

Digital Banking at the Crossroads of Innovation, Trust, and Cybersecurity

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UDC: 336.7; EDN: RJSQNA; JEL: E42, E44, E52, G21, G28, O33, D53

DOI: 10.58587/18292437-2025.4-214

Keywords & phrases: digital banking, fintech, cybersecurity, market capitalization, innovation, regulatory compliance, financial stability, financial innovation

Թվային բանկինգի զարգացումը՝ նորարարության, վստահության և կիրառական տեխնոլոգիաների խաչմերուկում

Մարգարյան Հայկ Ա.

Տնտեսագիտության թեկնածու, դասախոս,

Հայաստանի պետական տնտեսագիտական համալսարան (Երևան, ՀՀ)

Անփոփոխություն. Գիտական հոդվածի նպատակն է վերլուծել թվային բանկինգի ընդունման հիմնական գործոնները՝ տեխնոլոգիական առաջընթացի և փոխվող սպառողական սպասումների համատեքստում: Հետազոտությունն ուսումնասիրում է թվային բանկային ծառայությունների օգտատերերի վարքագիծը՝ դիտարկելով այնպիսի գործոններ, ինչպիսիք են օգտագործման հարմարավետությունը, գործնական արդյունավետությունը, օգտատիրոջ վստահությունը և թվային անվտանգության միջավայրի անվտանգությունը: Վերլուծությունն ընդգծում է սոցիալ-դեմոգրաֆիական փոփոխականների՝ տարիքային խմբերի, կրթական մակարդակի, եկամտի և թվային գրագիտության ազդեցությունը թվային ծառայությունների ընտրության վրա: Ինստիտուցիոնալ մակարդակում հոդվածը դիտարկում է ֆինանսական կառույցների ռազմավարական արձագանքները՝ ներառյալ արհեստական բանականության ինտեգրումը, հարթակի անհատականացումը, բաց բանկինգի տեխնոլոգիաների կիրառումը և ESG սկզբունքների վրա հիմնված պրոդուկտների մշակումը: Fintech News Singapore-ի (2025) տվյալներով Ասիայում թվային բանկային նորարարության առաջատարներն են Maya (Ֆիլիպիններ), Kakaobank (Հարավային Կորեա) և ANEXT Bank (Մինգապուր), որոնք հաջողությամբ համատեղում են հաճախորդակենտրոն մոտեցումները և տեխնոլոգիական յուծումները: Ներկայացվում է նաև «Project mBridge» նախաձեռնությունը՝ Հնդկոնգի, ԱՄԷ-ի և Թաիլանդի կենտրոնական բանկերի համագործակցությամբ, որը նպաստում է միջազգային թվային արժույթների գործարքների արագացմանը: Բացի այդ, շուկայի մակրոտնտեսական վերլուծությունը, հիմնված GlobalData-ի 2025թ. տվյալների վրա, արձանագրում է գլոբալ բանկային համակարգի կապիտալիզացիայի 27.1% աճ՝ պայմանավորված ԱՄՆ Դաշնային պահուստային համակարգի դրամավարկային մեղմ քաղաքականությամբ: Հոդվածը ներկայացնում է ռազմավարական պատկերացումներ՝ ուղղված թվային ֆինանսական ծառայությունների ներառական, կայուն և անվտանգ զարգացման խթանմանը՝ համապատասխանեցված կարգավորող շրջանակներին և սպառողական արժեքներին, ինչպես նաև ընդգծում է տեխնոլոգիական նորարարությունների և կարգավորման դինամիկ փոխհարաբերությունները՝ ապահովելու երկարաժամկետ մրցունակություն և ֆինանսական համակարգի դիմացկունության և կայունության ապահովմանը: Այս մոտեցումները կարևոր են թվային բանկային էկոհամակարգի բարելավման և հաճախորդների վստահության ամրապնդման համար:

