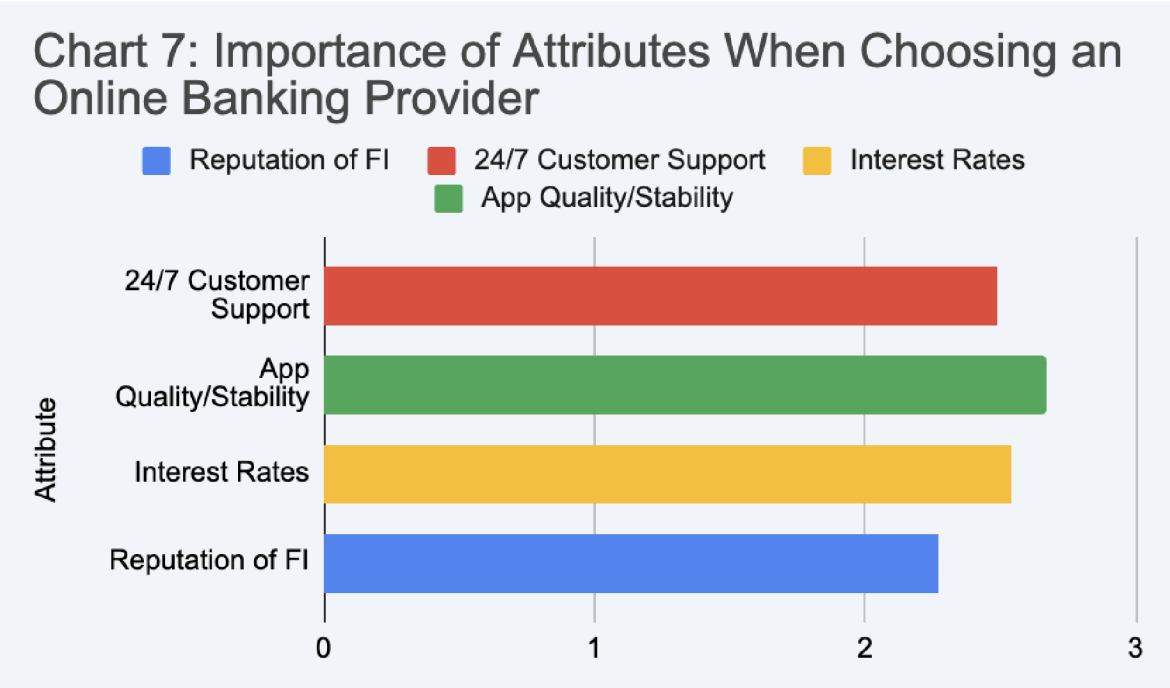
Source: own analysis based on primary data

The distribution of responses reveals that cultural influence, particularly advice from older generations, is a significant, yet nuanced, determinant of banking choices. The majority of respondents fall into the Slightly influential category (31 respondents), suggesting that while cultural norms are not dismissed, they primarily function as a soft, guiding force rather than an absolute rule. This confirms that modern consumers are open to new financial services, like online banking, but cultural wisdom remains part of the decision-making context.

However, a substantial minority report a much higher level of influence, with Very influential (22 respondents) and Completely determines my choice (15 respondents) collectively accounting for nearly 37% of the responses outside of the 'Not at all' group. This demonstrates a segment of the population where cultural and familial advice serves as a potent barrier to adoption, especially when that advice favors traditional, face-to-face banking methods (as seen in Chart 3). This segment is less likely to adopt purely on the merits of technology and requires a strategy that secures the endorsement of influential family members or community leaders. Conversely, the 12 respondents who selected Not at all represent the most digitally autonomous segment, whose banking behavior is purely dictated by technological drivers and personal convenience. For the thesis's recommendations, this data advocates for a dual strategy: marketing digital services that respect traditional values, such as emphasizing security and institutional stability, while also

providing educational materials targeted at family influencers to shift the cultural perception of digital banking to a safe and trusted option. Figure 7 continues to the seventh chart.

Figure 7. Chart 7.



