FIDE FORUM

FORUM INSIGHTS

DIGITALISATION, INNOVATION, AND **DISRUPTION** IN THE FINANCIAL INDUSTRY

Issue : 3 | November 2024

About FIDE FORUM

FIDE FORUM is a community of board leaders in the financial industry that provides a vibrant platform for networking and collaboration among esteemed industry professionals. At FIDE FORUM, we play a pivotal role in empowering board directors in the financial sector to share invaluable insights, engage in discussions on best practices, and address industry-wide challenges in corporate governance.

Established in 2010, FIDE FORUM is uniquely positioned as the only organisation that specifically represents and serves the interests of financial institutions in Malaysia. For the past 14 years, our institutional and individual membership base recorded a sustained growth.

We advocate strong corporate governance practices through our vision and mission. The organisation enables the coming together of individuals, enabling potential business opportunities to be explored, and collective partnership to be enhanced.

The formation of FIDE FORUM was initiated by alumni Members of the Financial Institutions Directors' Education ("FIDE") Programme, which saw both **Perbadanan Insurans Deposit Malaysia ("PIDM") and Bank Negara Malaysia ("BNM")** sharing the common vision to create a common purpose for financial institutions, boards to foster and synergise communication, cooperation and collaboration among its Members and stakeholders. The successful formation of

BOARD MEMBER

Datuk Kamaruddin Taib
Chairman

Pushpa Rajadurai
Board Member

Choong Tuck Oon
Board Member

Nizar Idris
Board Member

FIDE FORUM is well positioned to grow as it evolves its strategies, structure and synergy to adapt to changing circumstances and challenges.

Today, FIDE FORUM is a membership-based organisation that helps Members to connect and build relationships, access resources and information relevant to their interests, and own a platform for sharing their views to relevant stakeholders. FIDE FORUM provides a comprehensive range of services from talent sourcing to improving the effectiveness of board performance. The aim is to create a forward-looking environment where Members can access, acquire and grow professionally while contributing to the overall success of the organisation's mission.

VISION

To be an exclusive network for financial institutions directors to enhance board excellence for sustainable business growth and financial stability.

MISSION

To provide seamless board services to enhance financial institutions directors' awareness, board talent management and board effectiveness by leveraging on thought leadership and insights of Members.

Ou Shian Waei
Board Member

Adil Ahmad
Board Member

Tan Sri Mohd Nasir Ahmad
Board Member

CHIEF EXECUTIVE OFFICER

Tay Kay Luan

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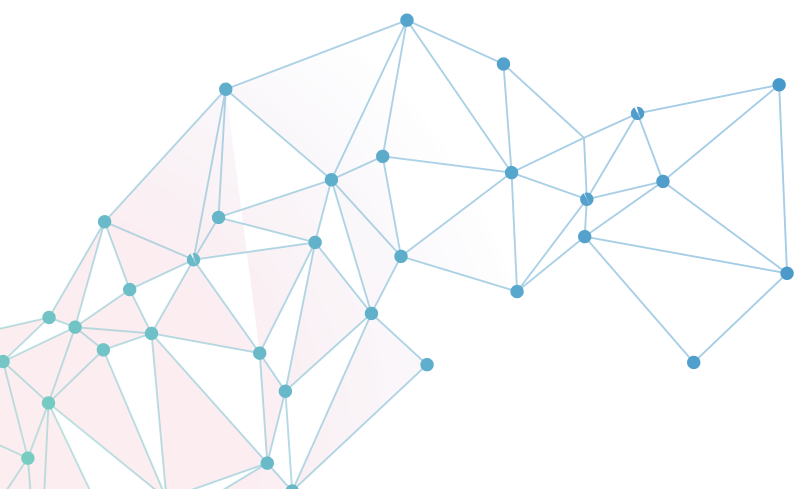

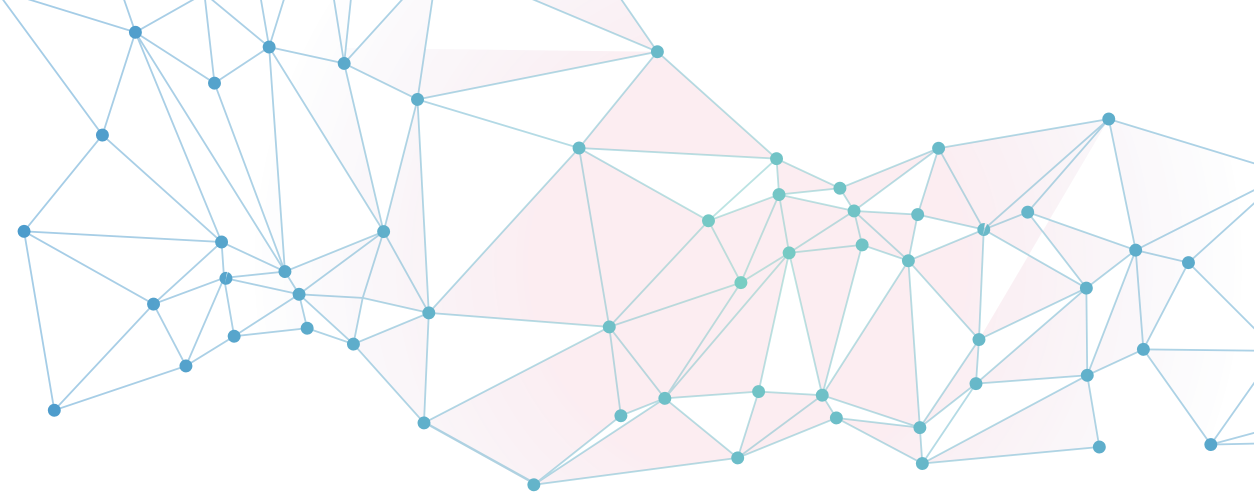

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FOREWORD

Datuk Kamaruddin Taib
Chairman of FIDE FORUM

I am very excited to present to you the third issue of FIDE FORUM's flagship publication, which we affectionately call Forum Insights. In today's fast-evolving financial landscape, directors of financial institutions face a complex set of challenges that demand thoughtful oversight. These responsibilities extend beyond daily organisational management and effective governance to encompass risk mitigation, stakeholder engagement, and stringent regulatory compliance. Increasingly, directors are also expected to consider broader factors such as climate concern and its role in society, equality, the promotion of diversity – all the while ensuring good governance. Technology adds yet another layer, presenting both challenges and opportunities that redefine board priorities.

In this third Issue of Forum Insights, we explore the ongoing and far-reaching effects of digitalisation, innovation, and disruption that will continue to have an effect on the financial industry. The publication features 14 articles contributed by distinguished experts across a wide range of fields, including regulatory bodies, government, thought leadership, digital banking, fintech, technology providers, consultancy, academia, and think tanks. By presenting these diverse perspectives, we aim to equip directors with insights to stay ahead of technological trends and to think strategically about how these developments affect their institutions. Alongside a diversity of thought, the contributing authors of this year's Forum Insights also reflect our commitment to diversity, equity, and inclusion. Digitalisation brings a host of solutions and opportunities for the financial industry, with artificial intelligence (AI) standing out as one of the most transformative. AI has the potential to significantly boost productivity and operational efficiency, yet it also introduces risks, particularly in cybersecurity, as digital threats grow increasingly sophisticated. Financial institutions must tackle these challenges by creating effective strategies to safeguard stakeholders and maintain trust. Such emphasis for the need for change is also pointed out by AG Suhaimi Ali in the first article:

> ***"To stay relevant, the financial industry must continue to innovate their business models, invest in digital transformation, and enhance their technological capabilities."***

To address the growing influence of technology, a notable trend among boards is the establishment of specialised technology committees. This practice signals a strong commitment to digital innovation but also runs the risk of sidelining directors who are not part of these committees, potentially leading them to disengage from discussions around technology. Given that digitalisation permeates every area of a financial institution's operations, it's essential for all directors to maintain a broad understanding of its impact. The rapid pace and technical complexity of digital matters require continuous vigilance and a commitment to lifelong learning to enable directors to stay informed and to be able to effectively navigate these challenges.

With such needs in mind, this current issue of Forum Insights aims to bring directors up to speed on a wide range of technology-related topics, from the emergence of new digital products and the role of digital banks, to the wider implications of geopolitical shifts in an interconnected world. A key statement from YB Liew Chin Tong that was made in the second article encapsulates the spirit of learning and growth — the very objectives for which publications like Forum Insights exist:

> ***"A country is only as good as the people living in it. Genuine action can only manifest with the right intent and mindset which involve having the willingness to change, adapt, and become more competitive."***

To conclude, I extend my gratitude, on behalf of FIDE FORUM, to the writers of this year's Forum Insights – authors who have made invaluable and noteworthy contributions that cover all areas surrounding digitalisation in the financial industry with a diversity of perspectives encompassing governance, technical aspects, education, and policy. I would also like to thank you, the reader, for your continued support and taking an interest in the topics we have featured. I trust that you will find this issue of Forum Insights engaging, thought-provoking, and invaluable.

Unlocking Value-Based Finance Through Digitalisation

AUTHOR

Suhaimi Ali
Assistant Governor
Bank Negara Malaysia

BANK NEGARA MALAYSIA
CENTRAL BANK OF MALAYSIA

Central to Malaysia's strategy in advancing Islamic finance is the Value-based Intermediation (VBI) initiative. VBI seeks to empower Islamic financial institutions to innovate solutions, and align their business practices as well as corporate strategies to deliver positive and sustainable impact to the economy, community and environment. This includes integrating environmental and social considerations into their operations and decision-making processes, in line with the intended outcomes of Shariah (Islamic law). VBI initiatives in Malaysia are delivered through diverse models, including via impact-based finance, social finance, microfinance and SRI-aligned sukuk. From its inception (2017) to 2022, Islamic banking institutions have intermediated over RM433.8 billion in VBI-aligned initiatives[1].

Advancements in technology have also enabled Islamic financial institutions to unlock more digitalised and innovative solutions within the Islamic finance sector. A prime example is myWakaf, an industry flagship programme under VBI, which leverages a multi-sided digital platform using various e-payment mechanisms to facilitate cash waqf contributions from the public, supporting the development of waqf projects across multiple states in Malaysia. Since its establishment, myWakaf has completed eight waqf projects, by mobilising cash waqf funds. With digitalisation, myWakaf has the potential to scale up. In its next phase of growth, myWakaf 2.0 aims to install 14 solar dome dryers for fishing communities across all states in Malaysia within the next three years.

Another use case of digitalisation to scale up social finance is the expansion of iTEKAD programme, which combines the provision of business assets funded by social finance instruments (e.g. donations, social impact investments, cash waqf and zakat) with microfinance, supplemented with structured financial and business training for microentrepreneurs. The industry is currently exploring the usage of digital tools to streamline the application, disbursement and monitoring process towards ensuring more efficient and transparent delivery of the programme. iTEKAD has provided funding and entrepreneurial training to more than 8,000 low-income microentrepreneurs, empowering them to improve their financial resilience and livelihood.

Aside from social finance, Malaysia is also recognised as a leading Islamic fintech market[2]. With a well-established Islamic fintech market and ecosystem in place, comprising conducive regulations, ready infrastructure and skilled talent pool, Malaysia offers fertile ground for exploring and developing cutting-edge Islamic finance technologies, especially in advancing impact-driven solutions. Digitalisation facilitates greater accessibility, efficiency and transparency, allowing these market players to better serve a diverse range of customers. In Malaysia, Islamic fintech players span various sectors within the financial ecosystem including digital banking and payment solutions, crowdfunding and P2P financing, investment and wealth management, blockchain and smart contracts, insurtech (takaful), personal finance and financial inclusion, digital remittances, regtech and compliance, Islamic digital platforms and marketplaces as well as education and awareness solutions.

[1] Data on VBI-aligned initiatives include financing, investment, deposits and social finance funds.
[2] Malaysia is ranked first in the Global Islamic Fintech (GIFT) Index, surpassing 64 other countries. The GIFT Index evaluates countries based on five key categories: talent, regulation, infrastructure, Islamic fintech market and ecosystem as well as capital. These categories collectively assess the overall conduciveness of each country for Islamic fintech activities.

Regulating and Facilitating a Vibrant Digital Financial Services Landscape

Technology is agnostic – both Islamic finance and conventional finance can benefit from its use. The agnostic nature of technology allows it to be customised to fit specific Shariah requirements. Regulating and facilitating a vibrant digital financial services landscape in Islamic finance involves a strategic approach that balances innovation, compliance with Shariah principles and robust regulatory oversight. In regulating financial technology, Bank Negara Malaysia (BNM) adopts both 'entity-based' and 'activity-based' approaches to regulation. For instance, entity-based regulation is applied on banks and insurance/takaful operators regardless of the specific financial activities they conduct, where the soundness, risk management and governance of the entire entity are considered critical to the financial system. In contrast, activity-based regulation focuses on risks and requirements of specific financial activities rather than the institution as a whole. Examples include payment services and digital wallets.