Հանգուցաբառեր և բառակապակցություններ՝ թվային բանկային ծառայություններ, ֆինտեք, կիրառական տեխնոլոգիաներ, շուկայական կապիտալիզացիա, նորարարություն, կարգավորող պահանջների կատարում, ֆինանսական կայունություն, ֆինանսական նորարարություն

Цифровой банкинг на перекрестке инноваций, доверия и кибербезопасности

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Аннотация. Цель данной научной статьи – проанализировать ключевые факторы принятия цифрового банкинга в контексте технологического прогресса и изменяющихся потребительских ожиданий. Исследование изучает поведение пользователей цифровых банковских услуг, рассматривая такие факторы, как удобство использования, практическая эффективность, уровень доверия пользователей и опасения, связанные с кибербезопасностью. Анализ подчеркивает влияние социально-демографических переменных – возрастных групп, уровня

образования, дохода и цифровой грамотности – на выбор цифровых услуг. На институциональном уровне статья рассматривает стратегические ответы финансовых организаций, включая интеграцию искусственного интеллекта, персонализацию платформ, использование технологий открытого банкинга и разработку продуктов на основе принципов ESG (экология, социальная ответственность и корпоративное управление). По данным Fintech News Singapore (2025), лидерами цифровых банковских инноваций в Азии являются Мауа (Филиппины), Какаобанк (Южная Корея) и ANEXT Bank (Сингапур), успешно сочетающие ориентированные на клиента подходы с технологическими решениями. Также представлен проект «Project mBridge», реализуемый центральными банками Гонконга, ОАЭ и Таиланда, способствующий ускорению расчетов по трансграничным операциям с цифровыми валютами. Макроэкономический анализ рынка на основе данных GlobalData за 2025 год фиксирует рост рыночной капитализации глобальной банковской системы на 27,1%, что обусловлено смягчением денежно-кредитной политики Федеральной резервной системы США. Статья предлагает стратегические концепции, направленные на содействие инклюзивному, устойчивому и безопасному развитию цифровых финансовых услуг, учитывающие регулирующие рамки и потребительские ценности, а также подчеркивает динамическое взаимодействие технологических инноваций и регулирования для обеспечения долгосрочной конкурентоспособности и устойчивости финансовой системы. Данные подходы имеют важное значение для улучшения экосистемы цифрового банкинга и укрепления доверия клиентов.

Ключевые слова и словосочетания: цифровые банковские услуги, финтех, кибербезопасность, рыночная капитализация, инновации, соблюдение нормативных требований, финансовая устойчивость, финансовые инновации

Introduction. Digital banking has rapidly transformed the financial services industry, marking a significant shift from traditional, branch-based banking to more efficient, tech-driven solutions. The proliferation of online and mobile banking platforms has made financial services more accessible and user-friendly, catering to the growing demand for convenience, speed, and cost efficiency. As Saharawat (2024) highlights [22], digital banking offers a variety of essential services, including account management, fund transfers, loan applications, and digital wallets, all accessible through smartphones and computers. This has not only streamlined banking operations but also promoted financial inclusion by providing services to previously underserved populations, particularly in developing regions. The evolution of digital banking has been facilitated by key technological innovations such as artificial intelligence, blockchain, and machine learning, which enhance decision-making, security, and customer service. Neobanks and internet-only banks are prime examples of the sector's adaptability, offering tailored, user-centric financial solutions that challenge the traditional banking model. However, despite these advancements, digital banking faces several challenges. These include cybersecurity threats, regulatory complexities, and the increasing need for banks to offer personalized, customer-focused services. Moreover, the rise of green banking, which integrates Environmental, Social, and Governance principles, demonstrates the growing importance of sustainability in shaping digital banking practices. This paper explores the emerging trends, challenges, and opportunities in digital banking, with a focus on technological advancements, cybersecurity, regulatory frame-

works, and customer-centric innovations that are shaping the future of financial services globally.