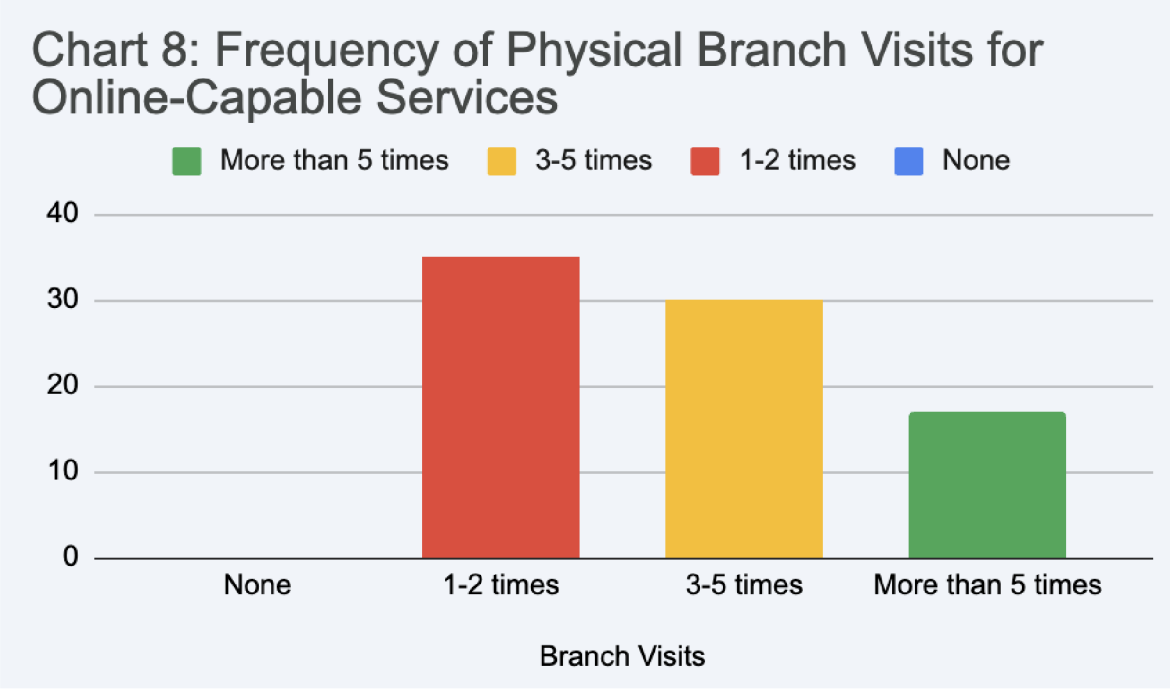
Source: own analysis based on primary data

The data is based on an inverse ranking scale, where a score closer to 1.0 indicates the highest level of importance. The most critical attribute influencing consumer choice is the Reputation of the Financial Institution (Mean Rank: 2.27). This finding powerfully links to the core barriers of trust and security identified in Charts 3 and 4; consumers prioritize institutional reliability and perceived stability above all else when choosing where to place their funds, suggesting that marketing must focus on legacy, credibility, and security protocols rather than just features.

The second and third most important factors, 24/7 Customer Support (Mean Rank: 2.49) and Interest Rates (Mean Rank: 2.54), highlight a dual need: reliable service when things go wrong and financial incentives. The high rank of 24/7 support indicates that users anticipate technical problems and need assurance that the technological factor (the app/website) is backed by human assistance, directly mitigating the technological barrier of complexity and unreliability. The least important attribute, App Quality/Stability (Mean Rank: 2.67), while

still important, ranks last. This suggests that while a good app is a prerequisite for a positive user experience (as seen in Chart 2), the Reputation and Support systems that underpin the app are the attributes that drive the initial provider selection. Recommendations must therefore focus on shoring up trust through visible institutional strength and robust support infrastructure, not just continuous feature releases. Figure 8 finalizes the visualization part with the eighth chart.

Figure 8. Chart 8.



Source: own analysis based on primary data

The question explicitly targets services that could be done online, making the visit frequency a direct measure of friction and incomplete digital adoption. The dominant response categories were '1-2 times' (35 respondents) and '3-5 times' (30 respondents), which together account for the majority of the non-fully digital user base. This indicates that a significant segment of the population in Kazakhstan still requires periodic physical interaction with their bank, primarily due to issues that digital channels have yet to fully resolve. These required branch visits are likely driven by the underlying barriers identified in Chart 3, such as a strong 'Preference for face-to-face interaction' or the inability of digital systems to handle complex or sensitive transactions that trigger the high trust and security concerns observed in Chart 4. The data suggests that while adoption is high (as seen in Chart

1), true digital migration is not complete, as frequent friction points force customers back into the branch. For the thesis, this highlights that the future development trend must focus on eliminating these remaining high-friction activities, perhaps by introducing enhanced digital identity verification or specialized remote consultation services, to fully realize the promise of seamless online banking and move these high-frequency visitors to zero. Table 1 continues to the overview of the correlations

Table 1. Correlation matrix.