The regulatory framework is underpinned by principles of proportionality and risk-responsiveness to provide a conducive environment where responsible innovation and healthy competition can take place. There are three broad categories: the License Regime, the Approval Regime and the Registration Regime. The intensity of regulation is calibrated to appropriate level of risk presented by the different categories of financial institutions and fintech companies. This includes compliance with developmental policies, prudential standards, and business conduct requirements. In regulating innovation, BNM is guided by three key principles: parity, proportionality and neutrality to provide a level-playing field to industry players (Diagram 1).

Diagram 1: BNM key principles and approaches to facilitate digitalisation and innovation

3 KEY PRINCIPLES

Parity
Same type of risk, same type of regulation

Proportionality
Regulation and supervision calibrated to the level of risk

Neutrality
Agnostic to different technologies, systems and approaches

5 MAIN APPROACHES

1. Advocacy & collaboration
Facilitate digitalisation in close collaboration with other key agencies

2. Policy & operational flexibility
Operate a regulatory Sandbox to enable live-testing of emerging businesses in a safe and contained environment

3. Outreach, education and guidance
Conduct educational and public outreach programmes to provide regulatory clarity

4. Regulatory adaptations
Recalibrate existing regulations and publish new policies to facilitate innovation

5. Enabling shared infrastructure
Implement and advocate for open and digital infrastructure in collaboration with industry players

1. Advocacy and Collaboration

BNM collaborates closely with various stakeholders to ensure that our policies are well-informed, innovative solutions are properly vetted, and regulatory frameworks remain agile to accommodate technological advancements while securing positive consumer outcomes. These collaborations include working with government agencies, financial institutions, fintech and technology providers as well as industry and consumer groups.

As a sector that supports the daily banking and payment transaction needs of over 95% of the population, secure identity verification is one example of cross-collaboration. BNM is currently working together with MyDID, the lead implementing agency for MyDigital ID, to support the use of MyDigital ID as a secure, trusted identity and fit-for-purpose authentication service for the financial sector. A trusted National Digital ID with the highest possible level of assurance and security is critical in minimising identity fraud risk and combating financial fraud. This is essential to maintain public trust in the financial system and for the sector to continue supporting Malaysia's digital economy blueprint aspirations. Beyond security, at its full potential, MyDigital ID will also enable further digitalisation of financial services and strengthen financial inclusion agenda across various use cases such as e-KYC, transaction signing and financial protection claims.

In addition, BNM continues to advocate for reforms anchored on realising our vision for an end-to-end digitalised motor ecosystem. Notable progress includes full commitment from all general insurers and takaful operators to roll out digital roadside assistance solutions. This entails digitally enabled distress call functions, tow-truck tracking, workshop selection and updates on repairs and claims status that would greatly ease consumers' concerns. As a result, more than 15 million policyholders and takaful participants now have access to the suite of digital roadside assistance solutions. These reforms will not only enhance customer experience and confidence, reduce claims leakages and fraud, but also pave the way for the progressive liberalisation of motor and fire tariffs. This in turn will encourage greater competition and innovation, with better choices for consumers with different needs and risk profiles, in line with risk-based pricing.

These are among the collaborative efforts that BNM is pursuing to facilitate innovation. For Islamic financial institutions, these enhancements promote the development of more innovative products and services that not only fulfil their functional purposes but also deliver greater alignment with VBI principles.

2. Policy and Operational Flexibility

Innovation within the Financial Technology Regulatory Sandbox (Sandbox) plays a crucial role in advancing VBI by fostering the development of Shariah-compliant financial solutions that contribute to a more sustainable outcome. The Sandbox provides a safe space for financial institutions and fintech startups to experiment with new products and services in a risk-proportionate regulatory environment and appropriate safeguards, within an approved period. This allows for the testing of innovative ideas such as green financing products, microfinance solutions for underserved communities, and digital platforms that enhance financial inclusion. By allowing these innovations to be piloted and refined, the Sandbox accelerates the integration of VBI in product solutioning.

Introduced in 2016, the Sandbox was refreshed this year. The refreshed Sandbox now comprises two tracks: the Standard Sandbox, with simplified assessment of its eligibility criteria to ease testing of innovative solutions; and the Green Lane, an accelerated track introduced in February 2024. The Green Lane offers a simpler and quicker path for financial institutions with a strong track record in risk management to test innovative solutions facing regulatory impediments. It is important to note that being accepted into the Sandbox does not guarantee that financial institutions and fintech players will receive a licence, but it may help to support the overall process of getting one.

The Refreshed Sandbox Now Comprises Two Tracks

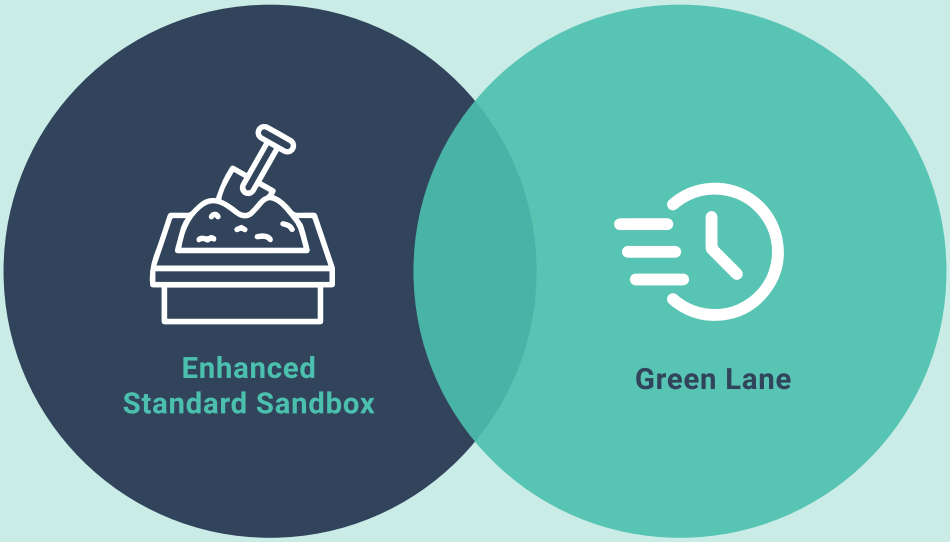


Diagram 2: Overview of Sandbox application and assessment process

Source: BNM, Sandbox Policy Document 2024

Enhanced Standard Sandbox		Green Lane
• Fintech companies, new entrants and financial institutions regulated by BNM • Admission on a roling basis (can apply anytime)	**Applicability**	• Financial institutions regulated by BNM • Institution admission on a cohort basis (two intakes in January and July) following which solutions may be registered anytime
Stage 1: Eligibility assessment • Simplified assessment with the following key changes: ◦ More facilitative process for applicants to demonstrate value proposition e.g. without proof-of-concept ◦ Greater focus on ability of applicants to identify risks appropriately • BNM endeavours to inform applicants within 15 working days	**Eligibility/ qualification criteria**	**Qualification at institutional level** • Confirmation that financial institution meets standards on institutional risk management, compliance and governance capabilities • Submission of list of all potential solutions and aggregate cap of expected financial losses • BNM endeavours to inform decision on approval within 30 working days **Qualification at solution-level** • Limit to 20,000 customers and up to 12 months of testing • Regulatory flexibility provided unless specified as out-of-scope
Stage 2: Preparation for go-live • Validation of preconditions for live test • Finalisation of testing parameters, KPIs and exit plan • Approval given with or without conditions for go-live	**Review before go-live**	**Simplified review** • Registration of solutions at least 15 working days prior to go-live • Attestation and indemnity of customers against direct financial losses
• For a rejected application, a cooling off period of six (6) months shall be observed before the applicant is allowed to resubmit the application	**Live-testing**	

Submission of interim reports to BNM and preparation of a final report post-testing

3. Outreach, Education and Guidance

More intensive effort is required to reach and educate unserved and underserved segments as we progress towards more secure and inclusive digital financial services. As part of the Financial Inclusion Framework 2023 – 2026, several strategies were outlined, including multiple collaborative efforts across various agencies such as the Financial Education Network (FEN), the financial industry and government agencies. One of the key goals is to transition communities, particularly in rural areas, towards greater use of digital payments through programmes such as the e-Duit Desa programme. In 2023 alone, over 110 e-Duit programmes have been conducted to bring merchants from different community segments, particularly those in rural areas, tourist destinations and campuses, into the digital payments space. A key target group for our public outreach efforts is the youths. Additionally, efforts were made to improve awareness on contemporary topics such as financial scams and financial literacy. To support this, FEN launched a pilot financial education programme, FEN PROAKTIF, aiming to equip university students with financial management skills. Apart from the financial education, 1,800 youths across Malaysia were engaged in 2023 to help them develop a deeper understanding of the economy as well as BNM's mandate and policies.

These initiatives have empowered many individuals with the knowledge and tools needed to make informed financial decisions, including awareness on availability of Islamic financial products and services that align with VBI and support sustainability practices. Association of Islamic Banking and Financial Institutions Malaysia (AIBIM) has also undertaken various initiatives to actively promote public awareness of Islamic finance and impact creation that the industry aims to bring through VBI and digitalisation efforts. This includes launching awareness campaigns, CSR projects, green learning and training programmes, employee well-being programmes, financial literacy training for youngsters and holding roundtable discussions with government agencies, Islamic finance stakeholders and related SMEs.

4. Regulatory Adaptations

Regulatory adaptations play a crucial role in empowering financial institutions to adapt to technological advancements, changing consumer behaviours and the growing demand for sustainable practices. These regulations foster an environment that encourages innovation. For example, Islamic banks leverage on innovative technology to enhance access to financial services, aligning with VBI's focus on promoting social welfare and fostering an inclusive financial system. Through digital platforms, these banks can offer affordable and accessible services to communities traditionally excluded from the financial sector. This not only reduces the wealth gap but also empowers individuals to engage in the formal economy.

To facilitate the market entry of digital-first business models, the Policy Document on Licensing Framework for Digital Banks was issued in December 2020, leading to BNM granting five new digital bank licenses. Two of the five approved digital banks are Islamic digital banks: AEON Bank and a consortium led by KAF Investment Bank Sdn. Bhd. This development aligns with VBI, which encourages the Islamic finance industry to deliver value beyond profit, such as promoting financial inclusion and responsible banking. With this development, Malaysia now joins other Asian countries, such as Singapore, Indonesia, China and Japan in having operational digital banks[2]. Following a similar journey, the Digital Insurers and Takaful Operators (DITO) Framework was issued in July 2024 to facilitate the entry of DITOs that can deliver strong and meaningful value propositions of inclusion, competition and efficiency. Once in operation, DITOs are expected to address critical protection gaps in digitally focused segments, providing Shariah-compliant products that prioritise social impact and sustainability alongside existing players in the insurance and takaful value chain.

Another key initiative pursued by BNM is developing the infrastructure for digital identity verification and authentication. In recent years, end-to-end digital account opening has gained traction as a broader range of financial services becomes increasingly digitalised. e-KYC supports this by enabling the digital onboarding of customers at anytime and anywhere. With the implementation of e-KYC, most customers no longer need to visit a physical branch to open an account. To ensure that the roll-out of e-KYC remains safe, secure and responsibly implemented, BNM issued a revised Policy Document on e-KYC in April 2024. Financial institutions are allowed to use various methods for identification and verification through e-KYC, such as facial recognition and video calls. These methods must align with the risk assessment and level of assurance required for the specific product, ensuring that ethical considerations are at the forefront of digital advancements, consistent with VBI. Besides increasing customers' convenience, the adoption of e-KYC reduces operational costs associated with manual KYC procedures, such as paper-based documentation and physical storage. These developments are expected to benefit both conventional and Islamic finance players in delivering better services to customers, while simultaneously upholding the VBI commitment to ethical and responsible financial practices.

[2] *Source: A List of Digital Banks in Asia - Fintech Singapore (fintechnews.sg)*

5. Enabling Shared Infrastructure

BNM is also focusing on futureproofing financial infrastructure, anchored on three objectives: resilience, inclusivity and adaptability. These objectives guide the development of the financial infrastructure to support the booming digital economy.

Open Finance remains an important agenda for Malaysia's financial sector as highlighted in the Financial Sector Blueprint 2022–2026 (FSBP). By enabling consumers to securely access, manage and share their personal financial data with third-party providers, consumers can control who they share their personal financial data with and what they do with it. This in return promotes digital and data-driven innovations, allowing consumers to benefit from hyper-personalised financial products, better investment advice and improved money management tools leading to better informed decision-making and greater financial inclusion. To make Open Finance happen, BNM is working with PayNet, Malaysia's retail payment system operator, to shape the ground rules and infrastructure for the financial sector. As the central bank and financial regulator, BNM will create an enabling regulatory environment that will support the financial sector's state of readiness for Open Finance and, by extension, Open Data use cases to take place. It will be important for the industry to in turn participate and give full support to the initiative.