Research methods. This study employs a mixed-methods approach, combining qualitative analysis of academic literature, industry reports, and institutional data with quantitative modeling to explore the global digital banking ecosystem. The qualitative component identifies key trends in adoption, market shifts, and strategic behavior of financial institutions, while a comparative framework evaluates digital banks' performance in terms of profitability, funding structure, asset growth, and regional distribution. Macroeconomic factors such as interest rate trends and central bank digital currency pilot programs are analyzed for their impact on sector innovation. The quantitative analysis incorporates financial stress indicators, like the Composite Indicator of Systemic Stress, to detect vulnerabilities within the financial system. Additionally, data from the European Central Bank provides insights into the interaction between monetary policy, inflation targeting, and financial system resilience in the Eurozone. This multidimensional approach offers a comprehensive empirical understanding of how digital banking transformation intersects with broader macro-financial dynamics and regulatory developments, highlighting the sector's resilience and adaptability in managing systemic risks.

Literature review. Mendicino, Nikolov, Suarez, and Supera (2018) argue that the macroeconomic effects of higher capital requirements critically depend on monetary policy. Specifically, when interest rates approach the lower bound, monetary policy loses its stabilizing power, which increases short-run costs. However, fragile banking systems benefit more from stricter capital

regulations, thereby justifying the implementation of tighter capital rules [18].

Ampudia, Ehrmann, and Strasser (2023) examine how monetary policy affects inflation across different income groups in the six largest euro area economies. Drawing on both broad, low-frequency data and high-frequency data focused on food and beverages, they reveal that inflation responses to policy shifts vary by income level. While higher-income households show lower inflation sensitivity due to distinct consumption patterns, they also respond more strongly in terms of adaptive shopping behavior. These contrasting dynamics suggest that earlier assessments may overestimate the uniform impact of monetary policy, underscoring the need for deeper investigation into its distributional effects [1].

Das, Patnaik, and Satpathy (2024) identify technological, psychological, and socio-demographic factors as key determinants of digital banking adoption. Their literature review emphasizes perceived ease of use, perceived usefulness, trust, and security concerns as primary influences. Additionally, social influence and individual characteristics such as age, education, and income significantly affect user behavior. The authors stress that while robust digital infrastructure is foundational, user perceptions and contextual factors are equally critical, advocating for a multidimensional approach to fostering digital banking adoption amid rapid technological change and evolving consumer expectations [11].

Waliullah et al. (2025) provide a systematic literature review on how cybersecurity threats impact the adoption and growth of digital banking. Key risks identified include data breaches, identity theft, and malware attacks, which undermine user trust and adoption rates. The authors argue for strengthening cybersecurity infrastructure, raising public awareness, and enhancing regulatory protections as essential measures to secure digital financial services. Their findings highlight the balance necessary between technological progress and safeguarding user confidence in digital banking [26].

According to Claire Della Luna (2024), technological solutions alone are insufficient; effective cybersecurity requires comprehensive strategies. These include multi-factor authentication, end-to-end encryption, AI-based threat analysis, and a Zero Trust architecture. Additionally, regular staff training, security audits, software updates, and cyberattack preparedness are essential. The study emphasizes that users often lack adequate awareness of cybersecurity threats, increasing information risk. It further argues that banks must invest in advanced technologies—such as AI, blockchain, and quantum computing—while adhering to stricter regulatory

standards. These findings offer valuable insights for both practical implementation and academic research on digital security in banking [8].

Stefanelli, Manta, and Toma (2022) investigate the strategic response of European banks to the digital transformation within the financial sector, particularly focusing on the adoption of open banking and application programming interfaces. The study examines how these technological innovations alter the dynamics of customer relationships and the overall role of banks in the broader financial ecosystem. By analyzing the implications of open banking, the paper explores the shifting boundaries of traditional banking services and the evolving landscape of financial interactions [24].

