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CONTACTS

Phone: **97-748-70-03**

Website: <https://ist-journal.uz>

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DIGITAL BANKING: IS IT POSSIBLE TO OPEN A DIGITAL BANK IN UZBEKISTAN



Abdushukurov Dilshodbek Shovkat ugli

Management study program, faculty of Economics and Business Education, Universitas Pendidikan Indonesia and Tashkent state university of economics, abdushukurov@upi.edu



Dr Maya Sari SE MM

Faculty of Management study program, faculty of Economics and Business Education, Universitas Pendidikan Indonesia, Bandung, Indonesia) NIP Number: 197107052002122007 mayasari@upi.edu

Abstract: This study investigates the feasibility of launching a fully digital bank in Uzbekistan amid a national push for financial modernisation and increasing demand for accessible, tech-enabled financial services. Using a qualitative-descriptive approach, the research analyses performance indicators from Uzbekistan's banking sector, benchmarks against successful digital banks in peer economies, and evaluates policy reforms, demographic trends, and institutional agility. Findings reveal a widening gap between traditional banks and digital-native institutions, with the latter demonstrating superior profitability, scalability, and customer engagement. Uzbekistan's favourable demographic structure, characterised by a large working-age and middle-aged population, and regulatory openness indicate strong potential for digital banking development. However, the study also highlights challenges around cybersecurity, infrastructure, and digital trust. The paper concludes with policy recommendations and strategic insights for regulators, investors, and entrepreneurs seeking to capitalise on Uzbekistan's evolving financial landscape.

Key words: Digital Banking, Fintech, Institutional Agility, Middle-Aged Consumers, Financial Inclusion, Banking Reform, Cybersecurity, Regulatory Innovation.

INTRODUCTION

The global banking industry is in the midst of a digital revolution transforming how financial services are delivered, consumed, and regulated. Digital banking, characterised by the complete dematerialisation of banking services through digital infrastructure, has gained substantial momentum in both developed and developing markets. Countries across Southeast Asia, Latin America, and Sub-Saharan Africa have rapidly adopted digital banks, driven by technological advancements, regulatory evolution, and changing consumer expectations. These global shifts have inevitably influenced Uzbekistan, a country embarking on a wide-scale modernisation of its financial ecosystem.

Uzbekistan's banking sector currently comprises 35 commercial banks, a mix of large state-owned institutions and privately managed entities. Historically, the sector has been dominated by public banks, which accounted for over two-thirds of total assets as of 2023. Despite this dominance, the sector has seen major changes in recent years, including increased privatisation efforts, foreign investor interest, and reforms designed

to liberalise the financial market. Notably, the Uzbek government has announced a comprehensive strategy to digitise the economy, with the financial sector positioned at the core of this transformation.

However, despite these reforms, the majority of Uzbek banks still operate on legacy systems, with limited agility and capacity to adapt to evolving market expectations. Traditional branch-based service models remain dominant, even as customer demands increasingly shift toward digital experiences marked by speed, personalisation, and accessibility. The contrast between slow-moving traditional banks and agile, tech-savvy private players is becoming more pronounced. This has led to a widening performance gap, where digitally native banks are beginning to outperform their conventional peers, both in profitability and customer satisfaction metrics.

This study investigates the central research question: Is it possible to successfully launch a digital bank startup in Uzbekistan? To answer this, the research examines macroeconomic indicators, banking performance data, fintech adoption rates, and policy reforms that collectively shape the digital banking landscape. It also analyses successful models in peer economies—such as Brazil's Nubank, India's Paytm Bank, and Kenya's M-Shwari—to identify strategies that may be adapted to Uzbekistan's context.

Furthermore, the paper incorporates multi-stakeholder perspectives, including the roles of regulators, customers, banks, and technology providers. This comprehensive approach ensures a nuanced understanding of both opportunities and challenges. The introduction of a digital bank in Uzbekistan is not simply a technological endeavour but a systemic transformation with implications for competition, inclusion, and institutional resilience. Accordingly, this paper aims to provide actionable insights that can inform policy, entrepreneurship, and investment in the country's evolving digital finance landscape.