Correlated Variable	Adoption_Score	Trust_Data_Safe	Inf_Features	Cultural_Influence
Influence Factors				
Inf_Convenience	0.08	-0.05	0.09	-0.16
Inf_Speed	0.08	0.1	-0.06	-0.08
Inf_Fees	-0.01	0.03	-0.02	0.02
Inf_Features	0.15	0	1.00	-0.08
Inf_Recommendations	-0.13	0.07	0.22	-0.11
Trust/Security Factors				
Trust_Security	-0.08	-0.3	-0.03	-0.02
Trust_Data_Safe	0.12	1.00	0	0.01
Trust_Barrier	0.02	0.04	-0.23	0.08
Trust_Clear_Info	-0.04	0.02	0	-0.09
Technological/Cultural				
UX_Rating	0.11	0.07	-0.14	0.12
Cultural_Influence	-0.07	0.01	-0.08	1.00
Importance (Rank)				
Rank_Reputation	-0.09	0.02	-0.23	0.13
Rank_App_Quality	-0.05	0.02	-0.02	0.07
Rank_Support	-0.13	0.02	0.06	0.13

Source: own analysis based on primary data

The analysis reveals statistical insights that confirm the dominance of technological and institutional factors in driving online banking adoption. The strongest positive relationship with overall adoption intensity is found with the degree to which a user is influenced by Features and functionality offered by the app. This solidifies the conclusion that functional

utility and a rich feature set are primary drivers for active usage, even more so than the general concepts of convenience or speed. A positive user experience rating is also consistently associated with higher adoption levels.

The data indicates a clear tension between technological excitement and security concerns. Individuals who are highly concerned that security is a major barrier are consistently less influenced by the attractiveness of new app features. This confirms that trust is a prerequisite: security anxieties must be mitigated before technological innovation can successfully attract and engage the customer. Furthermore, while a user's confidence that their personal data is safe is positively associated with higher adoption, this relationship is not as powerful as the influence of features, suggesting that security builds confidence but features drive usage.

A critical finding emerges from the analysis of institutional reputation. Users who place the highest importance on the Reputation of the Financial Institution are significantly less likely to be influenced by the presence of new app features. This highlights a key market segmentation where a large group of consumers prioritizes institutional stability, perceived safety, and legacy (a trust and cultural factor) over mere technological innovation. For this segment, the bank's brand trustworthiness is the primary factor for provider selection, and features are secondary.

Finally, Cultural Influence (the degree to which advice from older generations shapes banking choices) has a weak but inverse relationship with adoption intensity, reinforcing its role as a subtle source of market inertia. This cultural factor is also associated with a lower perceived value of Convenience in digital banking, indicating that this traditional segment prefers the reliability and personal touch of physical branches over the efficiency of the online channel. The subsequent section continues to the semi-structured interviews.

4.2 Semi-Structured Interviews

To complement the questionnaire analysis, two semi-structured interviews were conducted in Russian in February 2026. These interviews were carried out via Google Meet, using convenience sampling. One interview featured a representative from a commercial bank, while the other involved a financial technology expert. The aim of these interviews

was to offer a practical view from the industry regarding the adoption of online banking services in Kazakhstan and to enhance the understanding of the quantitative findings presented earlier. The interview records are included in the supplementary materials of the thesis and serve as a crucial qualitative part of the research.

The interviews revealed a clear agreement that online banking in Kazakhstan has already developed significantly, especially in urban areas and among younger and middle-aged customers. Both participants described digital banking as a common channel rather than a niche service. From the bank representative's point of view, mobile applications have become the main way for many clients to connect, as users increasingly depend on them for checking balances, making transfers, paying bills, managing deposits, and contacting support. The fintech expert also noted that the market has progressed beyond the early stages of digitalization into a more developed phase where customers expect a fast, intuitive, and mobile-first experience. This aligns with the questionnaire analysis findings, which showed high online banking usage among active adult users.

At the same time, both interviews highlighted that adoption varies across the population. The bank representative mentioned that older customers, people with low digital confidence, and some users in less connected regions still rely more on branches and ATMs. The fintech expert added that having technical access alone does not ensure effective usage. A customer may own a smartphone and have internet access but might still lack the confidence to use digital services on their own. This observation backs up the questionnaire findings that pointed out technological discomfort, habit, and a preference for face-to-face interaction as ongoing obstacles to wider online banking adoption. The qualitative responses suggest that the main challenge in Kazakhstan is not just access to digital banking, but also the ability and willingness to use it regularly and confidently.