Encouraging further development of digitalisation, another key initiative involves modernising our retail payment infrastructure and fostering interoperability between different payment solutions available in Malaysia. This initiative aims to enhance the efficiency and convenience of digital payment transactions for consumers and businesses alike. The development of retail payment infrastructure includes the establishment of Malaysia's shared fast payment infrastructure, the Real-time Retail Payments Platform (RPP) and the introduction of the unified QR code payment system, DuitNow QR, by PayNet. These developments have significantly contributed to the rapid adoption of e-payments, which saw a 23% increase in e-payment transactions in 2023, rising to RM11.5 billion transactions compared to RM9.3 billion in 2022.

As for the Medical and Health Insurance/ Takaful (MHIT) sector, BNM is working closely with the industry to establish a central medical claims data platform to support better cost control management and improve transparency on claims costs. This will be pursued in stages, with the first phase (expected to go live in 2025) focusing on collection of MHIT claims data to enable greater industry-wide analysis of medical claims and disclosure of medical inflation rates. The platform is also expected to pave the way for the publication on cost of common medical procedures in subsequent phases, which aims to empower consumers to make more informed healthcare decisions on their preferred medical provider and the reasonableness of costs incurred.

Strengthening Domestic and Global Collaborative Efforts

BNM is actively working in collaboration with the industry and other central banks to extend the efficiencies and convenience enjoyed in domestic payments to the cross-border payment space. Notably, BNM has been actively linking Malaysia's instant payment system (IPS) i.e., the RPP, with other IPSs in the region to provide faster, cheaper and more accessible cross-border payment services. This includes the real-time payment connectivity with Singapore, covering QR payments and person-to-person (P2P) fund transfers, which went live in March and November 2023, respectively. This connectivity complements earlier payment linkages with Thailand and Indonesia for QR payments, which went live in 2021 and early 2022, respectively. These three linkages enable the Malaysian customers of participating banks and non-banks traveling to these countries to pay using their domestic mobile banking apps at participating merchants that accept QR payments. Meanwhile, visitors from these countries to Malaysia also have access to pay at most of the two million DuitNow QR acceptance points in Malaysia.

To enhance the efficiency of cross-border payments, Project Nexus is developing a scalable multilateral payment connectivity model. The project aims to improve the cost, speed, access and transparency of cross-border payments by connecting domestic IPS across multiple countries through a standardised approach. Following the successful proof-of-concept in 2022, BNM together with the Bank for International Settlements Innovation Hub (BISIH) Singapore Centre and central banks from Indonesia, Philippines, Singapore and Thailand, have collaborated in 2023 to develop a detailed roadmap to bring the project into live implementation. The roadmap covers Nexus governance, business and technical specifications. Work to operationalise Nexus has commenced this year. The project will significantly benefit consumers through cheaper, faster and more transparent payments and fund transfers among participating countries in the future, in addition to strengthening intra-regional trade and economic cooperation.

As the pace of digitalisation continues to accelerate, policymakers are exploring emerging technologies that can spur greater efficiency, inclusion and vibrancy in the payments and financial sector. To this end, BNM has commenced a multi-year Central Bank Digital Currency (CBDC) exploration to evaluate its potential and underlying technologies such as Distributed Ledger Technology (DLT) to address gaps in the financial sector and achieve public policy objectives. Exploratory work on domestic wholesale CBDC is underway to reimagine and futureproof RENTAS, the domestic real-time gross settlement system. Some of the potential benefits from this workstream include enhancing the efficiency of liquidity management, simplifying compliance processes and enabling new use cases such as the settlement of tokenised assets. CBDCs and emerging technologies also have the potential to address longstanding frictions in cross-border payments associated with low speed and high costs. To this end, in line with our vision for more efficient cross-border payments, BNM collaborates closely with the BISIH on several CBDC and innovation projects such as Project Dunbar, Project Mandala and Project Rialto. BNM also participates as an observer in Project mBridge, which explores a multi-CBDC platform to enable instant cross-border payments and settlement.

Diagram 3: BNM involvement in several CBDC and innovation projects
Source: BNM

Project Dunbar

Tested the use of wholesale CBDC for international settlements via a shared platform. The project developed working prototypes and demonstrated practicable solutions to address key challenges distinct to a multi-CBDC common platform such as access, jurisdictional boundaries and governance.

Aims to automate compliance procedures, provide real-time transaction monitoring and increase transparency and visibility around country-specific regulatory policies, through a common protocol using smart contracts. In doing so, it aims to address a key challenge identified during Project Dunbar.

Project Mandala

Project Rialto

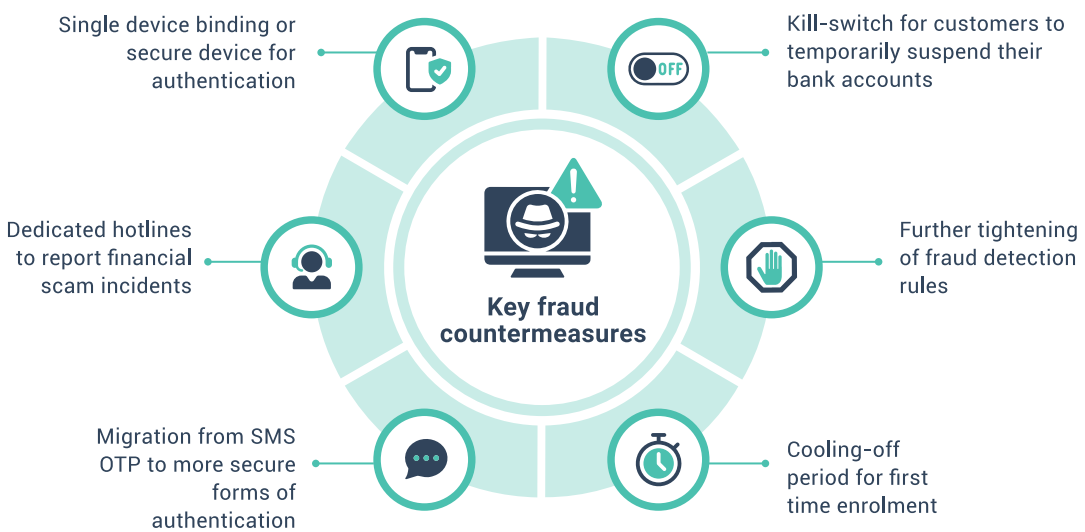
Explores an automated modular foreign exchange (FX) settlement solution using wholesale CBDC to address pain points associated with FX services facilitated by correspondent banks, such as trapped liquidity and settlement risks concerns.

With the ongoing digitalisation of financial services in Malaysia, cyber security emerges as one of the most significant risks. The same digital ecosystems that drive innovation and benefit consumers and businesses also pose risks and vulnerabilities to the financial sector. These include operational disruptions, data breaches and financial losses. The cyber security threat is highly complex, shaped by a range of factors such as higher interconnectedness between financial services and third-party service providers as well as greater use of cloud.

The threat is borderless and constantly evolving, posing challenges to put in place reliable safeguards. While reducing the probability of cyber-attacks remains an important objective, efforts will be intensified to mitigate the impact of such attacks. For example, BNM continued to actively engage in cyber information sharing initiatives on regional platforms such as the ASEAN Cybersecurity Risk Information Sharing Program (CRISP). In addition, BNM implemented several initiatives and frameworks, including the adoption of the Technology Risk Management Framework and Cyber Resilience Framework. BNM also improved the network resilience, technology architecture and implemented continuous cyber monitoring. The Cyber security Management Assessment Program (CMAP) was also accelerated to enhance cyber security maturity.

Furthermore, to enhance resilience against fraud, financial institutions were required to implement five key fraud countermeasures and a kill-switch capability introduced in 2022 (Diagram 4). As of today, most financial institutions have successfully implemented these six countermeasures.

Diagram 4: Key fraud countermeasures
Source: BNM, Annual Report 2023



The collaborative arrangements among authorities and industry players, both domestically and internationally, are crucial for developing holistic defences against cyber security risks to the financial sector. By working together, regulatory bodies, financial institutions, and technology providers can share information, best practices and resources to identify and mitigate potential threats more effectively.

The National Fraud Portal (NFP), a newly launched technology-based platform, is designed to detect, verify and track fraudulent activities reported to the National Scam Response Centre (NSRC). This platform is a collaborative effort between BNM, PayNet and several financial institutions, aimed at enhancing Malaysia's strategy to combat online fraud. By automating the NSRC processes, which were previously manual and time-consuming, the NFP significantly improves efficiency. Additionally, the portal standardises the industry's approach to managing mule accounts, ensuring that affected account holders maintain access to essential financial services.

Financial Industry to Stay Agile in the Evolving Environment

The advancements in technology demonstrate how digital innovations are supporting VBI, making it more inclusive, transparent and impactful. To stay relevant, the financial industry must continue to innovate their business models, invest in digital transformation and enhance their technological capabilities. This evolution is crucial to meet changing customer needs and remain competitive. BNM's role as the regulator is to foster a conducive environment for technological innovation by updating regulatory frameworks and for Islamic finance, ensuring that innovations align with VBI, without compromising financial stability or consumer protection. Additionally, BNM is committed to promoting monetary and financial stability by balancing innovation with robust oversight. Through various initiatives, BNM will continue to support the growth of a vibrant and inclusive digital economy in Malaysia, where the financial sector can thrive and play a pivotal role in supporting the realisation of Malaysia's economic aspirations. By leveraging on digital innovations and channels, Islamic finance can better fulfil the objectives of Shariah (Maqasid al-Shariah), and support economic development while upholding social and environmental values.

Unlocking Malaysia's Future:

Embracing Digitalisation and Reindustrialisation for Growth

AUTHOR

YB Liew Chin Tong

Deputy Minister of Investment, Trade and Industry (MITI)

MINISTRY OF
INVESTMENT, TRADE AND INDUSTRY

Background

Achieving economic prosperity is the aspiration of any society of any developing nation. Every individual should have the opportunity to pursue wealth and higher standards of living, so long as they are willing to put in an effort. However, individual determination alone will not lead to the realisation of these aspirations. It is, therefore, the role of elected officials and policymakers to ensure that the best conditions are available to allow these pursuits to manifest themselves. This is done through effective public policies and economic planning.

Various Malaysian governments have concocted their own economic development strategies over the past decades, setting a common theme and direction for the nation. An example of this took shape in the First Malaysia Plan in 1966. Since then, national economic strategies have been reviewed every 5 years to ensure relevance and effectiveness, allowing these plans to stand as a reference point for the country's economic development policies. By 2025, Malaysia would have come to the end of the 12th Malaysia Plan. Despite these enthusiastic plans and 67 years of independence, Malaysia is still striving to become a developed and high-income nation. It was certainly not for the lack of trying. For a time, Malaysia even seemed to be well on its way.

It first experienced an economic take-off between 1988 to 1997 during which the economy grew by an average of 9 percent annually. This growth was matched by an increase in wages of 9 percent annually. However, the Asian Financial Crisis struck in 1997. In 1998, then Deputy Prime Minister Anwar Ibrahim was removed from office, setting off a series of unstable political events. In 2001, China joined the World Trade Organization (WTO). From around 2001 up to the COVID pandemic, a period of two decades, Malaysia experienced premature deindustrialisation. This era was heavily influenced by prominent figures in the likes of Ronald Reagan and Margaret Thatcher who were still in office, coinciding with the fall of the Berlin Wall in 1989. This became more obvious from the time China joined the WTO and became the world's factory.

In the first eight months of 2023, Malaysia was among the top six countries that experienced the largest amount of greenfield FDI, where it recorded USD28 billion in investments – a record for the same period . Yet, Malaysia still maintains the mindset that it is competing with its neighbours for FDI. When an investor is keen to do business, a "customer is king" mentality persists. Instead, it is a different era where Malaysia needs to consider how it can take advantage of new opportunities to transform its economy.

Stepping Up by Tech-ing Up: The NIMP 2030 Strategy

The New Industrial Master Plan 2030 (NIMP 2030) was framed as a mission-based approach document, rather than a sectoral approach document. It aims to steer the nation's manufacturing sector towards a common mission. The idea of a mission comes from Mazzucato, who emphasised the need for collective action. The state needs to work with the financial sector and across the board to shape outcomes. This implies that investment and manufacturing activities should not be for their own sake but should ultimately lead to significant contributions.

The Ministry of Investment, Trade and Industry (MITI) aims to elevate Malaysia's industrial sector, allowing it to contribute to the advancement of the country's economic complex. The economy has been playing at the low end in terms of productivity with a high dependence on foreign labour and low remuneration. To remedy this, higher value-added work must become commonplace by "tech-ing up" for a digitally vibrant nation. "Tech up" describes digitalisation, automation, and the general adoption of technological innovation for the manufacturing sector.