LITERATURE REVIEW

The literature on banking sector development consistently emphasises the critical role of financial institutions in promoting economic growth, facilitating capital allocation, and enabling entrepreneurship. Levine (1998) posits that a well-functioning financial system is essential for mobilising savings and efficiently channelling them into productive investments. Building on this, Beck et al. (2018) demonstrate that banks influence both the scale and quality of economic output by affecting credit accessibility, cost of capital, and risk diversification. In the context of developing economies, this function is even more pivotal, as access to formal banking often determines the extent of economic participation.

With the advent of financial technology (fintech), scholars have turned their attention toward how digitisation reshapes these traditional roles. Digital banking, often considered a subset of fintech, has evolved beyond mere online access to encompass a fundamental redesign of banking services and infrastructure. According to SDK Finance (2025), digital banks operate entirely on digital infrastructure without relying on brick-and-mortar branches, leveraging technologies such as artificial intelligence (AI), machine learning (ML), blockchain, and cloud computing to deliver secure, real-time, and customer-centric services.

Empirical research on the performance impact of digital banking in developing countries is encouraging. Nguyen (2022), in a study on Vietnam, provides evidence that fintech adoption improves bank profitability, reduces operational costs, and expands service coverage, particularly to unbanked populations. Radu et al. (2023) similarly highlight that educated urban consumers in Romania show a preference for digital banking due to perceived convenience, transparency, and speed. These behavioural insights are particularly relevant to the Uzbek context, where smartphone penetration is rising, and a younger, tech-savvy demographic is emerging.

In Uzbekistan, digital transformation within the banking sector has become a policy priority. The German Economic Team (2023) has identified key reform areas such as open banking, regulatory innovation, and financial literacy as essential enablers of a digital banking ecosystem. Tursunov et al. emphasise the importance of internal digitalisation within commercial banks, noting that most institutions still lag in adopting core digital capabilities, especially in areas like cybersecurity, mobile platforms, and automated lending.

Comparative case studies further enrich the discussion. Brazil's Nubank has shown that user-focused mobile banking interfaces, coupled with transparent pricing and personalised services, can attract millions of customers with minimal physical infrastructure. India's Paytm Payments Bank leveraged the national digital identity framework (Aadhaar) and the Unified Payments Interface (UPI) to onboard underserved users and integrate them into the formal economy. Kenya's M-Shwari, developed in partnership with telecom operators, illustrates the power of cross-sector collaboration in delivering digital microfinance at scale.

Huber, Herrmann, and Morgan (2001) underscore that customer satisfaction in banking is increasingly driven by digital value propositions: speed, accessibility, personalisation, and trust. In traditional banks, such experiences are often fragmented or delayed. The shift toward digital thus represents not only a technological innovation but also a strategic reconfiguration of customer engagement models. These insights collectively shape the theoretical and empirical foundation for assessing digital bank potential in Uzbekistan.

RESEARCH METHODS

This study adopts a qualitative-descriptive methodology grounded in extensive secondary data analysis. The objective is to evaluate the economic, technological, and institutional readiness of Uzbekistan to support the establishment of a fully digital bank. The methodology is structured in three key phases: comparative benchmarking, sectoral diagnostics, and regulatory landscape evaluation.

Comparative Benchmarking

The first phase involves benchmarking Uzbekistan's banking sector against leading examples of digital banking innovation in developing economies, including Brazil (Nubank), India (Paytm Payments Bank), Vietnam (TPBank and MoMo), and Kenya (M-Shwari). These countries were selected based on comparable developmental challenges, financial inclusion gaps, and digital transformation trajectories. Performance metrics such as return on equity (ROE), non-performing loan (NPL) ratios, digital penetration rates, and operational efficiency were assessed using datasets from the IMF, World Bank, Statista, and national financial authorities.