A significant theme in both interviews was the importance of trust and security. The bank representative described trust as the foundation of digital usage, arguing that customers deal with sensitive matters like salaries, savings, loans, and personal data when using online banking. The fintech expert shared a similar view, explaining that trust operates on various levels: trust in the institution, trust in the technology itself, and trust in the support process when something goes wrong. These sentiments closely match the questionnaire results,

where lack of trust and security concerns stood out as major barriers to digital adoption. The interviews also shed light on this pattern. Security in banking is not just a technical issue; it is also psychological. Even with well-protected systems, adoption may stay limited if users do not fully grasp the safeguards or do not feel secure when using the service.

Another shared idea in the interviews concerned the key factors driving adoption. Both participants noted convenience, speed, and practical functionality as the main reasons customers turn to online banking. However, the fintech expert made a crucial distinction, pointing out that the concept of convenience alone isn't enough. Customers respond more favorably to specific useful functions like instant transfers, card controls, budgeting tools, and easy access to savings or credit products. The bank representative emphasized that applications should be straightforward, stable, and relevant to daily needs. This view strongly supports the questionnaire findings, where app features and functionality ranked as major factors in promoting online banking usage. It suggests that future development in Kazakhstan will rely less on basic digital access and more on the practical quality of digital services.

The interviews also underscored the ongoing importance of physical branches. Although both participants agreed that routine transactions increasingly occur online, they did not consider branches outdated. The bank representative stated that branches are still vital for complex issues, legal procedures, identification, and providing reassurance to customers. The fintech expert explained that many customers associate branches with safety, seriousness, and human responsibility. This aspect is important because it shows that digital banking is not merely replacing traditional banking; it is transforming the role of the branch. In the context of Kazakhstan, the future seems to be hybrid, with online channels managing daily operations while branches focus more on consultation, trust-building, and support for sensitive or complicated services.

5 Results and Discussion

The results of the practical part clearly answer the main research question, which was to investigate the factors that affect the use of online banking services in Kazakhstan. Evidence from both the questionnaire and the semi-structured interviews shows that online banking is well established in Kazakhstan, especially among younger and middle-aged users, but its adoption varies among different customer groups. The survey indicated that online banking is used fairly often, and the interviews confirmed that it has become a normal part of daily financial activity for many customers, rather than just a niche service. This finding aligns with existing literature, which notes that online banking is a mature service but still unevenly adopted, shaped by differences in access, confidence, and trust in institutions (Fenu & Pau, 2015; Jana et al., 2021). In the regional context, the findings support the view that Kazakhstan is ahead in Central Asia due to its relatively strong digital infrastructure and high level of non-cash transactions (Mamadiyarov, 2024; Begimkulov, 2025).

The first research question looked at the current state and development trends of online banking in Kazakhstan. Practical findings suggest that the country has moved beyond the early adoption stage and entered a more advanced phase where customers expect online banking to be fast, practical, and mobile-friendly. The questionnaire results showed regular use, particularly among active age groups. Interviews highlighted that mobile applications have become the primary way many users interact with their banks. However, some customers still visit branches for services that could be processed online, indicating that the shift to digital is not yet complete. This is consistent with literature, which shows that the current state of online banking worldwide is influenced not only by access but also by how well institutions can replace traditional processes with reliable digital options (Zhang et al., 2018; Sabbaghi, 2025). The findings also fit into the broader Central Asian discussion, where Kazakhstan is considered relatively advanced, though full adoption is not universal (Mamadiyarov, 2024; Ergasheva & Oltinov, 2025).

The second research question focused on the main drivers and barriers to adopting online banking services. The practical findings reveal that the strongest drivers include app features and functionality, advice from others, transaction speed, and lower fees. The main barriers are trust and security issues, a preference for face-to-face interaction, technological

discomfort, and the belief that online banking is too complicated. This result shows that customers do not simply adopt digital banking because it is available; they do so when it clearly adds value to their daily financial lives. Interviews reinforced this by pointing out that convenience alone is not enough; users are more drawn to specific features like instant transfers, card control, simple payments, and effective support. These results align with literature arguing that adoption is influenced by perceived usefulness and ease of use, along with trust, reliability, and digital skills (Zhang et al., 2018; Barredo et al., 2024). Therefore, the findings confirm that Kazakhstan follows international trends, although social recommendations and cultural habits play a particularly visible role here.

The third research question explored how demographic, technological, and cultural factors shape consumer behavior. Findings indicate that age is a significant dividing factor, with younger and middle-aged groups being more active in online banking, while older respondents are slower to adopt or prefer traditional channels. Technological factors also play a key role, especially the quality of mobile applications, perceived ease of use, and access via smartphones and shared devices. Cultural factors were less influential, but still relevant due to the impact of older generations and the continued value placed on in-person contact. This suggests that not adopting online banking is not just a technical issue; it is also related to habits, social norms, and how traditional banking is perceived. These findings align with literature showing that online banking adoption varies across age groups and that social environment, digital skills, and user confidence all shape behavior (Chang & Dutta, 2012; Ivanova & Kim, 2022). The results support the idea that in countries undergoing change, adoption is influenced not only by technology but also by broader social and cultural conditions (Mamadiyarov, 2024).