Kovacevic, Radenkovic, and Nikolic (2024) investigate the dual aspects of artificial intelligence integration within the banking sector, focusing on both its transformative potential and associated cybersecurity risks. The study highlights how machine learning enhances decision-making, fraud detection, and customer service automation. However, it also addresses emerging threats such as adversarial attacks, including data poisoning and evasion tactics, which exploit vulnerabilities in AI models. The authors advocate for the development of secure, resilient, and trustworthy AI systems to mitigate these risks and ensure the safe deployment of AI technologies in financial institutions [16].

Kshetri et al. (2023) conduct a comprehensive review of emerging cyber threats, specifically cryptojacking and ransomware attacks, within the banking industry. The study delves into the evolving tactics employed by cybercriminals, highlighting the financial motivations and sophisticated techniques underpinning these threats. The authors examine the challenges faced by financial institutions in mitigating such risks and emphasize the necessity for proactive cybersecurity measures. Additionally, the paper introduces a Digital Forensics and Incident Response approach, advocating for its integration into current cyber threat hunting processes to effectively counteract these malicious activities [15].

The study by Vásquez Ubaldo, Gutiérrez Barreto, Berrios Albines, and Belido-García (2023) reveals that the banking sector continues to be a primary target for cyberattacks. According to the authors, these attacks are driven by the high value of banking data and the presence of multiple and diverse access channels, which facilitate the actions of cybercriminals. The study's findings emphasize that technological investments—both in software and hardware—alone do not provide sufficient protection. The authors stress the importance of developing comprehensive information security strate-

gies that encompass not only technological but also human factors. In particular, they highlight the necessity of increasing cybersecurity awareness among employees and users, as user ignorance remains one of the main vulnerabilities within the system [25].

The article "Top 10 Banking Technology Trends in 2023" by Axiom Groupe outlines ten pivotal technological advancements shaping the banking sector. These include the integration of artificial intelligence for enhanced customer service and fraud detection, the adoption of open banking through application programming interfaces to foster collaboration with non-banking financial companies, and the implementation of blockchain technology to ensure secure and transparent transactions. Additionally, the article discusses the rise of hyper-personalized banking experiences, the utilization of the Internet of Things (IoT) for real-time data collection, and the emphasis on cybersecurity measures to protect sensitive financial information. The piece also highlights the growing trend of neobanking, the automation of banking processes through robotic process automation, and the exploration of quantum computing for complex financial modeling. These trends collectively signify a transformative shift towards more efficient, secure, and customer-centric banking services [3].

According to Setiawan and Prakoso (2024), digital banking adoption demonstrates a nuanced relationship with bank performance in Indonesia. While it exhibits a negative effect on return on assets, it enhances operational efficiency. The authors argue that bank size significantly moderates these outcomes, with larger banks being better equipped to optimize digital banking implementation. These findings underscore the importance of institutional scale and strategic alignment in maximizing the benefits of digital transformation in the financial sector [23 pp. 196-207].

According to Poon, Wibowo, and Tang (2024), this study develops a comprehensive framework for clustering FinTech based on technology, business models, and stakeholder perspectives. It synthesizes over 100 studies to classify FinTech into various clusters, providing a holistic view of the FinTech ecosystem. The authors emphasize the importance of understanding these classifications for both academic research and practical application in the rapidly evolving digital finance sector [20].

Asamoah and Osei (2024) explore the factors influencing users' intention to continue using digital banking services. Their study reveals that perceived self-efficacy, usefulness, and ease of use significantly affect users' continued usage intentions. The authors argue that user experience plays a critical role in sustaining digital banking

adoption, underscoring the importance of improving service quality to retain customers [25, pp. 3332-3342]

According to Coelho, Figueiredo, and Valério (2025), their report provides a comprehensive overview of key regulatory and non-regulatory developments in the fintech sector during the fourth quarter of 2024. The report covers various aspects, including decentralized finance (DeFi), digital assets, stablecoins, and central bank digital currencies (CBDCs). It also examines the metaverse, artificial intelligence, and related technologies such as robotics and quantum computing. The authors emphasize the importance of understanding these developments to navigate the evolving landscape of digital finance and technology [9].