In Malaysia, discussions about productivity often imply that workers need to work harder or that they are unproductive. On the other hand, few other countries talk about productivity as they focus purely on labour. One must realise that productivity can be increased when better tools and equipment are introduced. Achieving this goal necessitates significant investments in automation and advanced technologies.

Many fancy terminologies have been used in the past, such as Industrial Revolution 4.0 (IR4.0), which was embraced with much enthusiasm. In MITI, RM125 million was allocated in the past five years, most of which was channelled toward readiness assessment. With limited allocation of funds, an applicant company can only receive a maximum grant of RM500,000.

Subsequently, assessors steer companies towards the Internet of Things (IoT), which involves the purchase of software to digitalise. However, it is about the process of automation in the manufacturing sector that comes with digitalisation, not merely the upgrade of their digital software. Such a "grant approach" and "silo approach" has caused conditions to stagnate.

MITI's appeal to the financial sector in moving forward is to determine ways of blending finances. This implies that the government will provide fewer grants, though more interest subsidies will be provided. The viability of these proposals requires input from the financial sector to help industries transition rather than merely matching grants, which has failed to achieve significant results in the past.

To encapsulate what MITI hopes to achieve, it has set out ambitious targets for the manufacturing sector with aims to :

Increase value-add

Increase employment in manufacturing

Increase median wage

Wages are important as they provide economic security. The wage gap in Malaysia is not merely between Kuala Lumpur and Kelantan but includes disparities in areas like Bangsar and Lembah Pantai or Sunway and Mentari. This is the social gap that needs to be addressed which can be achieved through wage equity.

Malaysia's situation is unique. In other countries, the manufacturing sector is ordinarily the most advanced sector with better pay compared to other sectors. However, in the case of Malaysia, the general median wage in 2022 was RM2,424, while the manufacturing sector's median wage was only RM2,205. This is a social crisis as the manufacturing sector should be a catalyst to support the four NIMP missions and three goals.

Igniting Engines of Growth

In the years to come, there are **six engines of growth** in the Malaysian economy.

1. REINDUSTRIALISATION

The first is **reindustrialisation.** After over 20 years of deindustrialisation, there is a large number of investments moving into the manufacturing sector, including potential domestic investments into industrialisation. The government is urging banks to begin focusing on financing the manufacturing sector. For the longest time, banks have shied away from the manufacturing sector as it was playing at the low end.

2. GREEN TRANSITION

The second engine of growth is the **green transition.** Each of these transitions, be it electric vehicles, solar panels, or CCUS (Carbon Capture, Utilisation, and Storage), requires investment. Once there are steady flows of investments and constant effort to think through how to shape such investments, it will develop a life of its own, becoming an engine of growth.

3. TECH-ING UP

The third engine of growth is by **"Tech-ing Up"** which has been discussed earlier.

4. FACILITATE A "GOOD LIFE"

The fourth engine of growth is to **facilitate a "Good Life"** as the ultimate aspiration is to shape a middle-class society where people are paid better, which will then demand a good life. It includes the ability to deal with an ageing society, the care economy, more liveable cities, food security, and various other social protections.

5. RETHINK AND REVAMP

The fifth is to **rethink and revamp** the services sectors. This involves improving the quality of the service sector which will require a re-evaluation of its financial exports, export of professional services, and logistics sectors. Malaysia has always recorded a surplus in terms of the trade in goods. However, when it comes to trade in services, Malaysia is in a deficit, which then has an effect on its balance of payments.

6. EMPOWER REGIONS

There is a need to empower regions. Malaysia has a very centralised form of governance despite being a federal system. There are opportunities to unlock the potential of the various states. This includes the Johor-Singapore region with a special economic zone; or the prospects of an economic boom in Sarawak's hydrogen; the Penang-Kulim semiconductor cluster; and the corridors along the East Coast Rail Link (ECRL). Empowering regions will be important in the coming years as they will become engines of growth.

The Three Middles

MIDDLE IN THE GLOBAL SUPPLY CHAIN

MIDDLE POWER

MIDDLE-INCOME SOCIETY

A paradigm shift is needed in several areas to create an agile, resilient, and thriving country. Malaysia should define itself with the "three middles." The first is being in the middle of the global supply chain, where Malaysia positions itself in an indispensable position. The second middle is where Malaysia takes a middle-ground approach in politics, as geopolitics has direct consequences on geoeconomics. Malaysia aspires to be a middle power and does not want to choose sides as this has effects on its economy.

Malaysia aspires to become a middle-income society. Foreign investors need to see Malaysia in a different light in the context of the Southeast Asian region. There was a time when Singapore held sole attention, but today, investors see the region differently. Foreign investors have to come to realise that Malaysia is different compared to other regional neighbours. It is similar to Singapore and is capable of doing everything Singapore can do, albeit slightly less efficiently. However, for one-fifth of Singapore's land cost, investors must be prepared to pay two-thirds of Singapore's salaries. At the moment, Malaysian employers are only prepared to pay one-third of Singapore's pay, causing many Malaysians to flock to Singapore for work. Most Malaysian employers do not accept that the Malaysian and Singapore labour market is a single labour market despite the fact it is only separated by 1.5km of causeway.

It is important to move away from a land or resource-based economy to one that is a tech-based capital economy, from real estate to real sectors. More of the top developers in the country have ventured into the building of industrial parks due to a glut in the housing sector. Using the example of shopping malls, decades ago individual lots were sold to individual owners, each with their own way of running a business which created a very incoherent shopping experience.

When REIT was introduced, there was an understanding that shopping malls need to be centrally managed and operated. Industrial parks need to be operated in the same way. Instead of selling individual pieces of land, operators can adopt a model similar to the REIT model, but one that allows for more risks. GLCs should think of themselves not as industrial park operators, but as investors of industry. GLCs can help to bring in industries, build supply chains, assist locals to relocate, and invest in companies, instead of selling land. Eventually, GLCs and industrial park operators (developers) can transition from a land-based economy to a tech-based economy. This move is challenging but presents an opportunity for Malaysia to become a manufacturing hub once again.

Reshaping the Labour Market

Malaysia needs to transition from a labour-intensive workforce to become a resilient middle-class society. One way of achieving this relates to wages, particularly when workers are able to make their own choices. Many Malaysians do not want to work in the formal sector.

Almost 40% of Malaysian workers are self-employed, most of whom are in the gig economy or are gig workers working in Singapore.

There needs to be an eventual acceptance that gig work and the Singapore labour market are part of the Malaysian labour market. Only then can wages be adjusted accordingly. Jobs need to be reshaped and technology can be used to reduce the number of people hired, reshaping jobs, and allowing pay to be adjusted to levels that allow a person to consider certain occupations that were previously offered at lower pay.

The labour market needs to be reshaped by reducing incentives for the employment of unskilled foreign labour, but this will prove challenging. The Prime Minister, in his Budget 2024 speech, announced the introduction of a multi-tiered levy. This has been talked about since 2015 but has never been implemented. The plan is to introduce a dependency ratio for individual companies.

At the same time, the government will offer reinvestment allowances for automation to segregate big companies from SMEs. Each time a punitive measure is used to reduce unskilled foreign labour, it adversely affects SMEs more than the larger players. Segregating them will help reshape the labour market while at the same time allow for a five-year transition of the labour market to take place.

Rethinking Financing Strategies for Economic Growth

There is a dimension of bank and other financing elements that need to be involved to address the whole risk profile and demands of the business. Bank Negara Malaysia (BNM) places a priority on digitalising and having dedicated institutions to take care of the underserved pockets. Providing digital solutions to help the economy requires improvements in areas financiers may be uncomfortable with. DFIs play an important role and need to be reformed so that they can take on the load at an earlier stage. Subsequently, commercial banks can come in.

Venture capital will also play a major role. Commercial banks and GLCs may have to reassess, for example, the real estate sector and how to shift to the climate framework. Khazanah and the World Economic Forum found that 37% of energy consumption in Malaysia originates from transportation. Part of the reason is due to sprawling bank financing of car ownership. Resolving this requires a rethink of how to transport people into cities and reducing car usage through pricing.

Subsequently, banks will have to give more attention to the financing of supply chains. Malaysia has the capability to produce good, high-end machine tools (i.e., precision engineering) but faces the issue of serving foreign capital. Yet, there are enough precision engineering companies in the field. If organised properly, Malaysia will possess this capability.

There is a lack of subject matter expertise within the government. This forces agencies to turn to consultants. However, without a whole-of-government approach and with intentions only meant to resolve agency-specific problems, this will lead to further fragmentation. There is also a lack of thinking capacity and research into various sectors of the economy, especially the new sectors.

This calls for more investment in the understanding of critical materials and supply chains at the government level. In contrast, the South Koreans have mapped out 195 items in the supply chain, while Malaysia has only mapped out three or four items. Much collaboration is needed, moving forward.

Four decades ago, when Malaysia launched its electrical and electronics industry, the term "Mina Karan" emerged to describe the influx of women workers from rural areas entering the sector. While they lacked education, on-the-job skills training was provided to these workers, allowing them to complete their tasks effectively. Hence, what Malaysia lacks is an investment in skills.

At the same time, the importance of a high wage cannot be underestimated, as evidenced by the thousands of Malaysians working in low-skilled jobs as affordable labour in Singapore. This can be reversed by paying Malaysians more competitively through the reshaping of jobs and providing more on-the-job training. Much can be achieved by taking a long-term approach to fixing the education system.

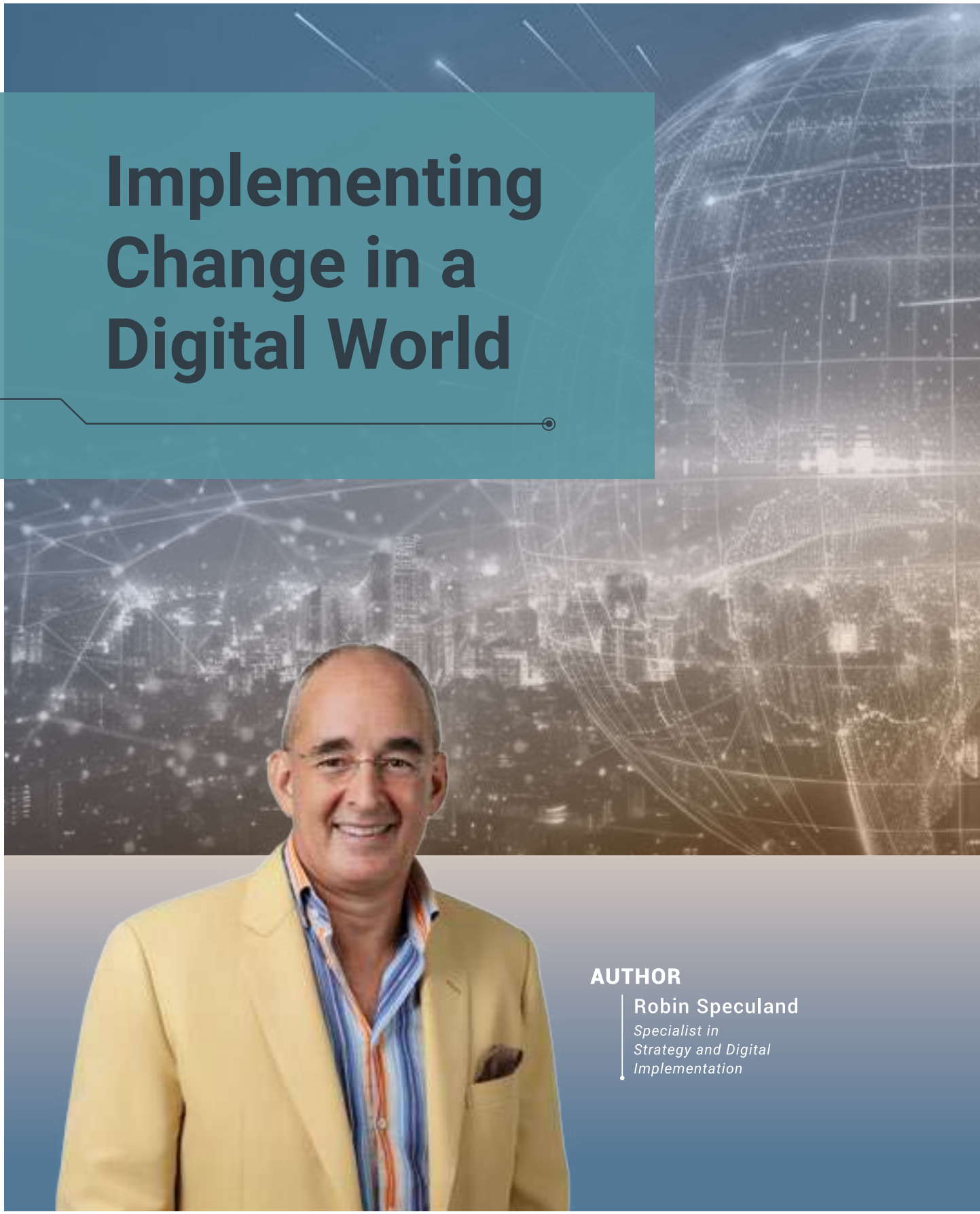
Conclusion

Malaysia is entering a challenging period of domestic reform, but its people can remain hopeful, as there are many untapped areas that hold the potential for significant improvements and positive change. The six engines of growth will require national collective action, both from the government and society, to unleash growth potential. This growth will lessen the pain of change.

