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The Rise of Digital Banks in Malaysia: Discussion on Industry Impact and Strategic Insights

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ABSTRACT

The rise of digital banks in Malaysia marks a transformative shift in the nation's financial services sector, catalysed by technological advancements, evolving customer expectations, and proactive regulatory intervention. Anchored by Bank Negara Malaysia's digital banking framework, the licensing of new digital-only banks is driving financial innovation, enhancing service accessibility, and fostering competition across the industry. This paper presents a comprehensive examination of digital banking, beginning with global trends and conceptual foundations, and narrowing in on Malaysia's regulatory and institutional context. It analyses the strategic positioning and operational models of licensed digital banks, particularly their efforts to serve financially underserved segments such as micro, small, and medium enterprises (MSMEs) and the unbanked. The study also assesses the strategic responses of incumbent banks and outlines the evolving cybersecurity and compliance landscape. Drawing on recent policy developments, market data, and case studies, the findings underscore the transformative potential of digital banks in promoting financial inclusion and catalysing a more resilient, technology-enabled banking ecosystem. The paper concludes with policy implications and avenues for future research.

Keywords: Digital banking; Financial technology (FinTech); Bank Negara Malaysia; Digital transformation; Financial ecosystem

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INTRODUCTION

The global financial landscape has witnessed a transformative shift over the past decade, driven by rapid technological advancements and changing consumer expectations. At the forefront of this transformation is the emergence of digital banks financial institutions that operate primarily or exclusively through digital platforms without relying on traditional brick-and-mortar branches. Globally, digital banks have disrupted conventional banking models by offering seamless, user-centric, and cost-effective financial services that appeal particularly to tech-savvy and underserved populations.

In Malaysia, the digital banking phenomenon is gaining momentum following concerted efforts by regulators, technology companies, and financial institutions to drive digital innovation. The introduction of the Digital Bank Licensing Framework by Bank Negara Malaysia (BNM) in 2020 and the subsequent issuance of five digital bank licenses in 2022 mark a pivotal moment in the country's financial sector development. These developments are aligned with broader national strategies such as the

Malaysia Digital Economy Blueprint (MyDIGITAL), which aims to position Malaysia as a digitally driven, high-income nation.

The growing importance of digital banks in Malaysia's financial ecosystem cannot be overstated. They are expected to enhance financial inclusion by extending services to unbanked and underbanked populations, support small and medium enterprises (SMEs) with innovative credit solutions, and promote competition within the banking industry. Furthermore, digital banks offer an opportunity to harness data analytics and artificial intelligence to deliver personalised financial services and improve operational efficiency.

This paper aims to explore the rise of digital banks in Malaysia by examining their regulatory context, industry impact, and strategic implications for incumbents and stakeholders. Specifically, it analyses the institutional developments facilitating digital banking, assesses their potential disruptions and contributions to the financial services sector, and outlines strategic responses by various players.

The paper is structured as follows: Section 2: provides a conceptual overview of digital banking and outlines global trends; Section 3: examines the regulatory and institutional context in Malaysia; Section 4: analyses the industry-level impact and strategic positioning of digital banks; Section 5:discusses the challenges, opportunities, and strategic responses by incumbents and stakeholders; and Section 6 concludes with key policy implications and future research directions.

CONCEPTUAL OVERVIEW OF DIGITAL BANKING AND GLOBAL TRENDS

Digital banking refers to the delivery of banking products and services primarily through digital channels, including mobile applications, internet platforms, and automated interfaces. Unlike traditional banks, which rely heavily on physical branches and manual processes, digital banks leverage cloud computing, artificial intelligence, data analytics, and open banking frameworks to streamline operations and enhance customer experience. These institutions are often characterised by low overhead costs, high scalability, and a strong emphasis on user-centric design.

Globally, the proliferation of digital banking has been spurred by a confluence of technological innovation, regulatory liberalisation, and evolving consumer behaviour. Markets such as the United Kingdom, South Korea, and Brazil have led the way with the successful establishment of digital-only banks like Monzo, KakaoBank, and Nubank, respectively. These entities have challenged incumbent banks by offering simplified account opening, lower fees, and real-time financial services tailored to individual needs.