Results. The ECB is projected to achieve a neutral rate as early as 2025 due to subdued regional growth and expectations of inflation aligning with the 2% target, aided by slowing wage growth and narrowing business margins. Similarly, the Fed is expected to follow suit, avoiding excessive labour market weakening amid the ongoing disinflationary trend [7]. Monetary easing in 2025 is poised to alleviate pressures on GDP growth. Although the full impact of monetary policy typically manifests with a delay—as suggested by Romer and Romer (2023) [21], who estimate a nine-quarter lag—recent granular data (Buda et al., 2023) [6] indicate that some effects materialize rapidly. For instance, interest rate changes influence consumption within days, business sales within a month, and employment within two months. These early responses suggest that monetary easing may provide a timely, albeit moderate, boost to economic activity in 2025, supporting the soft landing without reigniting inflationary pressures.

Deloitte's (2024) report assesses the digital maturity of banks across 44 countries, analyzing 1,005 functionalities in areas such as account opening, customer onboarding, everyday banking, and non-banking services. The study identifies two primary strategies among leading banks: enhancing customer experience through intuitive design and expanding functionalities to create comprehensive "super applications." The findings highlight the importance of both user-centric design and functional breadth in achieving digital banking excellence [10].

KPMG (2024) suggests that Germany's fintech market showed resilience in 2024, particularly with an 81% increase in corporate venture capital investments. This stability is attributed to favorable regulatory frameworks like the EU AI Act, which offer clarity to fintech operations. The report indicates that while global investments declined, the

German market’s focus on AI-driven solutions and embedded finance continues to attract significant interest [14].

BDO (2024) reports a 19% growth in German fintech investments in H1 2024, highlighting a shift towards niche markets and partnerships between fintechs and traditional financial institutions. The study also notes significant interest in AI, blockchain, and embedded finance, despite a more cautious investment climate in Europe [5].

As McKinsey & Company (2024) suggests, the lower-value cross-border payments market, which represents a substantial portion of the global payments sector, is increasingly being dominated by nontraditional players such as fintechs and money transfer operators. According to their analysis, these players have captured up to 65% of the market share in regions like Asia, a significant portion of the \$2 trillion global market. The report asserts that to counter this shift, traditional banks must modernize their infrastructure, integrate real-time processing capabilities, and enhance customer experience through transparent pricing and user-friendly interfaces. These measures are essential to regain competitive advantage and secure a share of this growing market, projected to account for nearly 40% of total global cross-border payment revenue in 2025 [17].

The 2023 PwC [19] Digital Banking Survey focused on Southeast Asia reveals that while over 70% of banks in the region have established clear digital strategies, a significant implementation gap remains, with more than 80% of banks falling short of achieving their digitalization objectives. The primary drivers of digital transformation are enhancing customer experience (68%) and improving operational efficiency (56%). Challenges such as ineffective implementation (62%) and cybersecurity threats (59%) are hindering progress.

To overcome these issues, banks are focusing on modernizing technology architectures, adopting cloud solutions, and upskilling their workforce, although concerns regarding cloud security and regulatory compliance still impede adoption in countries like Thailand (PwC, 2023).

The 2025 Global Digital Bank Rankings by TABInsights highlight the rapid growth and increasing profitability of digital-only banks worldwide. Brazil's Nubank leads the list, followed by ING Group's retail arm and China's WeBank. These top 100 digital banks collectively held \$2.4 trillion in assets, \$2 trillion in deposits, and \$78 billion in revenue by the end of FY2023. Notably, 61% of these banks reported full-year profitability, a significant increase from 48% in 2024. The average time to reach profitability has decreased to two years, indicating improved operational efficiency. Despite this progress, the global break-even ratio remains below 25%, with interest income being the primary revenue source. The rankings assess over 160 banks across five key dimensions: customer base, market/product coverage, profitability, asset and deposit growth, and funding. The Asia Pacific region accounts for 47% of the top 100, Europe 30%, and North America 10%.