For Malaysia to ascend to the next level, structural barriers have to be overcome; its workforce needs to become skilled and adaptable; key industries need to be scaled up; and economic strategies need to be aligned with global trade developments in mind. The importance of increasing productivity through digital-technological means will prove to be the way forward as it will place Malaysia on the map as an attractive option in the overall global value chain.

A country is only as good as the people living in it. Genuine action can only manifest with the right intent and mindset which involve having the willingness to change, adapt, and become more competitive. Leadership must be exercised at every level, from the board of directors, to the c-suite, and down to the executive level in demonstrating determination in making a digital leap forward. With renewed direction and the right determination, the sky is the limit for the Malaysian people in their pursuit of economic prosperity – a pursuit that must undertake the path of upscaling through digitalisation and reindustrialisation.

Implementing Change in a Digital World



AUTHOR

Robin Speculand

Specialist in Strategy and Digital Implementation

Digital transformation transcends traditional IT upgrades, embodying a radical rethinking of how an organisation uses technology, people, and processes to fundamentally change business performance. For the financial sector, this means not just automating existing processes but reimagining customer interactions, compliance measures, and product and service offerings from the ground up.

Digital transformation is also daunting as it combines adopting technology, which has previously failed; typically two out of every three initiatives, with redesigning a company's culture, which has also failed on average two out of every three times. Digital transformation requires conducting both of these and expecting a better outcome!

We have now completed the first full decade of digital transformation as we know it today, and we have learned that it predominantly fails not because of technology but because of the challenges of transforming a company. To overcome this high failure rate, top-performing leaders subscribe to both the strategy and its implementation.

They also recognise that the transformation is driven predominantly not by efficiency or effectiveness, but by the customer.

Customers notice your implementation, not your strategy.

Crafting a new strategy in a digital world involves making choices such as markets to compete in, growth strategies to pursue, customer segments to target, sustainability and social responsibility to incorporate, technology to invest in, and the ecosystems to participate in.

Implementation moves the organisation from planning to doing, from thinking to achieving, and from choices to action. It requires employees to work differently, as by default a new strategy means doing things differently. Employees, however, are already busy every day. Therefore, the challenge for leaders is to ensure they are busy doing the right things, that is, taking the right actions.

Strategy is about making the right choices; implementation is about taking the right actions.

In the phrase "taking the right actions," "taking" means having the discipline to do what one is supposed to do. But this is not easily accomplished. For example, we know eating healthy is good for us, but after studying the menu, we order hamburgers and fries rather than a salad. We know exercising for a minimum of 20 minutes a day is good for us, but we sit on the couch and binge episodes of our favorite TV series instead of going to the gym or for a run.

Despite our good intentions, somewhere between thought and action, we lose our focus.

Consider these examples:

1. After having potential life-threatening heart surgery, people know they need to change their daily actions, but most do not. Dr. Edward Miller, dean of the medical school and CEO of the hospital at Johns Hopkins University, says: "If you look at people after coronary-artery bypass grafting two years later, 90 percent of them have not changed their lifestyle." 1

2. The International Journal of Environmental Research and Public Health2 indicates that as many as one in five doctors smoke. Despite knowing the risks of smoking, and supposedly setting an example for their patients – they still smoke.

3. Even though people know it's good to exercise and eat right, by 2030, an estimated one half of the American population will be obese.3

> "Just because people understand what to do doesn't ensure that they will actually do it."
>
> – Marshall Goldsmith
> *Executive Leadership Coach & Author*

> "We don't have to be smarter than the rest. We have to be more disciplined than the rest."
>
> – Warren Buffett
> *Investor*

[1] *Alan Deutschman, "Change or Die," Fast Compa*
[2] *Anaïs Besson, Alice Tarpin, Valentin Flaudias, Georges Brousse, Catherine Laporte, Amanda Benson, Valentin Navel, Jean-Baptiste Bouillon-Minois, and Frédéric Dutheil, "Smoking Prevalence among Physicians: A Systematic Review and Meta-Analysis," International Journal of Environmental Research and Public Health 18, no. 24 (2021): 13328, https://doi.org/10.3390/ijerph182413328.*
[3] *Melissa Healy, "By 2030, Nearly Half of All U.S. Adults Will Be Obese, Experts Predict," Los Angeles Times, December 18, 2019, www.latimes.com/science/story/2019-12-18/nearly-half-of-us-adults-will-be-obese-by-2030.*

Eastern philosophy has this expression: "The way you do anything is the way you do everything." That means when discipline is developed in one's personal life, it carries over into their work life and vice versa.

According to a Deloitte 2023 analysis[4]: "Organisations often struggle to determine which actions drive the most impact and which investments yield the most enterprise value. We found that the link between strategy and action is the determining factor in a company's ability to derive the most value from its digital transformation. The right combination of digital transformation actions can unlock as much as US$1.25 trillion in additional market capitalization across all Fortune 500 companies. But the wrong combinations can erode market value, putting more than US$1.5 trillion at risk."

Implementation in a digital world requires leaders to think differently and approach things differently. For example, The America's Cup is the Formula 1 of boat racing, with each boat constantly seeking technological advantages. Previous advantages have come from raked masts and hydrofoils and, most recently, from artificial intelligence (AI).

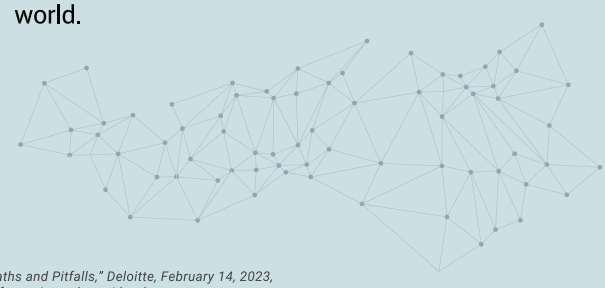
In 2019, the Emirates Team New Zealand took a different approach to the boat-racing competition by collaborating with McKinsey & Company to expedite the boat's design. The team implemented an AI system that could run thousands of simulations in the time it took the crew to complete just a few. Digital simulations were then used as training methods and to test design innovations. Remarkably, within two months, the AI began outperforming the sailors in these simulations. A bot trained itself by using reinforcement learning, a machine learning technique that identifies the best sequence of actions in a complex environment.

> **"The bot was actually doing things that felt counterintuitive to the sailors, but they'd try them out on the water, and they'd actually work."**
>
> -
> Jacomo Corbo
> *QuantumBlack's co-founder & chief scientist*

In this way, AI even began teaching the sailors new techniques using AI insights built into their system of decision-making, resulting in accelerating the innovation process and Emirates Team New Zealand winning the America's Cup that year, a tense and thrilling race.

Similar to the sailors, leaders need to understand the digital technology and methodologies their company can adopt and then leverage them to the maximum value.

The six success factors in the following page are what leaders need to consider, to transform their company in a digital world.



[4] *Gregory Dost and Diana Kearns-Manolatos, "Unleashing Value from Digital Transformation: Paths and Pitfalls," Deloitte, February 14, 2023, www.deloitte.com/global/en/our-thinking/insights/topics/digital-transformation/digital-transformation-value-roi.html.*

Key Actions for Digital Transformation Success

1. Establishing a Clear Digital Ambition
2. Developing an Agile Culture
3. Investing in Technology Platform and Reskilling Employees
4. Leveraging Data for Competitive Advantage
5. Developing Customer Obsession
6. Strengthening Cybersecurity and Regulatory Compliance

1. Establishing a Clear Digital Ambition

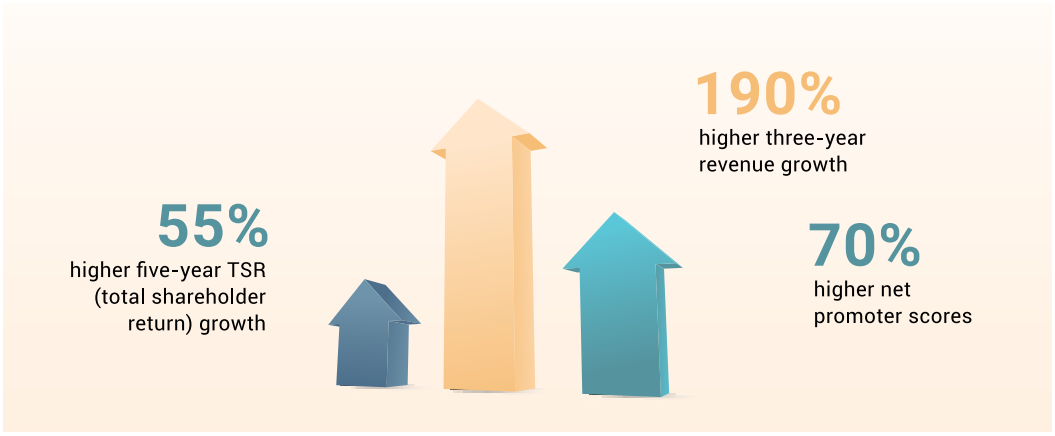
Importance:

A coherent digital ambition aligns all organisational efforts and resources toward a unified goal. It provides a framework against which all initiatives can be measured.

The leadership discussion question: "How can the organisation leverage digital to add greater value to the customer, whether B2B or B2C (as digital is rapidly eliminating this difference), and what needs to change within the business?"

A digital ambition articulates how the organisation will improve the customer experience by leveraging digital technologies and methodologies. It inspires and aligns people, drives the investment in technology, and focuses the energy on the right actions to be taken.

A 2022 BCG survey[5] found that businesses that focus on customer experience create more value, generate more growth, and foster more trust than their peers – by eye-opening margins. Leaders saw 55% higher five-year TSR (total shareholder return) growth, 190% higher three-year revenue growth, and 70% higher net promoter scores.



Implementation:

Leaders should articulate what digital means to their customers and only then how digital will drive the business forward. They need to detail specific outcomes such as improved customer satisfaction or operational efficiency. For instance, Maybank's digital strategy includes providing seamless, personalised banking experiences through its MAE app and integrating banking with lifestyle needs to enhance customer engagement and satisfaction.

[5] *"Building Customer Experience for the Future," BCG, April 11, 2023,*

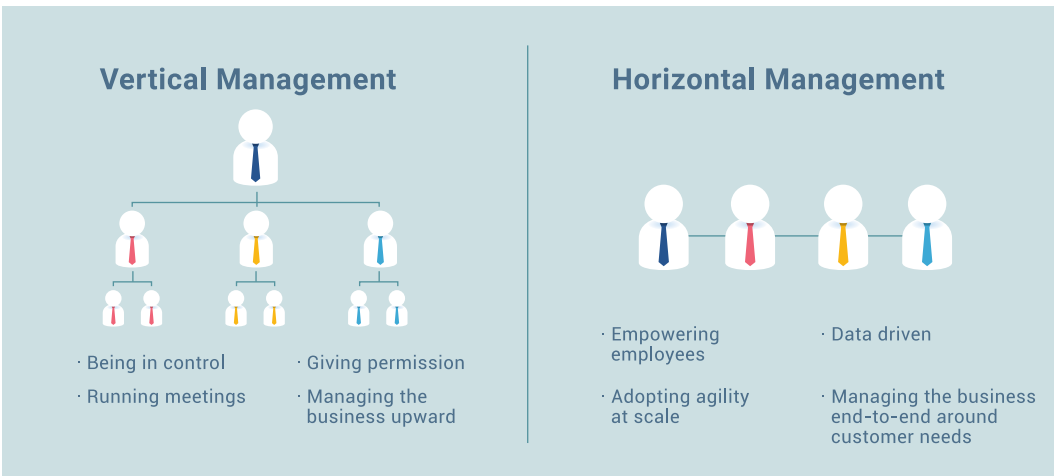
2. Developing an Agile Culture

Importance:

Digital transformation requires a cultural shift that embraces rapid innovation, experimentation, and a tolerance for failure. The challenge we have is that legacy leadership is the biggest roadblock to successful transformation (not technology). The most open-minded and adaptable leaders who have shaken off the shackles of legacy leadership are discovering new value for their customers and ways to lead their employees.

In the past, the strongest leaders were considered to have all the answers. In a digital world, the strongest leaders are the ones who ask the right questions.