The fourth research question examined how trust, security, and convenience affect the acceptance of online banking. Among these, trust and security emerged as critical issues. The questionnaire revealed only moderate confidence in data safety and banking security measures, with security concerns identified as the top barrier overall. The interviews added depth by showing that trust operates on different levels: trust in the institution, trust in the technology, and trust in the support available when problems arise. This helps explain why some customers with access to digital tools might still limit their online banking use. While convenience matters, results suggest that it does not outweigh concerns about security. This

supports the literature arguing that banking differs from many other digital services because it involves money, privacy, and risk, making trust vital for adoption (Sundaram et al., 2019; Barredo et al., 2024). The findings also reflect the idea that online banking adoption increases when perceived usefulness is high and perceived risk is low, but declines if security worries remain unresolved (Jana et al., 2021; Zhang et al., 2018).

The final research question addressed what banks and policymakers can do to increase adoption and improve customer experience. Based on the results, the best recommendation is not just to expand access to online banking but to enhance the quality, clarity, and inclusivity of digital banking services. The practical findings suggest that banks should invest in stable mobile applications, useful everyday features, clearer onboarding, better customer support, and improved communication about security. Educational resources may also be helpful, especially for customers with lower digital skills. Additionally, the findings suggest that physical branches will remain relevant for complex transactions, indicating that Kazakhstan's future banking model is likely to be a mix of both digital and branch services. This conclusion aligns with literature emphasizing that the future of online banking depends not just on technology but also on governance, inclusion, customer protection, and institutional trust (Sabbaghi, 2025; Jana et al., 2021).

6 Conclusion

The purpose of this thesis was to explore the factors that influence the adoption of online banking services in Kazakhstan. It aimed to understand how demographic, technological, and behavioral variables shape consumer attitudes and usage patterns. Specifically, the thesis sought to identify the current state and trends of online banking in Kazakhstan. It also aimed to determine the main drivers and obstacles affecting its adoption. Additionally, the research assessed the role of demographic, technological, and cultural factors in consumer behavior. It evaluated how trust, security, and convenience impact customer acceptance. Lastly, it aimed to provide practical recommendations for banks and policymakers who want to improve digital banking adoption and customer experience.

To meet these goals, the thesis combined theoretical and practical approaches. The theoretical section reviewed the growth of online banking, key concepts related to digital financial services, and existing academic discussions on consumer adoption, trust, perceived usefulness, security, and digital behavior. The practical part relied on primary research using a mixed-method approach. Quantitative data were collected through a questionnaire survey targeting consumers in Kazakhstan. Qualitative data were gathered through two semi-structured interviews conducted via Google Meet in February 2026 in Russian, using convenience sampling. One interview involved a bank representative, while the other involved a financial technology expert. This combination of methods allowed for a comparison between numerical trends and practical insights, helping to interpret the findings in a broader context.

The thesis found that online banking had become an important and frequently used part of financial life in Kazakhstan. This was especially true for younger and middle-aged users. The findings indicated that the country had progressed beyond the early stage of digital banking and had entered a more mature phase. Customers began to expect speed, simplicity, and practical digital functions. However, adoption was not uniform across all groups. Older customers, users who felt less confident with technology, and individuals who preferred traditional communication continued to rely more on branches and face-to-face service.

The research identified key drivers of adoption, including practical app features, quick transactions, convenience, and the ability to manage daily financial tasks efficiently. Respondents saw value in online banking not just because it was modern, but because it saved time and offered real benefits in daily life. In contrast, the main barriers included concerns about trust and security, a preference for personal contact, and uncertainty about how to use digital banking tools correctly. This indicated that adoption depended on not only technical availability but also customer confidence and perceived safety.

Another significant finding was that demographic and behavioral differences strongly influenced adoption patterns. Age was a clear dividing factor, while comfort with technology and regular use of mobile devices also played a crucial role. Cultural and social habits were less influential than technological and trust-related factors, yet they still mattered, particularly regarding the ongoing symbolic importance of branches and personal support. These results suggested that the adoption of online banking in Kazakhstan was shaped by a mix of utility, routine, risk perception, and institutional confidence.