According to TABInsights, digital banks have shown strong growth in assets, users, and profitability, with Nubank (Brazil), ING’s retail division, and China’s WeBank leading global performance. These top 100 digital banks, selected from over 400, operate independently from traditional banks, emphasizing fully virtual customer experiences. By FY2023, they managed \$2.4 trillion in assets, \$2 trillion in deposits, and \$78 billion in revenue. The compound annual growth rate (CAGR) for assets, loans, deposits, and revenue from FY2021 to FY2023 stood at 7%, 8%, 7%, and 18%, respectively, signaling sustained momentum [13].

Rank 2025	Rank 2024	Digital Bank	Country/Headquarter	Year of launch	Customer	Coverage	Financials	Balance Sheet	Funding	Final Score
<i>Total Scores Achievable</i>					30.0	10.0	30.0	20.0	10.0	100.0
1	5	Nubank	Brazil	2014	21.9	6.5	16.3	10.0	5.3	60.1
2	3	ING (Global)	Netherlands	1991	6.9	10.0	17.6	19.1	5.3	59.0
3	1	WeBank	China	2015	20.8	5.0	14.3	13.6	2.0	55.8
4	4	KakaoBank	South Korea	2017	18.5	5.0	9.8	16.4	6.0	55.6
5	7	T-Bank	Russia	2007	19.6	4.5	15.7	12.7	1.3	53.8
6	2	Ally Bank	US	2009	5.8	5.5	16.3	20.0	6.0	53.6
7	8	ING	Germany	<2000	4.6	5.5	19.6	18.2	3.3	51.2
8	9	MYBank	China	2015	16.2	3.0	13.0	16.4	2.0	50.6
9	13	Toss Bank	South Korea	2021	18.5	3.0	13.0	11.8	3.3	49.7
10	6	Su Merchants Bank	China	2017	16.2	4.0	13.0	13.6	2.0	48.8

Figure 1. World’s top 10 digital banks (2025)

Source: TABInsights

According to Kapfer and Weng (2025), the *TABInsights World's Top 100 Digital Banks Ranking 2025* demonstrates the global expansion and operational maturity of digital-only banks. These banks, evaluated across 42 markets, were ranked based on a multi-dimensional scorecard emphasizing customer engagement, profitability, growth in deposits and assets, product reach, and funding strength—rather than sheer size. A new metric, “funding as a percentage of total assets,”

was included to better reflect financial sustainability. Among the top 100 banks, 47 are based in Asia Pacific, 30 in Europe, and 10 in North America. For comparative performance analysis, this study highlights the top 30 digital banks, which include market leaders such as Nubank, ING, and WeBank. A visual line chart has been constructed to illustrate the relative performance of these banks, offering insight into their digital maturity and regional competitive advantage.