In the Asia-Pacific region, digital banking is rapidly gaining traction as regulators embrace financial technology to drive competition and financial inclusion. Countries such as Singapore, Hong Kong, and the Philippines have introduced dedicated digital banking licenses and sandbox environments to encourage innovation while maintaining financial stability. The COVID-19 pandemic has further accelerated digital adoption, reinforcing the demand for contactless, convenient, and personalised banking experiences. In this global context, Malaysia's foray into digital banking reflects both a response to international trends and a proactive effort to address domestic financial inclusion gaps and technological readiness.

Digital Banking in Malaysia: National Context and Developments

In Malaysia, the digital banking sector is still in its nascent stage but is progressing rapidly under the guidance of proactive regulatory initiatives. Recognising the transformative potential of digital financial services, Bank Negara Malaysia (BNM) has taken decisive steps to modernise the financial landscape in line with national priorities such as MyDIGITAL, the Malaysia Digital Economy Blueprint, and the Twelfth Malaysia Plan. These strategic frameworks underscore digitalisation, innovation, and inclusivity as core pillars of Malaysia's economic transformation agenda.

A key milestone in Malaysia's digital banking journey was the issuance of the Digital Bank Licensing Framework by BNM in December 2020. This comprehensive regulatory guideline outlines the prudential and operational requirements for new digital banks, particularly emphasizing financial inclusion, robust risk management, and sustainable business models. In April 2022, BNM granted five digital bank licenses to consortia comprising a diverse mix of players including traditional banks, technology companies, e-commerce platforms, and fintech firms. This approach reflects Malaysia's intent to foster a competitive yet stable digital banking environment that promotes innovation while safeguarding consumer interests.

The primary objective of introducing digital banks in Malaysia is to serve underserved and unserved market segments, particularly micro, small, and medium enterprises (MSMEs), gig economy workers, and the B40 (bottom 40% income) population. Traditional banks have historically faced challenges in efficiently reaching these groups due to high compliance costs and limited physical infrastructure in rural areas. Digital banks, through their lower-cost and data-driven operating models, are expected to bridge this financial inclusion gap by offering more accessible, user-friendly, and tailored financial solutions.

Malaysia also benefits from a relatively high digital readiness. With mobile penetration exceeding 130% and internet usage covering over 90% of the population (MCMC, 2023), the foundational infrastructure for digital banking is well established. Furthermore, Malaysians have shown increasing openness to digital financial services, with significant growth in mobile banking, e-wallets, and fintech usage, especially during and after the COVID-19 pandemic. This digital adoption trend provides a conducive environment for the success of fully digital banks. Nonetheless, the path forward is not without challenges. Digital banks in Malaysia must navigate issues such as cybersecurity risks, data privacy concerns, trust-building among unbanked segments, and the need for financial literacy. Additionally, incumbent banks are simultaneously undergoing digital transformation themselves, creating a dynamic and competitive landscape where differentiation will depend on innovation, strategic agility, and customer-centric service design.

From a regulatory standpoint, BNM has adopted a phased supervisory approach for newly licensed digital banks, where these institutions are required to operate under a foundational phase with asset limitations for a period of 3 to 5 years. This gradual onboarding is designed to ensure operational resilience, governance maturity, and effective risk controls before they are allowed to scale operations. Malaysia's approach to digital banking reflects a balanced commitment to innovation, inclusion, and financial stability. While the sector is still evolving, it holds the potential to significantly reshape the country's financial services ecosystem.

RegTech(Regulatory Technology) and SupTech(Supervisory Technology): Enablers of Digital Financial Oversight

The rise of digital financial services, including digital banking, has brought about increased regulatory complexity and operational risk, prompting the need for more agile and technology-enabled compliance and supervisory mechanisms. In response, two critical innovations Regulatory Technology (RegTech) and Supervisory Technology (SupTech) have emerged as central pillars in modernizing both institutional compliance functions and regulatory oversight frameworks.