The interviews reinforced and expanded on the findings from the questionnaire. They confirmed that online banking had become a standard service channel rather than a specialized one. However, they also highlighted that trust remained central to wider adoption. The qualitative evidence indicated that trust operated on several levels: trust in the bank, trust in the digital system, and trust in the resolution of potential issues. This helped explain why some consumers still hesitated, even when digital services were readily available.

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8 Supplementary Materials

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8.3 List of abbreviations

ATM	Automated Teller Machine
OECD	Organization for Economic Cooperation and Development
EBRD	European Bank for Reconstruction and Development
IFC	International Finance Corporation

List of appendices

Questionnaire

1. **What is your current age group?**
    - 18-24 years
    - 25-34 years
    - 35-44 years
    - 45-54 years
    - 55 years and above
2. **What is your highest level of education completed?**
    - High School Diploma or equivalent
    - Vocational/Technical School
    - Bachelor's Degree
    - Master's Degree
    - Doctorate (Ph.D.) or equivalent
    - Other
3. **What is your current employment status?**
    - Employed full-time
    - Employed part-time
    - Self-employed
    - Student
    - Homemaker
    - Unemployed
    - Retired
4. **Do you currently use online banking services (via website or mobile app)?**
    - Yes, regularly (multiple times a week)
    - Yes, occasionally (1-3 times a month)
    - No, but I plan to start soon
    - No, and I do not plan to start
5. **If you use online banking, which services do you utilize? (Select all that apply)**
    - Checking account balance/statements
    - Transferring money between own accounts
    - Transferring money to other accounts (within Kazakhstan)
    - Bill payment (utilities, mobile, internet)
    - International money transfers

- Applying for loans or credit cards
- Managing investments/deposits
- Other (Please specify)

6. **Please rate the following factors based on how strongly they influence your decision to use online banking services (1=Not at all influential, 5=Extremely influential).**
    - [Convenience (access anytime, anywhere)]
    - [Speed of transactions]
    - [Lower transaction fees compared to physical branches]
    - [Features and functionality offered by the app/website]
    - [Recommendations from friends/family]
    - *Scale: 1 (Not at all influential) to 5 (Extremely influential)*
7. **Please rate your level of agreement with the following statements regarding Trust and Security in online banking (1=Strongly Disagree, 5=Strongly Agree).**
    - [I trust the security measures implemented by my bank for online transactions.]
    - [I am confident that my personal and financial data are safe when using online banking.]
    - [Security concerns (e.g., fraud, hacking) are a major barrier to me using online banking.]
    - [My bank provides clear information on how to protect myself from online threats.]
    - *Scale: 1 (Strongly Disagree) to 5 (Strongly Agree)*
8. **How would you rate the overall user experience and ease of use of your online banking service?**
    - *Scale: 1 (Very Poor) to 10 (Excellent)* (Inferred from sample data)
9. **If you DO NOT use online banking (or use it rarely), what are the main reasons? (Select all that apply)**
    - Lack of trust/security concerns
    - Lack of familiarity/comfort with technology
    - Preference for face-to-face interaction at a physical branch
    - High transaction fees or hidden costs
    - Poor internet connectivity/lack of access to required devices
    - Perception that online banking is too complicated to use
    - My banking needs are simple and met by ATMs/branches
    - Lack of reliable customer support for online issues
    - Other (Please specify)
10. **To what extent do you feel cultural norms or advice from older generations influence your banking choices?**
    - Not at all

- Slightly influential
- Moderately influential
- Very influential
- Completely determines my choice

11. **What would encourage you or your peers to use online banking more frequently? (e.g., better security, training, incentives, etc.)**
    - *Open-ended text field.*
12. **How would you rate your bank's current online banking service (mobile app/website)?**
    - *Scale: 1 (Very Poor) to 5 (Excellent)* (Inferred from sample data)
13. **Which financial institution's online banking service do you primarily use?**
    - *Open-ended text field.*
14. **In the last 6 months, how many times have you needed to visit a physical bank branch for a service that could potentially be done online?**
    - None
    - 1-2 times
    - 3-5 times
    - More than 5 times
15. **If training or educational resources about online banking were provided by your bank, how likely would you be to use them?**
    - *Scale: 1 (Very Unlikely) to 5 (Very Likely)* (Inferred from sample data)
16. **Which devices do you primarily use to access online banking services?**
    - Personal Smartphone/Tablet
    - Personal Desktop/Laptop
    - Work Computer/Device
    - Shared Family Computer/Device
17. **If you had a technical issue with online banking, how would you prefer to receive support?**
    - Phone call to customer service
    - Live Chat support within the app/website
    - Email support
    - Through social media platforms
    - In-person visit to a physical branch
18. **Please rank the importance of the following attributes when choosing an online banking provider (1 = Most Important, 4 = Least Important):**
    - [Reputation of the Financial Institution]
    - [Quality/Stability of the mobile application]
    - [Interest rates on deposits/loans]

- [Availability of 24/7 customer support]
- *Scale: 1 (Most Important) to 4 (Least Important)*

Semi-Structured Interviews

First interview (Azamat)

Question: How would you describe the current level of online banking adoption in Kazakhstan from the perspective of a commercial bank?