To successfully lead a company in today's digital world, a dramatic shift is required from vertical to horizontal management. Leaders must let go of such legacy leadership practices. That means moving from being in control, giving permission, running meetings, and managing the business upward (known as vertical management) to empowering employees, being tremendously data-driven, adopting agility at scale, and managing the business end-to-end around customer needs (called horizontal management).



Implementation:

Implementing agile methodologies that allow for quick pivots and iterative development is crucial. Creating 'test and learn' environments where teams can experiment safely without fear of repercussions, encourages innovation. DBS Bank's transformation into a more agile organisation illustrates this, where cross-functional teams collaborate in 'sprints' to drive faster, customer-centric product development .

3. Investing in Technology Platform and Reskilling Employees

Importance:

The success of digital initiatives heavily depends on having the right leaders and talent equipped with the necessary digital skills.

Leaders have become accustomed to being the most knowledgeable people in the room. After all, that's one reason many got promoted. But this is no longer true, because many of the skills and knowledge required today are relatively new. Examples include how to write code, employ machine learning, or analyse data – areas that were not previously part of a business school's curriculum. Recognizing that leaders no longer know it all, their leadership style needs to adapt to accommodate a learning mindset. Both leaders and employees need to become lifelong learners.

Recognising that some employees are now hired because of their specific digital skills, a practice that's becoming common is reverse mentoring. Reverse mentoring flips the script on traditional mentoring by having junior employees with a specialised skill share their knowledge with someone more senior.

At Infineon, for example, reverse mentoring accelerated the adoption of a new platform. The new platform promised substantial process improvements via digitised documents, streamlined data access, and greater transparency to aid decision-making. Despite the promise, though, persuading senior leaders to use the new system was initially difficult. Junior employees solved the problem by stepping up and guiding senior leaders through the process.

Implementation:

Financial institutions should invest in continuous learning and development programmes to keep their leaders and workforce current with technological advancements and advances in banking systems. Partnering with educational institutions to create tailored courses in data analytics, cybersecurity, and digital ethics can help bridge the skill gap. An example is Bank Negara Malaysia's collaboration with local universities to develop fintech-specific curriculums.

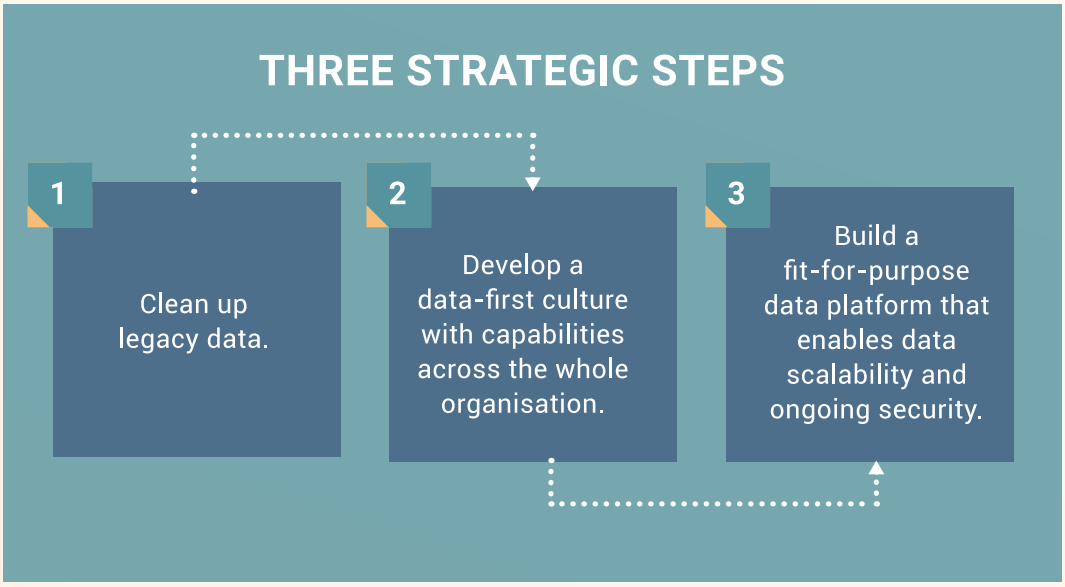
4. Leveraging Data for Competitive Advantage

Importance:

In the digital economy, data is a key asset that can provide insights into customer behaviour, operational efficiency, and strategic opportunities.

It's now possible to measure everything that happens within an organisation, and those that succeed in becoming data driven are the ones who will win in the next few years. Successfully data-driven organisations recognise the mantra "better data, better decisions, better performance."

For traditional companies to become data driven, it requires three strategic steps.



Leaders are responsible for putting in place the governance and support for data use as well as identifying who has access to which data. That's the easy part!

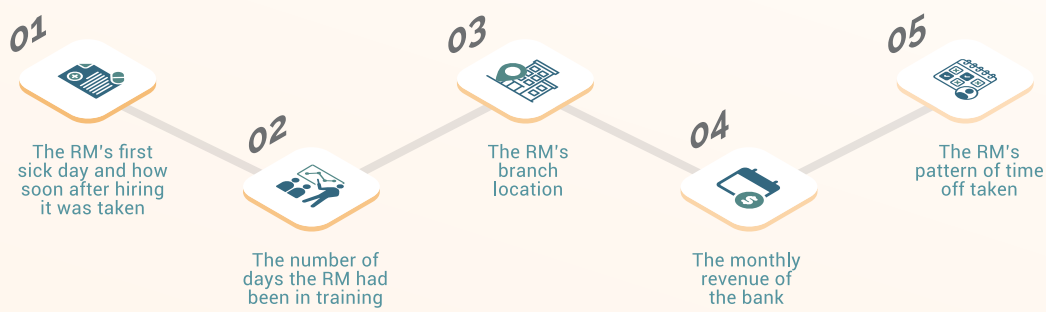
The greater challenge requires changing employees' behaviour to use data in their decision-making. Leaders begin by encouraging employees to focus on the current problem rather than on what data to use but also to turn to data whenever possible.

Implementation:

Financial leaders should establish advanced data analytics capabilities to harness big data for real-time decision-making. Implementing robust data governance and privacy standards ensures trust and compliance. CIMB Bank's platform uses data analytics to offer customised financial solutions that anticipate customer needs and preferences.

In another example, DBS Bank adopted data to reduce relationship manager (RM) turnover, a common issue in banking. Data regarding RMs' behaviour wasn't being used, so members of the analytics team and human resources team changed that. They turned to the data and discovered they could predict when an RM was likely to leave.

They did this by looking at:



Each data point reflected common behaviours demonstrated before the RM resigned. Then 600 data points were fed into machine learning. With 85% accuracy, the results told the bank which people were likely to leave within three months. Today, this model generates a monthly report (used as a digital nudge) that alerts supervisors about RMs who might potentially resign. It also prescribes specific actions that leaders can take to prevent resignations.

Today, DBS Bank retains more than

90% of its employees who might otherwise have left.

Data usage pays off. For every one percent improvement in reducing turnover, the bank

saves up to $3.7 million

5. Developing Customer Obsession

Importance:

Digital-first customers expect seamless, intuitive, and personalised interactions across all digital touchpoints.

Top-performing companies have identified that this access to digital transformation puts the customer at the center. Companies that started with efficiency or focused on a smaller area of the business have eventually recognised that digital penetrates every part of the business and that everyone today is a technology company. They identify how digital affects the essential components of the business – something leaders habitually underestimate. It's not about tweaking or adjusting their business model; rather, for many companies, especially traditional ones, it's a complete transformation that starts and ends with the customer. It calls for revisiting customer offerings while leveraging tools such as data analysis, design thinking, and customer journeys.

Customer-obsessed organisations recognise it's not technology that should be driving the transformation. Rather, customers and their changing requirements are the drivers. For example, companies such as Levi's and Procter & Gamble are sending employees on customer visits to observe and understand how they use their products, what job needs to be done, and from that, how they can better meet their customers' needs.

Customer-obsessed organisations adopt design thinking and have the agility to rapidly translate customer discoveries into their products and services. Haier Group, for example, uses the expression "zero distance to the customers," which is a mindset as much as a strategic play. The goal? Any feedback from the customer goes immediately to the engineers and designers, not through layers of supervisors and managers.

Implementation:

Banks and insurance companies need to redesign their customer journeys to be digital-first, utilising technologies like AI and machine learning to provide personalised services. The combination of customer journey mapping and data is where the magic happens in providing better service through mass hyper personalisation.

6. Strengthening Cybersecurity and Regulatory Compliance

Importance:

As financial institutions handle increasingly large volumes of sensitive data, protecting this data against cyber threats and ensuring compliance with regulatory requirements is paramount.

It is estimated that more systems are hacked than are not hacked. Therefore, it becomes not a question of "if" but "when" an organisation will be hacked. In fact, it can take up to a year and a half before a hack is discovered. This places additional importance on leaders to ensure their customers, both internal and external, can trust them.

Implementation:

Adopting advanced cybersecurity measures and ensuring systems are up-to-date with regulatory changes are critical. Regular audits and adopting frameworks such as the Bank Negara Malaysia's Risk Management in Technology (RMiT) can guide institutions in maintaining robust security standards.

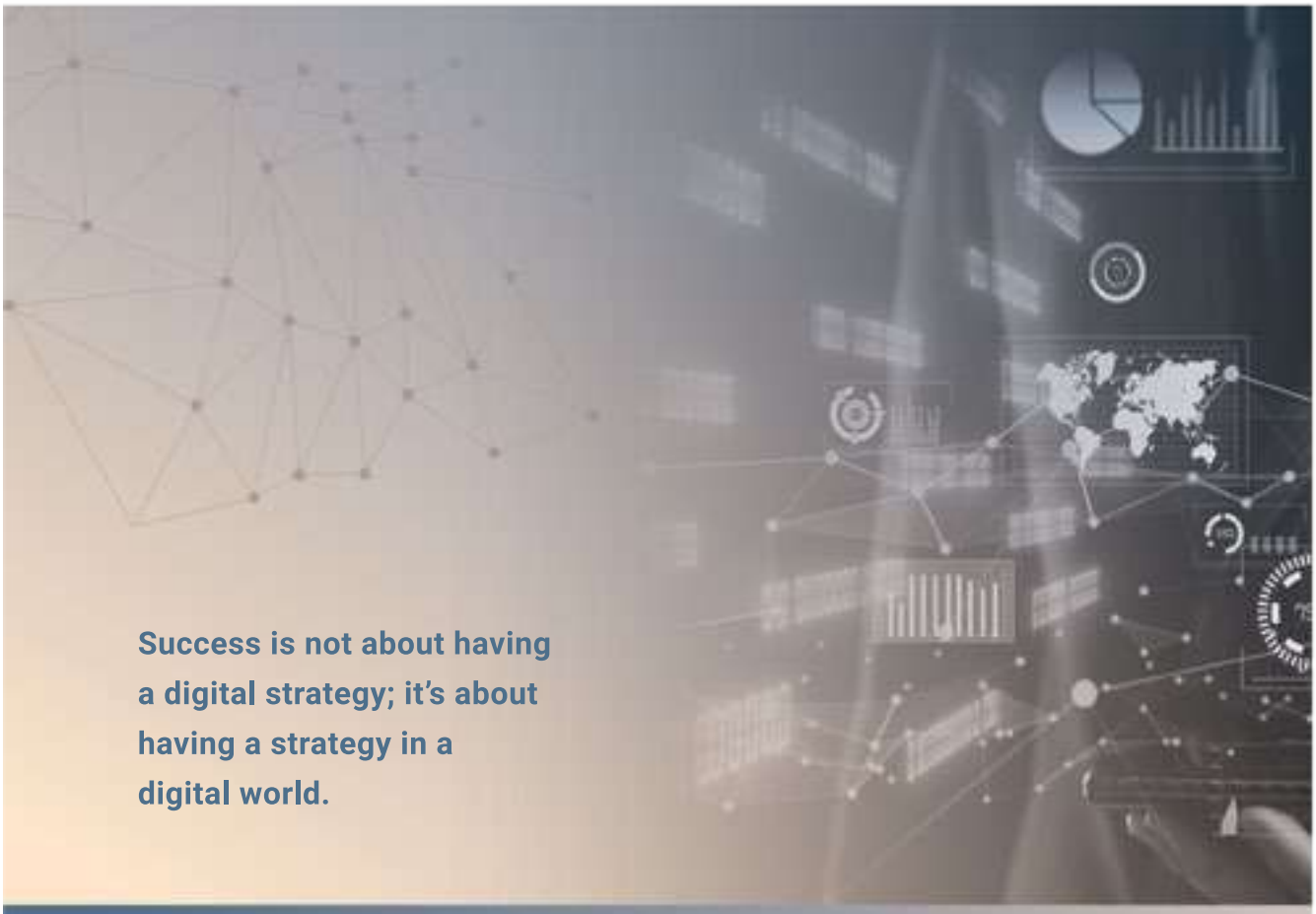
A best practice is to build cybersecurity into the strategy, not having it as an afterthought. This creates a better, safer, and more responsible approach to protecting customer trust.