RegTech refers to the use of advanced digital tools such as artificial intelligence (AI), machine learning (ML), robotic process automation (RPA), and cloud computing to enhance the efficiency, accuracy, and responsiveness of regulatory compliance processes within financial institutions (Arner et al., 2017; Zetzsche et al., 2020). In the context of digital banking, RegTech enables real-time monitoring of financial transactions, automated customer onboarding through digital KYC and AML systems, and the generation of regulatory reports with minimal manual intervention. These innovations are particularly valuable for digital banks, which typically operate with lean operational models and require scalable, cloud-native compliance infrastructure to manage regulatory obligations effectively.

Conversely, SupTech pertains to the application of similar technologies by regulatory and supervisory authorities to strengthen their monitoring, data analysis, and enforcement capabilities (Bains et al., 2021; EBA, 2022). Using SupTech tools, regulators can automate the collection of large-scale regulatory data submissions, conduct predictive analytics to identify systemic vulnerability, and perform remote supervision of licensed entities. For example, Bank Negara Malaysia (BNM) has expressed its commitment to building SupTech capabilities to support real-time supervision and risk-based regulatory responses, particularly under its Financial Sector Blueprint 2022–2026 (BNM, 2022).

The integration of RegTech and SupTech in the Malaysian financial ecosystem represents a mutual reinforcement of private and public sector innovation. While RegTech solutions assist digital banks in achieving compliance with reduced friction and cost, SupTech empowers regulators to supervise digital institutions more efficiently, thereby ensuring financial stability without stifling innovation. This symbiotic relationship is critical in a rapidly digitizing financial landscape, where traditional oversight mechanisms may prove inadequate in the face of algorithmic decision-making, embedded finance, and data-driven business models.

From a policy perspective, continued investment in RegTech and SupTech infrastructure along with the development of regulatory sandboxes and data-sharing protocols will be essential to fostering a balanced environment that safeguards financial integrity while enabling innovation. Further academic inquiry into the adoption rates, effectiveness, and cross-border interoperability of these technologies will also be crucial to inform best practices in regulatory governance in the digital banking era.

Regulatory and Institutional Context in Malaysia

The regulatory environment in Malaysia has played a pivotal role in catalysing the emergence of digital banks. Bank Negara Malaysia (BNM), the central regulatory authority, launched the Digital Bank Licensing Framework in December 2020 after a public consultation process, setting clear guidelines for capital requirements, governance, risk management, and customer protection (BNM, 2020). This framework was designed to ensure that digital banks contribute meaningfully to financial inclusion, particularly for underserved and unserved market segments, including microenterprises, B40 households, and rural populations (BNM, 2021).

In April 2022, BNM granted five digital banking licenses—three to conventional entities and two under Islamic banking provisions—signifying a landmark moment for financial innovation in the country (BNM, 2022). The initiative is aligned with national policy directions outlined in the Malaysia Digital Economy Blueprint (MyDIGITAL) and Financial Sector Blueprint 2022–2026, both of which emphasize digital transformation, resilience, and inclusivity in financial services (MDEC, 2021; BNM, 2022b). Additionally, regulatory sandboxes operated by BNM and the Malaysia Digital Economy Corporation (MDEC) have provided fintech startups and prospective digital banks a controlled environment to test innovative products and services without incurring full regulatory burdens (World Bank, 2022). These measures illustrate a proactive regulatory stance that balances innovation with systemic stability and consumer protection (IMF, 2021; ADB, 2023).

Industry Impact and Strategic Positioning of Digital Banks

The introduction of digital banks in Malaysia has begun to reshape the competitive dynamics and strategic orientation of the financial industry. Digital banks are expected to drive financial democratization by offering simplified and affordable financial services to underserved communities, particularly through mobile-first approaches and data-driven lending models (KPMG, 2022; Accenture, 2020). Unlike traditional banks, which often rely on physical branches and legacy systems, digital banks operate on low-cost infrastructure, allowing for agile operations and faster product deployment (Deloitte, 2020; Gomber et al., 2018).

The operationalization of digital banks in Malaysia has begun to yield tangible effects across the financial services landscape, particularly in altering market behaviour, shifting consumer expectations, and prompting a recalibration of strategic priorities among incumbents. These effects are most visible in how digital banks have redefined cost efficiency, product delivery, and inclusivity within the banking system. By adopting mobile-first platforms, lean infrastructure, and data-driven decision-making, digital banks have introduced a viable alternative to conventional banking, especially for underbanked and underserved segments such as micro and small enterprises, informal workers, and rural communities (Bank Negara Malaysia [BNM], 2022b; KPMG, 2022).