Sectoral and Institutional Diagnostics

The second phase analyses Uzbekistan's commercial banking landscape using official data published by the Central Bank of Uzbekistan and supported by industry assessments from the German Economic Team and CERR (Centre for Economic Research and Reforms). Core financial indicators—such as net profit, liquidity ratios, capital adequacy ratios, and asset quality—were evaluated across both public and private banks. The analysis also includes a performance review of emerging digital-native banks (e.g., TBC Bank, Uzum Bank, and Octobank), with a focus on their growth patterns and operational structures compared to legacy institutions.

In addition, this phase assesses technological maturity within banking institutions. Criteria include digital onboarding capabilities, presence of mobile applications, use of cloud infrastructure, API integrations, cybersecurity investments, and customer relationship management (CRM) tools. These indicators were cross-referenced with global fintech standards and local readiness frameworks.

Regulatory and Policy Framework Assessment

The final phase investigates the legal and regulatory environment shaping fintech and digital banking in Uzbekistan. Policy documents, legislative reforms, and public statements from the Central Bank and the Ministry of Finance were reviewed to identify existing enablers and constraints. Key focus areas include licensing requirements for digital banks, regulatory sandboxes, open banking mandates, and data protection regulations.

Complementary to this, the research incorporates qualitative content from stakeholder interviews, including perspectives from local fintech founders, banking executives, and policy analysts published in Uzbek financial journals and conference proceedings.

Together, these three methodological strands provide a comprehensive foundation for evaluating the possibility and implications of launching a digital bank in Uzbekistan. The triangulation of financial metrics, institutional diagnostics, and policy context ensures the robustness of findings and the practical relevance of recommendations.

Results

The findings of this study reveal a pronounced dichotomy in the performance and structural dynamics of Uzbekistan's banking sector, underscoring the urgent need for digital transformation and the potential for digital banks to capitalise on systemic inefficiencies.

Profitability Trends

The overall profitability of Uzbekistan's banking sector declined significantly in 2024. According to Central Bank statistics, the sector reported a total net profit of 6.96 trillion UZS—a sharp 43.7% decrease from 2023 levels. The contraction was heavily concentrated in state-owned banks, several of which posted negative returns. For instance, Ipoteka Bank and MKBANK experienced losses of -240.2 billion UZS and -703.8 billion UZS, respectively, with MKBANK's profitability collapsing by over 4000% year-on-year.

In stark contrast, digital-first and private banks not only weathered the downturn but delivered robust growth. TBC Bank reported a net profit of 341 billion UZS, marking a staggering 748.5% increase. Uzum Bank and Octobank posted growth rates of 121.4% and 101.7% respectively, despite their relatively recent market entries. These performance gaps underscore the superior scalability and efficiency of digital banking models, which rely on lean infrastructure, automated services, and customer-centric interfaces.

Liquidity and Capital Adequacy

Despite profitability pressures, liquidity remained stable. The banking system held nearly 101 trillion UZS in highly liquid assets in 2024, supporting short-term solvency and client confidence. The liquidity coverage ratio (LCR) averaged around 160% across the sector, significantly above the regulatory minimum of 100%.

Capital adequacy indicators also remained healthy, with the overall ratio standing at 17.3% and Tier 1 capital at 14.2%. These buffers provide resilience and headroom for credit expansion, particularly for digital

banks aiming to scale lending portfolios via algorithmic credit scoring and mobile distribution.

Digital Banking Growth and Market Potential

According to forecasts from Statista (2024), Uzbekistan's digital banking market is expected to reach \$117.5 million in revenue by 2025, with a compound annual growth rate (CAGR) of 9.45%. Projections suggest that by 2029, the market will exceed \$168 million. This growth is driven by rising internet penetration, smartphone usage, and the growing trust in mobile-first financial solutions.

User behaviour data indicate that younger demographics are significantly more inclined to adopt digital services. Surveys show that users aged 18–35 are 2.5 times more likely to open a digital account than older generations, a trend consistent with other emerging markets.