Answer: Online banking has already become a normal part of everyday banking for a large share of customers in Kazakhstan, especially in urban areas and among younger and middle-aged users. For many clients, the mobile application is now the main point of contact with the bank. They use it not only to check balances or transfer money, but also to pay bills, manage cards, open deposits, and communicate with support. At the same time, adoption is not equally strong across all customer groups. Older clients, people with lower digital confidence, and some customers in less connected areas still rely more on branches or ATMs. So, from our perspective, the market is quite advanced, but there is still room for broader and more balanced adoption.

Question: What are the main reasons why customers choose to use online banking services?

Answer: The first and most obvious reason is convenience. Customers want to solve financial issues quickly without visiting a branch and without depending on working hours. Speed is also very important. People expect to make transfers, pay for services, or block a card within seconds. Another reason is the growing range of available features. If the application provides a full set of useful functions, customers are much more likely to stay active in the digital channel. We also see that online banking becomes part of lifestyle expectations. Many people simply consider digital access to be the standard level of service. In addition, lower friction in routine operations often increases customer satisfaction and makes the relationship with the bank more stable.

Question: What barriers still prevent some customers from adopting online banking in Kazakhstan?

Answer: The most serious barrier is still trust. Even when systems are technically secure, some users remain afraid of fraud, data theft, or making mistakes during transactions. Another barrier is low digital literacy. Some clients do not feel comfortable installing applications, managing passwords, or understanding how different online functions work. There is also a behavioral barrier. A number of customers, especially from older generations, are used to face-to-face contact and feel more confident when they speak to a bank employee in person. Finally, there are practical barriers such as unstable internet access or limited familiarity with smartphones in certain groups. These barriers do not affect everyone equally, but together they still slow full adoption.

Question: How important are trust and security for the development of online banking?

Answer: They are absolutely central. In banking, customers are dealing with their salary, savings, loans, and private personal information. Because of that, trust is not just one factor among many, it is the basis for digital usage. If a client feels uncertain about data protection or fears unauthorized access, they may limit their use of the application or avoid online banking completely. For this reason, banks need not only strong security systems, but also clear communication. Customers need to understand what protections are in place, how to use them, and what to do if something suspicious happens. In practice, security has both a technical and a psychological side. The technology may be strong, but if the customer does not feel safe, adoption will still suffer.

Question: In your view, what features or improvements most strongly encourage wider use of online banking?

Answer: Users respond best when the application is simple, stable, and genuinely useful. A clean interface matters because customers do not want to spend time learning a complicated system. Beyond that, practical features make a big difference, for example instant card management, fast transfers, bill payments, deposit opening, loan applications, spending analytics, and notifications. Good support is also important. If a customer faces a problem and receives quick help through chat or hotline, confidence grows. Another useful improvement is better onboarding for less experienced users. Step-by-step guidance, short explanations, and educational content can reduce hesitation. In my opinion, adoption rises when digital banking feels not only modern, but also easy, reliable, and relevant to everyday needs.

Question: Do you think physical branches still play an important role, even with the growth of digital banking?

Answer: Yes, definitely. Digital banking is expanding fast, but branches still remain important for certain services and for certain customer groups. Complex issues, sensitive consultations, some identification procedures, and cases involving legal documentation are often easier to handle in person. Branches also matter for customers who need reassurance and personal explanation. I do not think the future is purely branchless. More realistically, the system is becoming hybrid. Routine transactions move online, while branches focus more on advisory, problem-solving, and relationship-based services. In that sense, online banking does not completely replace the branch, but it changes the role of the branch.

Question: How do you see the future of online banking adoption in Kazakhstan over the next few years?

Answer: I expect adoption to continue growing, but the next stage will be less about basic access and more about quality, personalization, and trust. Most active customers already have access to digital banking, so banks will need to compete through better user experience, more integrated services, and stronger customer support. I also think financial education will become more important, especially for groups that are still hesitant. At the same time, cybersecurity will remain a defining issue. As digital usage grows, customer expectations around protection and transparency will rise as well. Overall, I believe Kazakhstan has strong potential to deepen online banking adoption further, but success will depend on whether banks can combine innovation with reliability and customer confidence.