The presence of digital banks also compels incumbents to re-evaluate their competitive strategies. Traditional financial institutions have responded by accelerating digital transformation initiatives, forming partnerships with fintech startups, and investing in in-house innovation hubs (EY, 2021). For example, several Malaysian banks have launched digital-only subsidiaries or revamped their mobile banking platforms in response to the competitive threat posed by new entrants (PwC, 2021; Oliver Wyman, 2022).

The impact of these new entrants is particularly evident in their ability to serve previously overlooked market segments. Unlike traditional banks that are often constrained by high operational costs and legacy systems, digital banks can scale rapidly without physical infrastructure. This allows them to offer lower-cost savings accounts, micro-loans, and real-time payment solutions tailored for gig workers, freelancers, and small merchants. The use of alternative data—such as e-commerce behaviour, mobile usage, and digital payment patterns—for credit scoring has enabled digital banks to extend credit access to customers without formal credit histories (Accenture, 2020; World Bank, 2022). In practice, this supports national financial inclusion agendas and aligns with Malaysia's Shared Prosperity Vision 2030.

Moreover, the competitive pressure exerted by digital banks has pushed established financial institutions to rethink their market positioning. Major Malaysian banks such as Maybank, CIMB, and RHB have significantly expanded their digital capabilities, either by launching standalone digital platforms (e.g., MAE by Maybank) or by upgrading their mobile banking interfaces with AI-driven features and personalized financial management tools (EY, 2021; PwC, 2021). Some incumbents have also invested in fintech partnerships or established corporate venture arms to remain agile in an evolving ecosystem. These strategic responses reflect a broader industry recognition that digital-first engagement is now essential to retaining tech-savvy customers and capturing the next generation of banking consumers.

In strategic terms, digital banks in Malaysia tend to position themselves as inclusive, tech-savvy, and customer-centric alternatives. Their business models often leverage behavioural data, artificial intelligence, and cloud computing to offer personalized financial products, automate risk assessments, and provide 24/7 customer support (Arner et al., 2016; Chuen & Deng, 2017). Moreover, the adoption of embedded finance and open banking principles allows digital banks to integrate financial services seamlessly into e-commerce, telecommunications, and gig economy ecosystems (OECD, 2020; BNM, 2022b).

Digital banks in Malaysia are positioning themselves not merely as digital replicas of conventional banks, but as financial lifestyle platforms. Many are aligning their business models with broader ecosystem strategies, embedding financial services within digital commerce, telecommunications, and gig economy networks. For instance, some licensed digital banks are collaborating with ride-hailing platforms, food delivery services, and online marketplaces to offer embedded credit and payment solutions directly within third-party apps (BNM, 2022a; Deloitte, 2023). This ecosystem-centric approach enables digital banks to reach users where they spend most of their time and to drive financial inclusion through everyday digital touchpoints.

At the same time, the use of cloud-native infrastructure, AI-powered onboarding, and automated risk analytics has enhanced service delivery, particularly in areas like instant account creation, remote identity verification (e-KYC), and fraud detection. These efficiencies translate into faster time-to-market for new products, reduced compliance costs, and more personalized customer engagement—factors that are increasingly crucial in an experience-driven economy (Gomber et al., 2018; Chuen & Deng, 2017). Such innovations also align with Bank Negara Malaysia's push for greater innovation in digital financial services, as outlined in the Financial Sector Blueprint 2022–2026.

In summary, digital banks in Malaysia are reshaping industry dynamics through both competitive disruption and complementary innovation. Their entry has introduced new service models that focus on affordability, accessibility, and agility—forcing traditional banks to innovate in kind. The strategic positioning of these players, rooted in embedded finance and ecosystem partnerships, reflects a broader global trend toward the convergence of financial services with everyday digital life. As Malaysia's digital banking sector matures, the interplay between regulation, innovation, and competition will continue to shape the industry's trajectory.