Middle-aged demographic

Uzbekistan's demographic profile plays a pivotal role in shaping the trajectory of digital banking adoption. While the national median age is approximately 28 years (Central Intelligence Agency [CIA], 2023), over 45% of the population falls within the 25–54 age group, considered the prime working demographic (World Bank, 2020). Additionally, about 8.6% belong to the 55–64 age group, placing them within the global definition of "middle age," typically ranging from 40 to 65 years (Lachman, 2004). This age cohort, often characterised by financial stability and growing digital literacy, represents a high-potential user base for digital financial services, with Uzbekistan currently benefiting from a demographic window defined by a low proportion of dependents under 15 and over 65 the middle-aged and working-age population is poised to drive long-term digital banking growth (United Nations Population Fund [UNFPA], 2019).

Policy Shifts and Innovation Readiness

Regulatory openness is gradually increasing. The Central Bank of Uzbekistan has launched initiatives to test fintech innovation through pilot projects and has expressed interest in developing a regulatory sandbox environment. These policy signals, although still in the early stages, point toward a more supportive landscape for future digital banks.

In parallel, several traditional banks have begun investing in digital transformation. Kapitalbank and Hamkorbank have upgraded their mobile platforms and integrated digital customer onboarding. However, most of these efforts remain incremental and fail to match the agility and customer-centric models of native digital banks.

Institutional Agility and Digital Capability

A decisive criterion in evaluating the feasibility of digital banking in Uzbekistan is institutional agility and digital capability—a bank's ability to implement, scale, and optimise digital operations in response to evolving consumer needs. Data from the Central Bank of Uzbekistan (2024) illustrates the significant performance gap between traditional and digital-native banks. For example, MKBANK and Ipoteka Bank, both state-owned institutions, reported losses of -703.8 billion UZS and -240.2 billion UZS, respectively, in 2024. In contrast, TBC Bank, a digital-first institution, posted a 748.5% increase in net profit, reaching 341 billion UZS in the same year. Similarly, Uzum Bank and Octobank recorded profit growth of 121.4% and 101.7%, respectively.

These disparities suggest that digital-native banks, which prioritise agile workflows, cloud computing, mobile-first platforms, and AI-powered customer engagement, are structurally better positioned for growth. Meanwhile, many legacy banks are hindered by rigid hierarchies, outdated IT infrastructure, and slower innovation cycles (German Economic Team, 2023). Thus, institutional agility and digital capability are essential metrics for identifying banks that are viable leaders in Uzbekistan's digital finance ecosystem.

Cybersecurity and Digital Trust

As digital banking expands in Uzbekistan, cybersecurity and digital trust emerge as critical enablers of long-term adoption and ecosystem stability. Trust in the safety of digital financial platforms significantly influences user engagement, particularly among middle-aged and risk-conscious demographics. While digital-native banks like TBC Bank and Uzum Bank have made strides in digital onboarding and mobile platform optimisation, cybersecurity investments remain uneven across the sector (German Economic Team, 2023).

According to global benchmarks, over 68% of banking users in developing countries cite concerns about data breaches and fraud as primary barriers to using online financial services (Deloitte, 2022). In Uzbekistan, where digital literacy is still maturing, such concerns are heightened by limited public awareness around safe digital practices and weak enforcement of data protection laws. Although the country passed a Law on Personal Data (2021), enforcement mechanisms and institutional capacity remain in early development stages.

Legacy banks often rely on outdated core systems with minimal cybersecurity integration, while digital-first institutions are beginning to adopt multi-factor authentication, behavioural fraud detection, and cloud-based encryption systems. However, the absence of a national cybersecurity framework tailored to fintech and digital banking introduces vulnerabilities that could erode trust if not proactively addressed.

Building a digitally trusted banking ecosystem in Uzbekistan will therefore require:

Stronger regulatory alignment with international standards (e.g., GDPR, ISO 27001),

Development of consumer-facing security tools, and Promotion of cyber hygiene education among users. Addressing these gaps is essential to ensure that rapid digitisation does not outpace public trust, particularly in a sector as sensitive and risk-prone as finance.