Second interview (Alikhan)

Question: How would you assess the development of financial technology and online banking in Kazakhstan today?

Answer: Kazakhstan is one of the more dynamic digital finance markets in the region. Over the last several years, customers have become much more comfortable with app-based payments, transfers, and other remote financial services. Online banking is no longer seen as an additional option for a narrow group of users. It has become a mainstream channel. What is especially interesting is that customers now expect more than simple remote access.

They want a fast, intuitive, mobile-first experience that fits into everyday digital life. This means that banks are not only competing with each other, but also with broader technology standards set by e-commerce, delivery, and platform services. In that sense, the market has moved from early digital adoption to a more mature phase where quality of experience matters a lot.

Question: From a fintech perspective, what are the main drivers of online banking adoption among customers?

Answer: The strongest driver is usefulness in real everyday situations. Customers adopt online banking when it saves time, reduces effort, and offers functions that are genuinely practical. Convenience alone is not enough as a vague idea. People want specific benefits, such as instant transfers, easy card control, fast payments, budgeting tools, or simple access to savings and credit products. Another important driver is interface quality. If the design is intuitive and the process is smooth, customers feel more confident using digital services. Social influence also matters. When friends, relatives, or colleagues actively use digital banking and speak positively about it, the barrier to entry becomes lower. So, in practice, adoption is driven by a mix of functionality, usability, and social normalization.

Question: What role does trust play when customers decide whether to use digital financial services?

Answer: Trust is critical because financial technology deals with risk in a very personal form. A customer may like the design of an app, but if they do not trust the provider or do not believe their money and data are safe, they will limit usage. Trust has several layers. One is institutional trust in the bank or service provider itself. Another is trust in the technology, meaning whether the customer believes the system will work correctly and securely. There is also trust in the support process, because users want to know that if something goes wrong, there will be a fast and fair response. In emerging and transition markets, this issue can be even more important because digital adoption is closely linked to general confidence in institutions. Without trust, innovation alone does not create lasting adoption.

Question: Why do some customers still prefer traditional banking channels instead of online banking?

Answer: There are several reasons. Some people still associate the physical branch with safety, seriousness, and human responsibility. They feel more secure when they can speak to a person directly, especially for important transactions. Others are not against digital banking in principle, but they worry that the process is too technical or that they might make a mistake. There is also a cultural dimension. Advice from older family members and long-standing habits can shape banking choices, especially in societies where personal recommendation carries strong weight. In addition, not all customers have the same level of digital confidence. A service may be technically available, but if the person does not feel capable of using it comfortably, adoption remains limited. So resistance is often not about rejecting technology entirely, but about uncertainty and habit.

Question: What weaknesses do you see in the current online banking environment that banks should address?

Answer: A common weakness is that many digital services are still built from the bank's internal logic rather than from the customer's perspective. Some applications include many features, but the navigation is not always simple, especially for first-time or less confident users. Another issue is that security communication is often too formal or too vague. Customers need practical explanations, not only technical statements. Support can also be improved. When users face a problem in the digital channel, the support experience becomes part of the product itself. Slow or unclear support damages trust very quickly. Finally, banks should pay more attention to inclusive design. A strong online banking system should not work only for experienced urban users. It should also be understandable for people with lower digital literacy and different behavioral habits.

Question: What measures could increase online banking adoption in Kazakhstan in the coming years?

Answer: I think progress will come from a combination of product development, education, and trust-building. On the product side, banks need to focus on stable mobile applications, simple flows, and functions that solve real problems. On the educational side, there should be more clear guidance inside the app and more visible support for users who are still unsure. Short tutorials, onboarding prompts, and practical security tips can be very effective. Trust-building is equally important. Banks need to communicate security measures in a way that is understandable and reassuring. They should also show that support is

accessible when something goes wrong. Beyond that, cooperation with the broader fintech ecosystem can help banks innovate faster and offer more flexible digital solutions.

Question: How do you see the future relationship between traditional banks and fintech solutions in Kazakhstan?

Answer: I do not see them as pure opponents. In many cases, the future will be based on interaction rather than direct replacement. Traditional banks have scale, customer bases, and regulatory experience, while fintech solutions often move faster and focus more sharply on user experience and innovation. The most successful institutions will probably be those that combine both strengths. For online banking adoption, this means customers will increasingly expect bank services to feel as simple and responsive as modern technology platforms. If banks continue to modernize their services and cooperate with technology providers where needed, Kazakhstan can deepen digital banking usage further. The long-term winner will not simply be the most digital institution, but the one that can create the most trusted and convenient financial experience for a broad range of users.