Challenges, Opportunities, and Strategic Responses

While digital banks offer transformative potential, they also face significant operational and strategic challenges. Regulatory compliance, particularly concerning capital adequacy, anti-money laundering (AML), and cybersecurity, can pose substantial hurdles for new entrants without the institutional experience or resources of traditional banks (World Bank, 2021; ADB, 2023). Additionally, consumer trust remains a fragile asset, especially in markets where brand loyalty and face-to-face engagement have long been normative (McKinsey & Company, 2021).

Despite their considerable potential to transform Malaysia's financial landscape, digital banks face a range of operational, regulatory, and market-related challenges. One of the most pressing issues is compliance with stringent regulatory requirements, including those related to capital adequacy, anti-money laundering (AML), consumer protection, and cybersecurity. Unlike traditional financial institutions with established risk management infrastructures and compliance teams, digital banks often lack legacy experience and institutional maturity, placing pressure on their internal governance frameworks (World Bank, 2021; ADB, 2023). This is particularly critical in the Malaysian context, where the regulatory approach, led by Bank Negara Malaysia (BNM), emphasizes financial stability, consumer protection, and the integrity of the financial system (BNM, 2022a).

Consumer trust represents another major barrier to adoption. While digital banks offer convenience and innovation, many Malaysian consumers remain cautious due to longstanding preferences for physical branch interactions and established banking brands. This sentiment is especially strong among older populations and rural communities, who may view digital-only models as impersonal or insecure (McKinsey & Company, 2021). Establishing a strong brand identity, fostering trust through transparent operations, and ensuring reliable customer service are therefore vital to market penetration.

Digital infrastructure limitations compound this challenge. Although Malaysia boasts high smartphone usage and internet penetration, pockets of digital exclusion persist in rural and semi-urban areas. Gaps in digital literacy, inconsistent network coverage, and affordability concerns may hinder the ability of digital banks to reach low-income and underserved populations—precisely the groups they aim to include (MDEC, 2021). Addressing these structural barriers requires coordinated efforts, not only from digital banks themselves, but also from public and private stakeholders involved in digital ecosystem development. Digital infrastructure is another challenge. Despite high smartphone and internet penetration, disparities in digital literacy and connectivity persist across rural and lower-income populations in Malaysia, potentially limiting digital banks' reach (MDEC, 2021). Moreover, acquiring and retaining customers without a physical footprint necessitates significant investment in digital marketing, user interface design, and customer support systems (Accenture, 2020).

Nonetheless, the opportunities are considerable. Digital banks are better positioned to innovate rapidly, scale efficiently, and deploy cost-effective technologies such as cloud computing, API-based platforms, and AI-driven services (Gomber et al., 2018; Chuen & Deng, 2017). Their agility allows them to respond to market shifts, regulatory changes, and customer preferences with greater speed than incumbents.

Customer acquisition and retention further add to the complexity. Without physical branches to create visibility or walk-in traffic, digital banks must rely heavily on digital marketing, intuitive user interface (UI) design, seamless onboarding experiences, and responsive support infrastructure to build a loyal user base. These initiatives demand substantial upfront investment and continuous iteration, especially in a highly competitive environment where incumbent banks and fintech platforms are also vying for digital engagement (Accenture, 2020).

Nevertheless, the digital banking model offers several advantages that can offset these limitations. From an operational perspective, digital banks benefit from cloud-native infrastructures, enabling flexible scalability and cost efficiency. Application Programming Interfaces (APIs) and modular architecture support integration with third-party services, facilitating product innovation and ecosystem collaboration. Artificial intelligence (AI) and machine learning tools enhance customer profiling, fraud detection, credit scoring, and chatbot-enabled support, creating an experience-driven banking environment that resonates with younger, digitally literate customers (Gomber et al., 2018; Chuen & Deng, 2017).

The ability of digital banks to adapt quickly to market shifts is also a critical asset. Their lean structures allow for faster product iterations, rapid regulatory compliance updates, and the testing of new services in niche markets. This agility positions them favorably in addressing evolving consumer preferences, such as demand for hyper-personalized financial advice, instant credit approvals, and embedded finance solutions within non-financial platforms.