Figures and Tables

2024 Net Profit (bln UZS) vs Bank

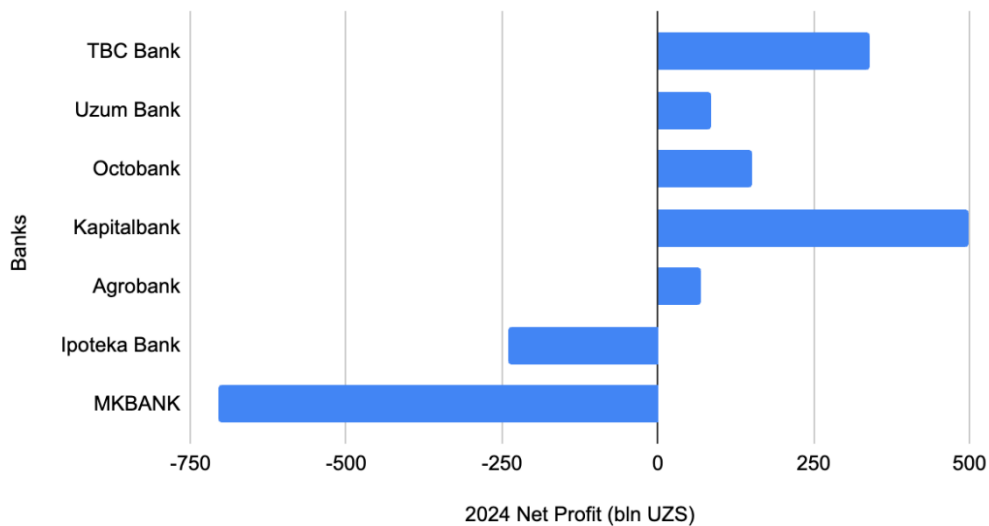


Figure 1: Net Profit of Selected Banks in Uzbekistan (2024)

To illustrate the structural and financial divergence between traditional and digital banks in Uzbekistan, the following figures and tables provide a comparative overview using 2024 data.

A bar chart comparing absolute net profits across traditional and digital-first banks

Interpretation:

While Kapitalbank maintains a strong position, losses among legacy banks such as MKBANK and Ipoteka Bank highlight systemic inefficiencies. Digital-native banks show sustained upward trends, reflective of leaner models and customer acquisition strategies.

YoY Profit Growth (%) vs Bank

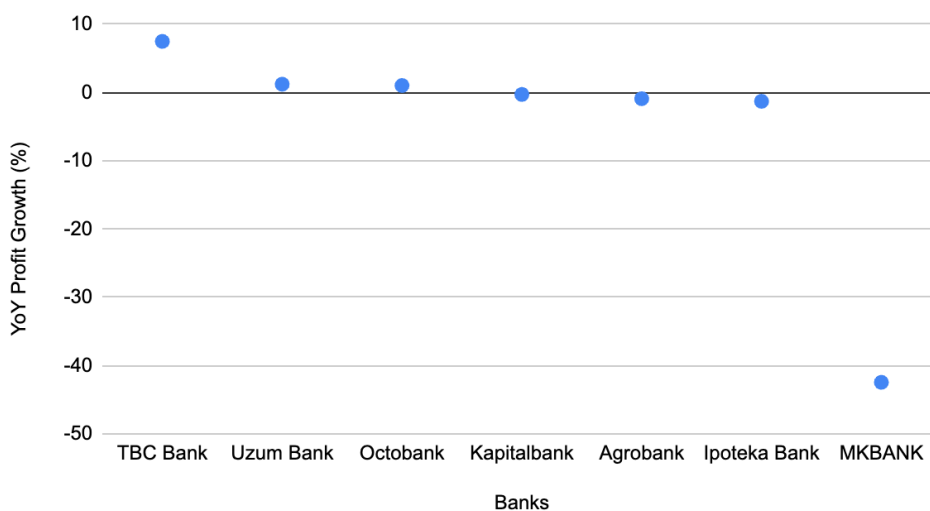
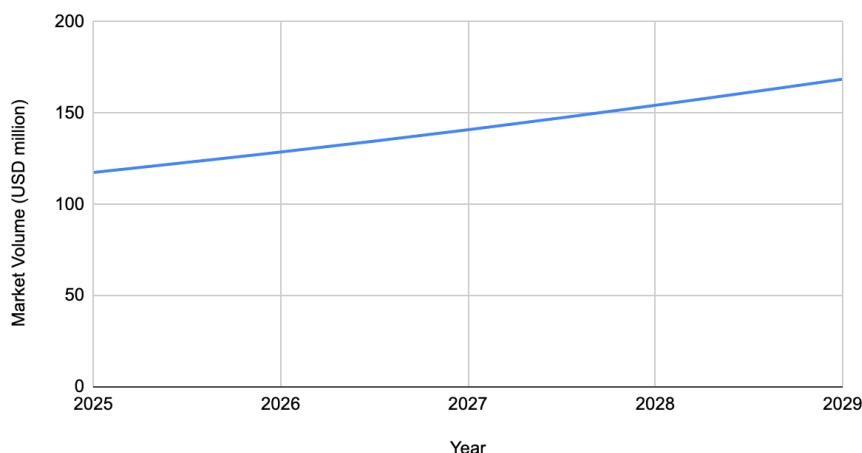