The cost of protecting against being hacked can be minimal compared to the cost of being hacked. According to PwC, one in four organisations globally has suffered a data breach amounting to a cost of

US$1–20 million
or more in the past three years.

An estimated 80% of systems vulnerabilities, however, can be fixed with patches that are already available.

MGM Resorts International faced a cyberattack in September 2023, attributed to the Scattered Spider group and ransomware by ALPHV (BlackCat). This attack disrupted MGM's operations and cost the company an estimated US$80 million in revenue over five days. The attack highlighted the evolving nature of cyberthreats and underscored the importance of robust cybersecurity measures.



Success is not about having a digital strategy; it's about having a strategy in a digital world.

The journey toward digital transformation is fraught with challenges but also filled with opportunities. By strategically implementing the outlined actions, financial leaders in Malaysia can navigate their institutions toward successful digital futures, driving innovation, improving customer experiences, and maintaining a competitive edge in a rapidly evolving digital landscape.

Robin Speculand is a global expert in strategy and digital implementation, a frequent keynote speaker, a facilitator at business schools, and consultant to Boards and C-level.

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The Rise of Digital Banks: Redefining Malaysia's Financial Services for the Underserved

GXBank

AUTHOR

Datuk Zaiton Mohd Hassan
Chairman, GX Bank Berhad

AEON Bank

AUTHOR

YM Raja Teh Maimunah Raja Abdul Aziz
Chief Executive Officer, AEON Bank

BoostBank

AUTHOR

Fozia Amanulla
Chief Executive Officer, Boost Bank

In April 2023, Bank Negara Malaysia (BNM) awarded digital banking licences to five consortiums to spearhead Malaysia's digital bank aspirations. This article explores the experiences of the first three digital banks to become operational, taking note of their plans, learning their challenges, and what Malaysia can expect from its digital banks in the foreseeable future.

GXBank

Datuk Zaiton Mohd Hassan
Chairman, GX Bank Berhad

One of the most compelling promises of digital banks mandated by BNM is to support the financially underserved. In Malaysia, a significant portion of the population still lacks access to traditional banking services, with 55% of the Malaysian adult population still considered underbanked. Complementing that, only 39% of Malaysians are considered to be eligible for bank loans.[1]

Gaps in financial inclusivity are not just confined to demographics. Limited access to physical banking infrastructure especially in rural and remote areas, low financial literacy, and the high costs of financial services, are further challenges in reaching underserved populations. This is where digital banks can bridge the gap by offering accessible, affordable, and more user-friendly financial products.

The move toward digital banking aligns with Malaysia's broader goals of becoming a digital economy and improving the overall financial ecosystem. It encourages banking services to innovate and adapt to changing consumer expectations, fostering a more competitive banking landscape. Against the backdrop of an increasingly competitive global stage, this push to modernise the banking sector is a key driver for economic development as it can improve financial literacy, support entrepreneurship, and attract foreign investment.

55%

of Malaysian adults are underbanked

39%

of Malaysian adults are eligible for loans

[1] *Kapronasia (2022). Big tech and incumbent financial firms win Malaysia's digital banking race. Accessed from https://www.kapronasia.com/asia-banking-research-category/big-tech-and-incumbent-financial-firms-win-malaysia-s-digital-banking-race.html*

Malaysians at the Heart of GXBank

Since GXBank's launch in November 2023, we have been encouraged by the tremendous support from Malaysians. In less than two weeks, we onboarded 100,000 customers and in eight months, surpassed 750,000 users who have set up more than 800,000 Savings Pockets, GXBank's in-app savings feature. On the product front, we are constantly listening and innovating to better cater to the needs of our customers.

We see ourselves beyond just a digital bank. We leverage cutting-edge technology to democratise access to financial services for everyday Malaysians. We aim to create a seamless, intuitive financial experience that puts Malaysians at the heart of what we do.

Our long-term financial inclusion and literacy programme, Impian GIGih, reflects our commitment to fortifying Malaysia's financial resilience through education and facilitating intergenerational mobility. We provide financial literacy to help Malaysians make informed decisions, support underprivileged parents with financial assistance for their children's education, and offer deserving students the means to further themselves in tertiary education and achieve their ambitions.

When the Power of Tech Meets the Right Minds

Operating a digital bank presents unique challenges and opportunities. Technology constantly evolves and should be capitalised on to improve financial services. It offers the promise of streamlined efficiency and enhanced customer experiences, which together can be a cornerstone of achieving greater financial inclusivity.

For example, at GXBank, we leverage AI and machine learning to identify fraud, train our chatbot to better serve customers' queries, as well as build credit models. We built a proprietary Gen AI tool to decipher large amounts of data feedback from customers across different channels: social media, app ratings, customer service channels such as e-mails, voice and chat. This enables us to truly understand customer pain points and needs, and to improve in areas our customers will appreciate.

Leverage AI and machine learning

- *Identify fraud*
- *Better serve customers' queries*
- *Building credit models*
- *Decipher large amounts of data feedback from customers across different channels*

Learning from Those Before Us

Nevertheless, we and the other Malaysian digital banks have a lot to learn from our global peers, which had a headstart in this space. In Europe, N26 and Revolut have demonstrated the importance of a seamless user experience and a robust digital infrastructure. Their success underscores the value of simplicity, transparency, and customer-centricity. In Asia, South Korea's KakaoBank exemplifies the power of integrating financial services with popular digital platforms. By leveraging the widespread use of KakaoTalk, the bank has been able to offer convenient financial services within a familiar ecosystem, driving rapid adoption and customer engagement.

These examples highlight the critical role of innovation, technology, and customer focus in the success of digital banks. They provide valuable lessons for Malaysian digital banks as they navigate their growth journeys.

Europe

N26 | Revolut

- Demonstrated the importance of a seamless user experience.
- Robust digital infrastructure.
- Success underscores the value of simplicity, transparency, and customer-centricity.

Asia

kakaobank

- Exemplifies the power of integrating financial services with popular digital platforms.
- Leveraging the widespread use of KakaoTalk
- Able to offer convenient financial services within a familiar ecosystem, driving rapid adoption and customer engagement.

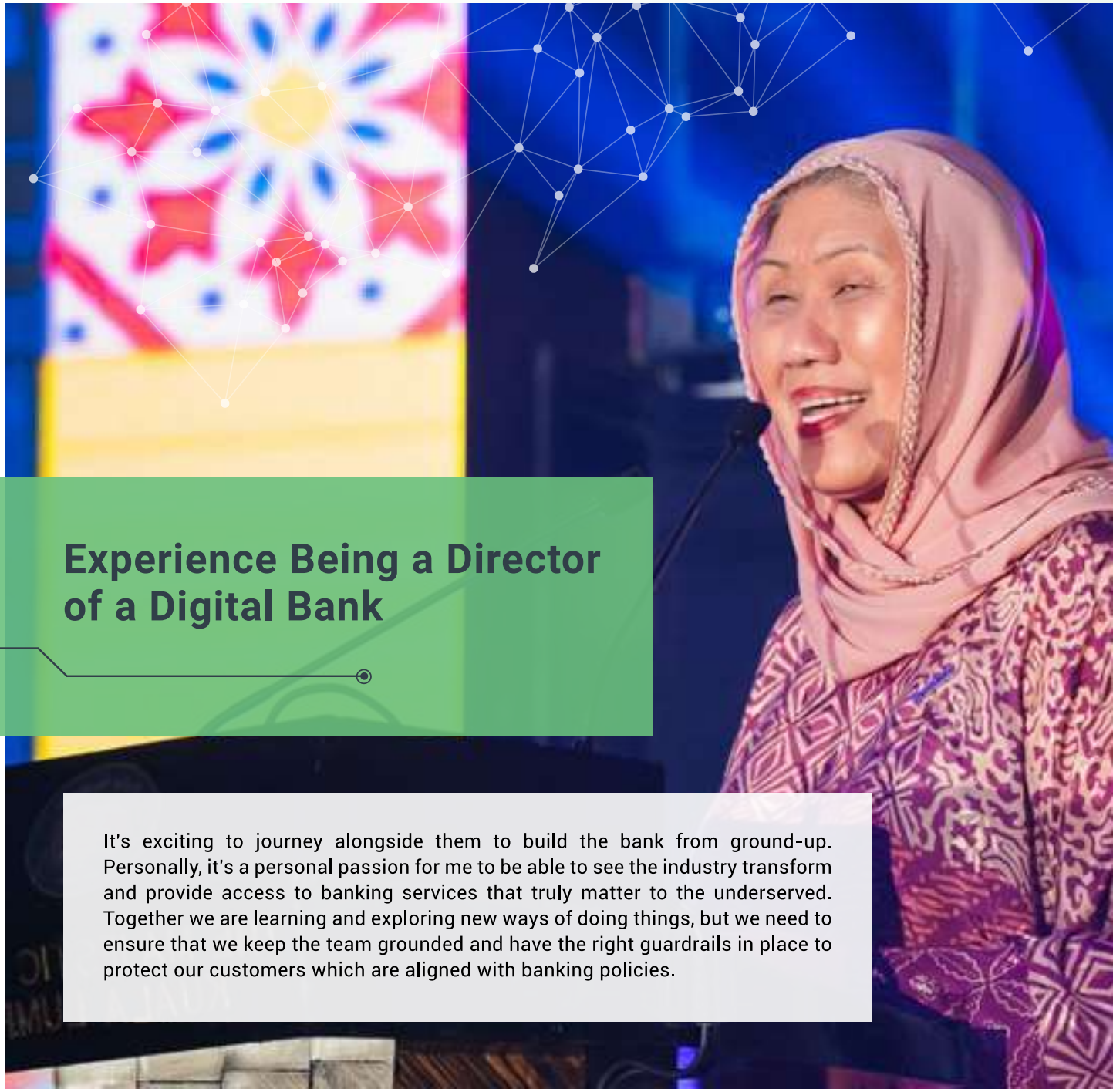
Closer to home, the digital bank landscape is still relatively nascent but we are making steady progress. BNM's Financial Technology Regulatory Sandbox Framework policy document, designed to foster a regulatory environment conducive to meaningful innovation in the financial sector, was updated in late February 2024 in a bid to further boost fintech innovation including digital banks in the country.

The framework has been enhanced to simplify the eligibility pathway, particularly for early-stage fintech startups facing challenges with the Sandbox's eligibility criteria. Additionally, a new feature, the Green Lane, has been introduced to enable financial institutions with a strong track record in risk management, governance, and compliance to test innovative solutions more swiftly by granting them regulatory flexibility.

In a nutshell, the potential for positive, inclusive change is immense, with the presence of digital banks. Nonetheless, the path ahead is long and challenging, and requires the collaboration of both the private and government sectors to spur it on.

At GXBank, we are committed to growing for the collective good, using technology to solve everyday Malaysian issues, and being that bridge for the underserved. These values define who we are as a bank, guiding every decision and action we take. As a visionary and customer-focused bank, we aim to build a financial ecosystem that truly encourages Malaysians to be financially resilient and prepared for tomorrow's economy.

For the digital banking players to make a meaningful impact, it is imperative for regulators, bankers, and industry stakeholders to collaborate towards a more inclusive financial ecosystem.



Experience Being a Director of a Digital Bank

It's exciting to journey alongside them to build the bank from ground-up. Personally, it's a personal passion for me to be able to see the industry transform and provide access to banking services that truly matter to the underserved. Together we are learning and exploring new ways of doing things, but we need to ensure that we keep the team grounded and have the right guardrails in place to protect our customers which are aligned with banking policies.

AEON Bank

YM Raja Teh Maimunah Raja Abdul Aziz
Chief Executive Officer, AEON Bank

AEON Bank (M) Berhad is Malaysia's first Islamic Digital Bank, licensed and regulated by Bank Negara Malaysia. We are part of the AEON Group, a global corporation with a retail ecosystem and financial services. Officially launched on 26 May 2024, we currently offer a suite of Shariah-compliant Personal Banking solutions, such as deposit Savings Account-i, AEON Bank x Visa Debit Card-i, Savings Pots, budgeting tools and a range of digital payment services with strategic partners and merchants, including DuitNow and utility bill payments. In the near future, AEON Bank will be expanded to include Business Banking, offering Shariah compliant microfinancing solutions to AEON main suppliers and vendors, as well as MSMEs (Micro, Small & Medium Enterprises), corporate entities and commercial enterprises.