In response to this emerging competition, incumbent banks in Malaysia have adopted diverse strategic approaches. Some have formed strategic alliances with fintech firms, leveraging external innovation to expand their digital offerings. Others have launched digital-only subsidiaries to experiment with new models without disrupting their core operations. For instance, initiatives such as MAE by Maybank and TNG Digital's partnership with CIMB demonstrate how traditional banks are evolving to retain relevance in the digital space (EY, 2021; PwC, 2021). Additionally, banks have begun investing in advanced analytics, cloud infrastructure, and digital risk management systems to modernize legacy platforms and enhance operational resilience.

Regulatory authorities have also responded proactively. BNM has introduced a dedicated digital banking regulatory framework and established sandbox environments to allow for controlled experimentation with innovative financial services. Furthermore, supervisory capacity has been strengthened through the integration of RegTech and SupTech tools, enabling more dynamic oversight of digital operations and risk exposure (IMF, 2022; BNM, 2022b). RegTech (Regulatory Technology) and SupTech (Supervisory Technology) are both subsets of financial technology (FinTech) designed to improve regulatory compliance and supervisory efficiency in the financial services industry. These policy innovations reflect a broader shift towards principle-based regulation that balances innovation facilitation with systemic safeguards.

While digital banks in Malaysia face considerable headwinds including infrastructure gaps, trust deficits, and compliance burdens, they are also uniquely positioned to drive financial innovation and inclusion. Through strategic agility, ecosystem integration, and regulatory collaboration, digital banks can overcome early-stage barriers and contribute meaningfully to a more competitive, resilient, and digitally inclusive financial system. Strategic responses from incumbents vary. Some traditional banks have opted to form alliances with fintech firms to extend their service offerings, while others have launched their own digital-only banks to capture younger, digitally native customer bases (EY, 2021; PwC, 2021). Regulatory authorities have also adapted by updating supervisory tools, investing fintech capabilities, and refining risk assessment frameworks to oversee the digital banking sector more effectively (IMF, 2022; BNM, 2022b).

Conclusion and Policy Implications

The rise of digital banks in Malaysia represents a pivotal evolution in the nation's financial services landscape. With robust regulatory support and increasing consumer demand for digital experiences, digital banks are well-positioned to expand financial inclusion, enhance competition, and catalyse further innovation in the sector. Their data driven, customer-centric approaches challenge traditional banking models and force incumbents to reimagine their strategic playbooks.

The emergence of digital banks in Malaysia represents a pivotal development in the nation's financial sector, introducing a new generation of technology-driven institutions that challenge traditional models and redefine the banking value proposition. While still in the early stages of market deployment, licensed digital banks are already influencing competitive dynamics, regulatory priorities, and consumer expectations. By offering innovative, cost-effective, and inclusive financial services especially to underserved populations such as micro-SMEs, gig workers, and the unbanked digital banks are well positioned to enhance the depth and breadth of Malaysia's financial inclusion agenda.

From a policy standpoint, continuous regulatory refinement will be essential to strike a balance between innovation and systemic stability. This includes strengthening cyber resilience, ensuring equitable access to digital services, and fostering interoperability among financial platforms (World Bank, 2021; OECD, 2020). Policymakers should also prioritize inclusive digital education to ensure that all segments of society can participate meaningfully in the digital economy.

From a practical standpoint, digital banks are enabling the rapid deployment of personalized, data-driven products through mobile-first platforms and cloud-based infrastructures. These innovations are not only reshaping customer engagement models but also reducing the cost-to-serve in a manner that traditional banks have struggled to replicate. However, their long-term success will depend on their ability to navigate regulatory compliance, establish consumer trust, and scale sustainably within a complex and evolving financial ecosystem.

The entry of digital banks has also triggered a wave of strategic realignment among incumbents, prompting established banks to fast-track digital transformation, invest in fintech partnerships, and rethink customer segmentation strategies. These developments are fostering a more dynamic and competitive industry landscape, with significant spillover effects on innovation, pricing, and service delivery.