Figure 2: Year-over-Year Profit Growth (%) of Selected Banks (2024)

A comparative chart demonstrating growth performance.

Interpretation:

The exceptional growth of TBC Bank and Octobank contrasts starkly with the severe declines among state-owned banks. These trends reinforce digital banks' agility and rapid scalability in emerging markets

Market Volume (USD million) vs Year**Figure 3: Digital Banking Market Forecast in Uzbekistan (2025–2029)**

A projection based on Statista data.

Interpretation:

The steady projected CAGR of 9.45% suggests strong future potential for digital banking startups. New entrants could benefit from early positioning, targeting younger, mobile-first demographics.

CONCLUSION

The research presented in this paper provides strong empirical and theoretical support for the feasibility and strategic potential of launching a digital bank in Uzbekistan. The financial data reveal clear disparities between traditional banking institutions and digitally oriented banks, with the latter outperforming significantly in profitability, operational efficiency, and customer engagement. Digital-native banks such as TBC Bank, Uzum Bank, and Octobank demonstrate that lean, tech-enabled models can thrive even in transitional financial systems, challenging the dominance of established players and reshaping consumer expectations.

Uzbekistan's macroeconomic fundamentals — including strong liquidity coverage ratios, stable capital adequacy levels, and increasing consumer appetite for mobile financial services — form a robust foundation for digital finance innovation. Moreover, forecasts indicating a 9.45% annual growth rate in the digital banking market underscore both the demand-side and supply-side viability of the sector. However, challenges remain, particularly around regulatory readiness, digital literacy, and the capacity of existing infrastructure to support end-to-end digitisation.

Strategically, digital banks offer significant value propositions. They reduce overhead costs associated with physical branches, deliver 24/7 services tailored to consumer needs, and utilise big data analytics to create hyper-personalised financial products. These capabilities are especially pertinent in Uzbekistan, where traditional banks often fail to reach remote or underserved populations efficiently. By adopting inclusive models and leveraging mobile platforms, digital banks can contribute meaningfully to national goals around financial inclusion and economic empowerment.

Policy implications are equally important. The Central Bank of Uzbekistan and other regulatory bodies must accelerate the development of fintech-friendly policies, including digital banking licenses, open banking standards, and regulatory sandboxes. Stakeholders should also invest in digital infrastructure (such as broadband and cloud services), promote cybersecurity awareness, and enhance data governance frameworks.

In conclusion, Uzbekistan is entering a pivotal phase in its financial sector evolution. By embracing digital banking models, the country not only stands to improve financial access and operational efficiency but also to position itself as a regional leader in fintech innovation. The evidence overwhelmingly suggests that the conditions for launching a digital bank are favourable, but success will depend on a coordinated effort between regulators, innovators, and end users.

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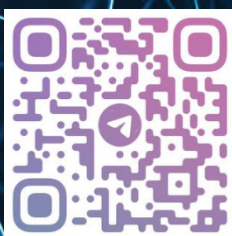
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