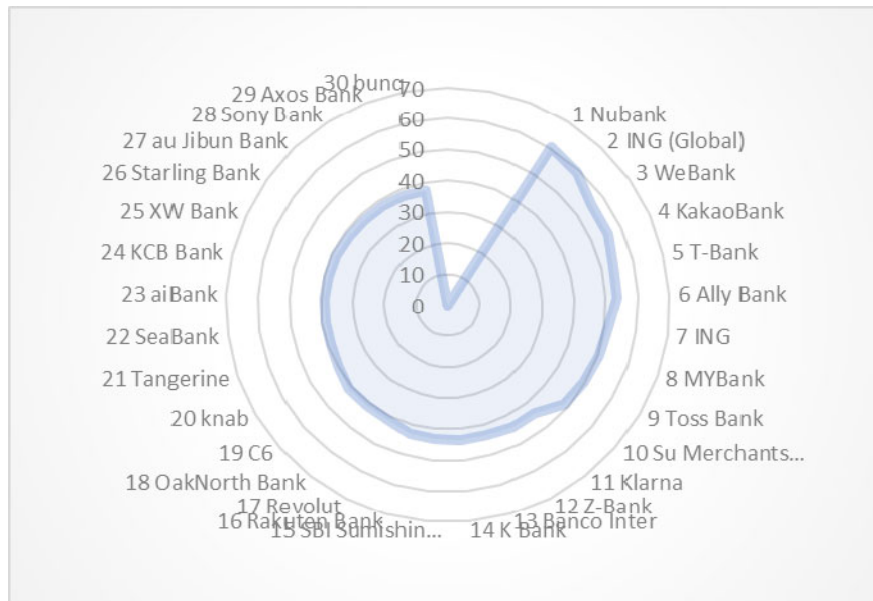


Figure 2. World's top 10 digital banks (2025), Source: TABInsights

According to Fintech News Singapore (2025), the top digital banks in Asia for 2025 include Maya (Philippines), Kakaobank (South Korea), and ANEXT Bank (Singapore). Maya, a digital bank in the Philippines, has achieved significant growth, reaching a deposit base of ₱25 billion from 2.3 million clients by August 2023. Kakaobank, established in South Korea in 2016, had 21.8 million

customers as of March 2023 and offers a range of banking and financial services. ANEXT Bank, a digital wholesale bank in Singapore, has been recognized for its excellence in digital banking innovation, customer growth, and financial performance. These banks exemplify the rapid expansion and innovation within the digital banking sector across Asia [12].



Figure 3. Top Digital Banks in Asia According to The Banker (2025) Source: Fintech News Singapore. (2025, February 11)

The "Project mBridge" initiative, a collaboration between the central banks of Hong Kong, UAE, and Thailand, has significantly improved cross-border CBDC transaction settlement times, reducing them from 2-5 days to mere seconds. As of mid-2024, the project reached its minimum viable product (MVP) stage. Additionally, the future of digital banking emphasizes customization, moving away from generic interfaces and rigid product bundles to allow customers to personalize their banking experiences. Furthermore, green banking integrates Environmental, Social, and Governance principles, offering sustainable products and carbon tracking tools to align financial choices with customers' values.

In Q4 2024, the combined market capitalization of the top 25 global banks surged by 27.1% year-on-year, reaching \$4.6 trillion, according to GlobalData

(2025). This growth was largely attributed to the U.S. Federal Reserve's interest rate cuts, which positively influenced investor sentiment and stock prices. JPMorgan Chase led the rankings, with a 37.2% increase in market capitalization, reaching \$674.9 billion, while Bank of America saw a 26.6% rise. In Asia, the Industrial and Commercial Bank of China (ICBC) experienced a 37.8% growth, reaching \$328.2 billion. Other notable performers included Goldman Sachs, which posted a 42.9% increase, and ICICI Bank, which rose by 25.8%. Despite the overall positive performance, TD Bank experienced a significant decline of 20.1% due to regulatory challenges and missed financial targets. This robust growth underscores the resilience of major banks amidst global economic uncertainties, highlighting the profound impact of monetary policy decisions [4].