At the policy level, Malaysia's regulatory authorities particularly Bank Negara Malaysia have played a proactive role in shaping a forward-looking digital banking framework. The digital banking licensing regime, combined with initiatives such as the Financial Sector Blueprint and national fintech sandbox, provides a structured yet flexible environment for innovation. Nevertheless, policymakers must remain vigilant in ensuring that innovation does not outpace risk oversight. This includes strengthening cybersecurity infrastructure, developing digital financial literacy programs, and enhancing the capabilities of supervisory institutions to manage emerging risks associated with AI, algorithmic lending, and embedded finance.

Moving forward, continued collaboration between regulators, digital banks, fintech startups, and traditional institutions will be critical. A coordinated approach can ensure that digital banking growth aligns with national financial inclusion goals while preserving financial stability. Moreover, regulatory harmonization, open banking standards, and interoperable digital identity systems should be prioritized to maximize ecosystem integration and minimize fragmentation.

Future research should explore the long-term performance of digital banks in terms of financial sustainability, customer outcomes, and risk management practices. Comparative studies between digital banks and neobanks in other jurisdictions can also yield valuable insights into success factors, pitfalls, and policy levers. Analyses with international digital banking models could further inform local strategies. As the digital banking ecosystem evolves, such empirical insights will be crucial in shaping effective policies and business models that serve both economic and social goals. Furthermore, more granular data on consumer behaviour, credit outcomes, and SME usage patterns will help inform evidence-based policymaking and targeted industry strategies. In conclusion, digital banks are not merely new players in Malaysia's financial sector they are catalysts for systemic transformation. With the right strategic direction and regulatory stewardship, they hold the potential to drive a more inclusive, competitive, and resilient financial ecosystem for the digital age.

References

Accenture. (2020). *The future of banking: The digital-only bank challenge*. Accenture. https://www.accenture.com

ADB. (2023). *Digital financial inclusion in Asia and the Pacific: A regulatory overview*. Asian Development Bank.

Arner, D. W., Barberis, J., & Buckley, R. P. (2017). FinTech, RegTech and the reconceptualization of financial regulation. *Northwestern Journal of International Law and Business*, 37(3), 371–413.

Arner, D. W., Barberis, J., & Buckley, R. P. (2016). The evolution of fintech: A new post-crisis paradigm? *Georgetown Journal of International Law, 47*(4), 1271–1319.

Bank Negara Malaysia (BNM). (2020). *Policy document on licensing framework for digital banks*. https://www.bnm.gov.my

Bains, P., Christensen, J., & Didier, T. (2021). *SupTech Applications for Risk-Based Supervision in the Banking Sector*. World Bank Group.

Bank Negara Malaysia (BNM). (2022). *Financial Sector Blueprint 2022–2026*.

Bank Negara Malaysia (BNM). (2022). *Bank Negara Malaysia announces the five successful applicants for digital bank licences*. https://www.bnm.gov.my

Bank Negara Malaysia (BNM). (2022b). *Financial Sector Blueprint 2022–2026*. https://www.bnm.gov.my

Chuen, D. L. K., & Deng, R. H. (2017). *Handbook of blockchain, digital finance, and inclusion*. Academic Press.

Deloitte. (2020). *Digital banking maturity 2020: How banks are responding to digital (r)evolution?* Deloitte Insights.

Deloitte. (2021). *The rise of digital banking in Asia: Perspectives from Singapore and beyond*. Deloitte Southeast Asia.

Economic Planning Unit. (2021). *MyDIGITAL: Malaysia digital economy blueprint*. https://www.epu.gov.my

European Banking Authority (EBA). (2022). *EBA Report on the Use of Supervisory Technology (SupTech) by EU Competent Authorities*.

EY. (2021). *NextWave global consumer banking survey 2021*. Ernst & Young Global.

Gomber, P., Koch, J. A., & Siering, M. (2018). Digital finance and fintech: Current research and future research directions. *Journal of Business Economics, 87*(5), 537–580. https://doi.org/10.1007/s11573-017-0852-x

IMF. (2021). *The promise of fintech: Financial inclusion in the post COVID-19 era*. International Monetary Fund.

IMF. (2022). *Malaysia: Financial system stability assessment*. IMF Country Report No. 22/150.

KPMG. (2022). *Pulse of fintech H2 2021: Global fintech investment trends*. https://home.kpmg

Malaysia Digital Economy Corporation (MDEC). (2021). *Digital financial inclusion: Bridging the gap*. https://mdec.my

McKinsey & Company. (2021). *Digital banking in Asia: Winning approaches to transformation*. https://www.mckinsey.com

OECD. (2020). *Digital disruption in banking: How are banks responding?* Organisation for Economic Co-operation and Development.

Oliver Wyman. (2022). *How Southeast Asia's banks can thrive in a digital age*. https://www.oliverwyman.com

PwC. (2021). *Emerging stronger: Malaysia's banking sector post-pandemic*. PricewaterhouseCoopers Malaysia.

Basel Committee on Banking Supervision. (2018). *Sound practices: Implications of fintech developments for banks and bank supervisors*. Bank for International Settlements.

Bounie, D., Francois, A., & Van Hove, L. (2020). Digital payment adoption and use: A literature review. *Journal of Economic Surveys, 34*(5), 944–987.

Claessens, S., Frost, J., Turner, G., & Zhu, F. (2018). Fintech credit markets around the world: Size, drivers and policy issues. *BIS Quarterly Review*, September, 29–49.

Chen, M. A., Wu, Q., & Yang, B. (2019). How valuable is fintech innovation? *Review of Financial Studies, 32*(5), 2062–2106.

Ghosh, S., & Vinod, D. (2017). Financial inclusion in Asia: What does the evidence say? *Asian Development Bank Economics Working Paper Series*, No. 502.

Frost, J. (2020). The economic forces are driving fintech adoption across countries. *Bank for International Settlements Working Papers*, No. 838.

Ghosh, S. (2021). Fintech and financial inclusion: An overview of the global landscape. *World Bank Policy Research Working Paper*, No. 9738.

Hadjibeyli, B., Sahay, R., & Čihák, M. (2022). Financial inclusion in the digital age. *IMF Staff Discussion Note*, SDN/22/01.

Hasan, I., Jackowicz, K., Kowalewski, O., & Kozłowski, Ł. (2020). Do fintech firms create value for investors? *Review of Financial Economics, 38*, 101–118.

Karim, N. A., & Hamid, A. (2022). Financial literacy and mobile banking adoption in Malaysia. *Asian Journal of Economics and Banking, 6*(1), 34–50.

Leong, K., & Sung, A. (2018). FinTech (Financial Technology): What is it and how to use technologies to create business value in fintech way? *International Journal of Innovation, Management and Technology, 9*(2), 74–78.

Lin, H., & Zhang, Y. (2020). Digital finance and inclusive growth: Evidence from China. *Emerging Markets Finance and Trade, 56*(15), 3497–3513.

Narula, R. (2021). Digitalization and development: The role of digital finance in developing economies. *Journal of International Business Policy, 4*(2), 225–243.

Ryu, H. S. (2018). Understanding benefit and risk framework of fintech adoption: Comparison of early adopters and late adopters. *Pacific Asia Journal of the Association for Information Systems, 10*(3), 75–100.

Schueffel, P. (2016). Taming the beast: A scientific definition of fintech. *Journal of Innovation Management, 4*(4), 32–54.

Suri, T., & Jack, W. (2016). The long-run poverty and gender impacts of mobile money. *Science, 354*(6317), 1288–1292.

Tang, M., & Law, S. H. (2022). Fintech development and economic growth in Malaysia: A structural break analysis. *Malaysian Journal of Economic Studies, 59*(1), 55–73.

Tapscott, D., & Tapscott, A. (2016). *Blockchain revolution: How the technology behind bitcoin is changing money, business, and the world*. Penguin.

Thakor, A. V. (2020). Fintech and banking: What do we know? *Journal of Financial Intermediation, 41*, 100833.

World Bank. (2021). *Malaysia economic monitor: Weathering the surge*. https://www.worldbank.org

Zetzsche, D. A., Buckley, R. P., Arner, D. W., & Barberis, J. N. (2020). RegTech: Evolution of Compliance and Technology. In *The Palgrave Handbook of Technological Finance* (pp. 439–461). Palgrave Macmillan.