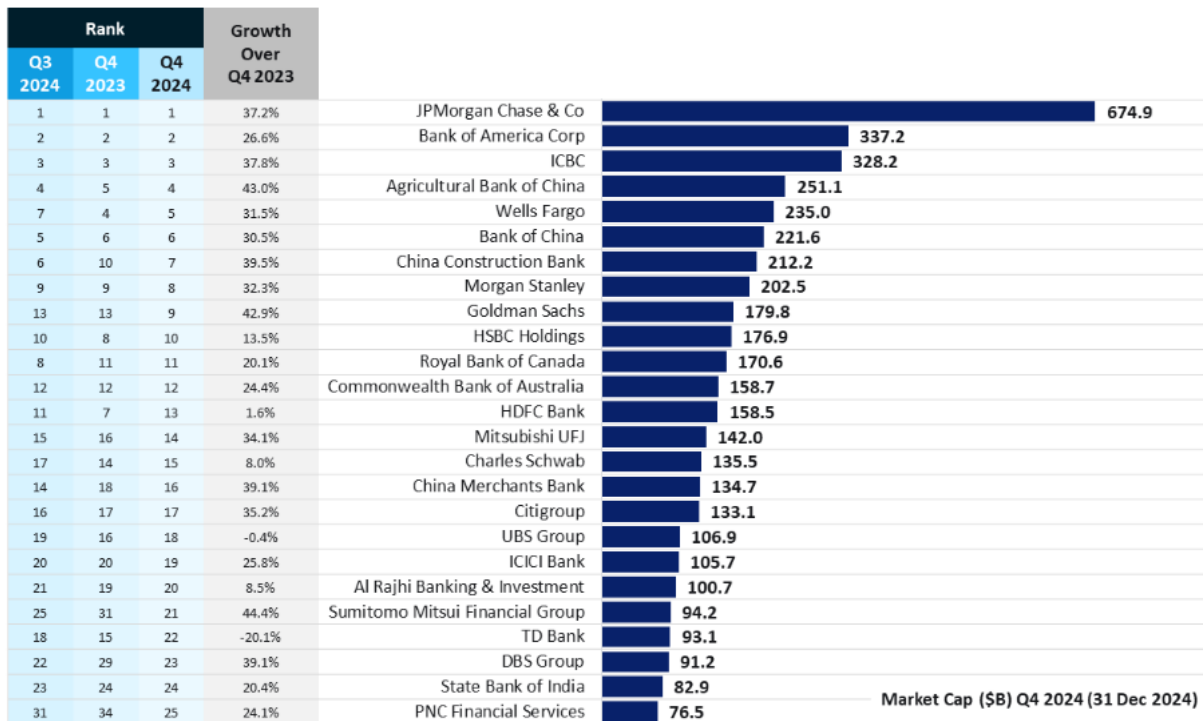


Figure 4. Top 25 Global Banks by Market Cap, Q4 2024
Source: GlobalData intelligence Center and Stock Exchanges

This performance contrasts with the increasing pressure on digital banks to maintain profitability and operational efficiency in the face of competitive market dynamics and rising cybersecurity threats. Digital banks, while benefitting from technological advancements and operational agility, must also confront challenges in scalability, regulatory compliance, and consumer expectations for personalized services. In particular, the move towards highly customizable banking experiences, alongside growing demands for secure, green banking solutions, suggests that future innovation

must balance both profitability and sustainability [20]. Thus, as traditional financial institutions continue to flourish, digital banks must focus on adapting to market trends, ensuring robust cybersecurity, and aligning with global regulatory frameworks to secure long-term success in the evolving financial landscape.

Conclusions. This study emphasizes the rapid development of digital banking, driven by technological innovation, regulatory frameworks, and customer-focused strategies. While traditional banks remain relevant, digital banking offers

significant growth opportunities amid rising demands for personalized, efficient, and secure services. The adoption of technologies such as artificial intelligence, blockchain, and mobile applications has enhanced both customer experience and operational efficiency, strengthening competitive positioning. Nonetheless, challenges persist, particularly cybersecurity threats and regulatory compliance, which can hinder user trust and adoption. Addressing these issues requires robust cybersecurity measures, clear regulations, and consumer education. Additionally, factors like usability, perceived usefulness, and reliability are critical for user acceptance. The study also notes the increasing importance of sustainability and ESG considerations in shaping consumer preferences. Ultimately, success in digital banking hinges on balancing innovation, customer satisfaction, and regulatory adherence to adapt to evolving market dynamics and ensure long-term resilience.

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