PRESENT	FUTURE
Officially launched on 26 May 2024 and currently offering a suite of **Shariah-compliant Personal Banking** solutions such as :	AEON Bank will be **expanded** to include **Business Banking** in the near future :
◆ Savings Account-i ◆ Savings Pots, Savings Optimisation Round-up Function & Budgeting Tools ◆ Digital payment and promotional collabration with strategic partners and AEON retail outlets, including AEON Points reward for payment using AEON Bank x Visa Debit Card-i ◆ DuitNow QR ◆ Utility bill payments ◆ Encashment of AEON Points directly into Savings Account-i ◆ 1% waiver for overseas transaction with AEON Bank x Visa Debit Card-i and 50% off international ATM withdrawal fee via VISA Plus ◆ Referral Programme	◆ Shariah-compliant microfinancing solutions to AEON main suppliers and vendors, local entrepreneurs, and commercial MSMEs ◆ Prioritising Personal Banking services, including Personal Financing and AEON Bank x Zurich Takaful products

The history of the company dates back to 1758 when Okada-ya, a precursor to AEON was established in Japan. We have had a presence in Malaysia for 40 years, and are continuously growing via multiple customer touchpoints, in store and online, which include the AEON Mall, AEON Supermarket, AEON BiG, MaxValu Prime, AEON Wellness, Daiso, TopValu, AEON Delight, AEON Fantasy and Malaysia AEON Foundation.

Finance is another growing business for AEON Group. In fact, AEON Credit Service Malaysia (ACSM) has been in operation for 28 years, providing motorcycle and personal Islamic financing to Malaysians. Currently, it is the largest motorcycle loan provider in the country. The majority of customers are first-time borrowers, primarily the lower income group, hence contributing towards financial inclusivity for the population segment that needs it the most.

AEON Bank (M) Berhad was established as one of five digital banks in Malaysia, expanding AEON Group's mission to be more sustainable in its growth and build a future-ready organisation. In Malaysia, AEON Bank is equally held by AEON Financial Service Co. Ltd. ("AFS Japan") and ACSM. As ACSM already offers Islamic microfinancing services, it was a logical move to build AEON Bank as a Syariah-compliant digital bank. More importantly, it enables us to be more inclusive and serve a wider segment of the local market, particularly customers who observe the prohibition tenet of riba.

Competitive Advantage

As an Islamic digital bank, Shariah financial principles are part of our DNA, while our customers touchpoints are 100% online. This forms the core of our CVP, while our USP is linked to the competitive advantage of being part of the AEON Group, especially as AEON has been a recognisable brand for four decades in Malaysia, and more than 260 years in Japan. In addition, being a part of a larger retail group allows us to reach out to more consumers and onboard them as our customers. Invariably, AEON Bank also contributes to the growth of AEON Group's customer acquisition and loyalty programmes.

As the only bank in Malaysia with its own integrated nationwide retail network, the integration with the AEON ecosystem enables us to reward our customers with a seamless loyalty programme. For example, the accumulated AEON Points can be redeemed for cash value, credited directly into their AEON Bank Savings Account-i, giving our customers value-added bonuses and convenience.

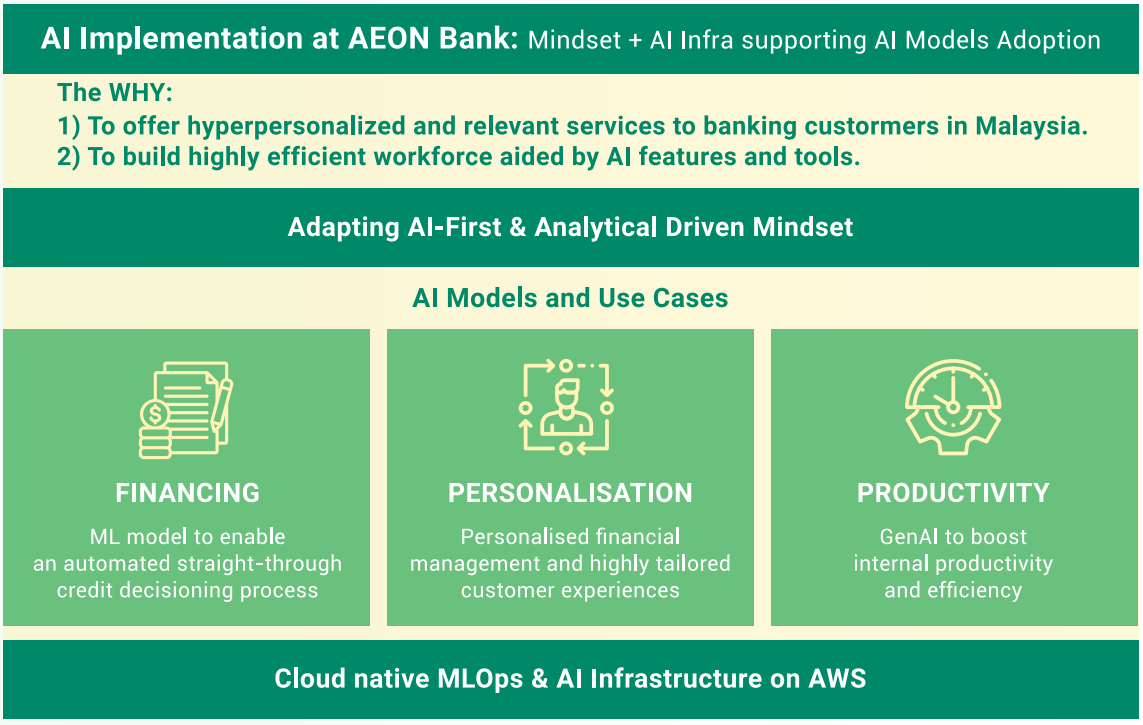
Comparison Between Conventional and Digital Banking

Conventional and digital banks co-exist as part of the financial and banking industry symbiosis and both are necessary to serve different market needs. The comparison between conventional and digital banking highlights several key differences. In terms of its structure, transforming a conventional bank from within is generally more challenging, while Islamic digital banks have the advantage of being built on Shariah principles from scratch.

As a cloud-native, AEON Bank is agile and capable of optimising on the latest tech solutions at a speed unattainable in a traditional setting. It is also more cost efficient, making it possible to offer more accessible services that align with the preferences among the target demographic and changing consumer behaviour, such as the declining frequency of physical bank visits. Despite its digital nature, AEON Bank is subjected to strict regulation, compliance and risk requirements under Bank Negara's Islamic Financial Services Act 2013 (IFSA).

Unlike incumbent banks that often rely on third-party solutions, however, AEON Bank is primarily made up of local Malaysian tech talent, providing a platform for homegrown innovation. This promotes the growth of Malaysia's technological capabilities, as digital banks are essentially fintech organisations offering banking services.

Moreover, strategic B2B partnership with a global infrastructure provider like Amazon Web Services (AWS) enables AEON Bank to build fully digital cloud architecture and enhance operational efficiency. We leverage on the strength of AWS in Malaysia and our collaborative infrastructural design, thus making it possible to deliver secure data management through AI/ML optimisation.

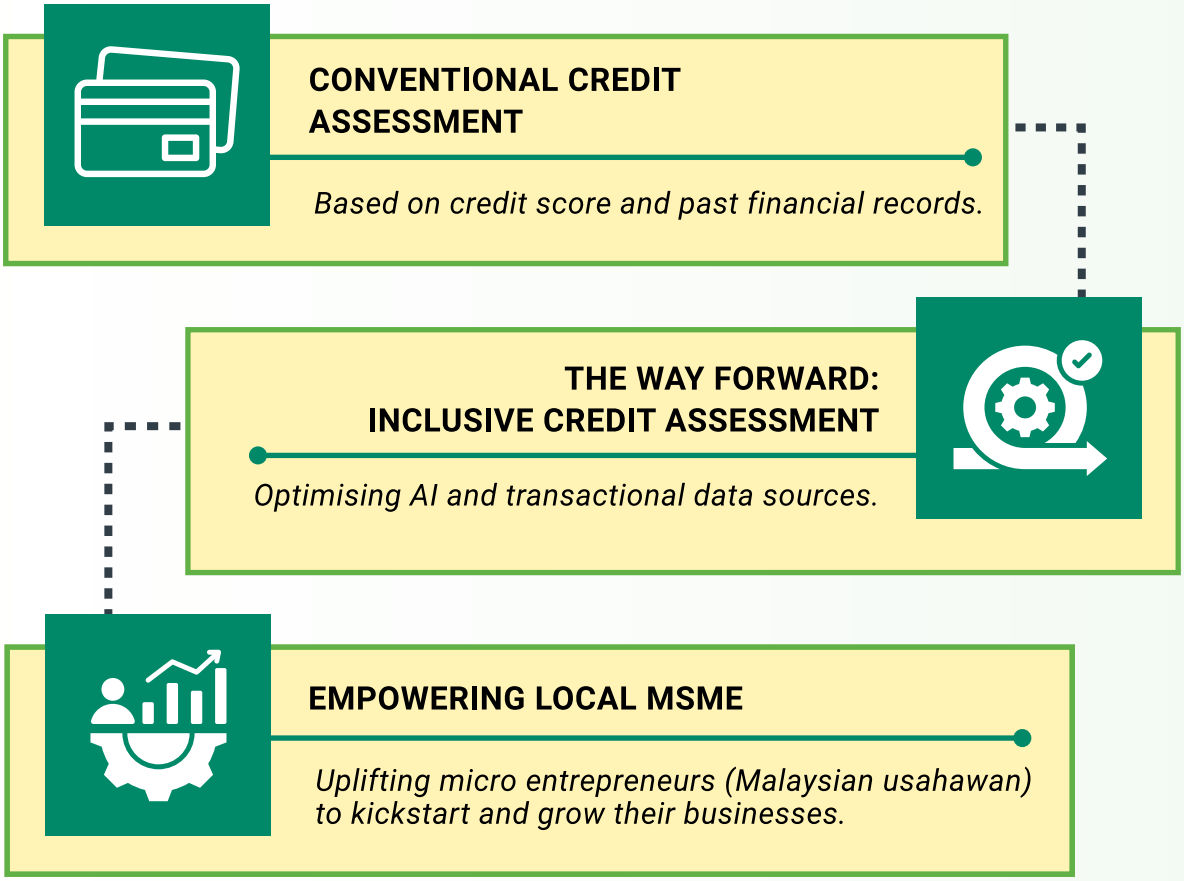


Credit Modelling

Traditionally, banks have relied on the same data sources to assess credit profiles. However, AEON Bank plans to leverage hybrid or alternative data to enrich the credit profiles of individuals, especially the younger demographic and credit thin customers, i.e., individuals without much credit history. This approach is challenging for non-digital banks, as accessing such data requires APIs, which are not easily integrated into conventional systems.

Similarly, MSMEs, such as F&B entrepreneurs, as well as micro and small vendors, have struggled to secure financing, contributing to a significant funding gap for MSMEs. The issue is not with the unavailability of funds, but rather, the limitations in how credit is assessed. Traditional banks face challenges in this area, as they do not utilise alternative data sources to support their credit assessments.

With the enhancement of digital technology and AI optimisation, AEON Bank is aiming to overcome this by using data from various sources to carry out credit assessments differently, providing much-needed financing to MSMEs, especially those that might not have had access to microfinancing from a bank before. This is particularly important to AEON Group, given its wider ecosystem and the long-standing relationships it has with many of its suppliers and vendors.



Aspiration and Vision for the Near Future

AEON Bank aspires to be a dynamic player in the digital finance industry, with the competitive edge of being Shariah compliant, providing simplified banking solutions, while addressing the challenges with accessibility and inclusivity. We aim to empower the community to pursue their aspirations and achieve economic independence, fostering a more inclusive financial future for all, while contributing towards the nation's fintech digital economy and establishing Malaysia as an Islamic banking hub in the region.

The long-term goal is to align our banking services with AEON's extensive footprint, creating seamless digital payments and financial solutions, enhancing customer engagement and driving cross-collaboration to increase customer acquisition, retention, brand loyalty and sustainable growth.

Views from a Director

Mohammad Ridzuan Abdul Aziz
Independent Non-Executive Director, AEON Bank (M) Berhad

Being a Director of a digtal bank requires a digital-first mindset and readiness to adopt a new perspective and strategise on the effectiveness of risk management, regulatory compliance and Shariah requirement aspects, while ensuring a stable cloud technology infrastructure as the key operational enabler. On top of that, it is important to establish a dynamic working culture and governance amongst a diverse group of talents employed within the organisation. It is also crucial for a Director of a digital bank to be familiar with the latest tech development and the evolving business model of various digital financial services in Malaysia and across the globe, thus balancing the need for tech-savvy consumers, as well as being more inclusive of the larger population.

Fozia Amanulla
Chief Executive Officer,
Boost Bank

Boost was established in 2017 with the core mission of serving the underserved and driving financial inclusion. Over the past seven years, Boost has rapidly evolved from a homegrown eWallet provider into a leading regional fintech player. Our holistic fintech ecosystem now encompasses digital payments, AI-based micro-financing, cross-border payment platforms, and an innovative embedded digital banking solution. These advancements have positioned Boost as a key player in the fintech space, empowering millions of customers – both users and merchants – across the region to be unstoppable.

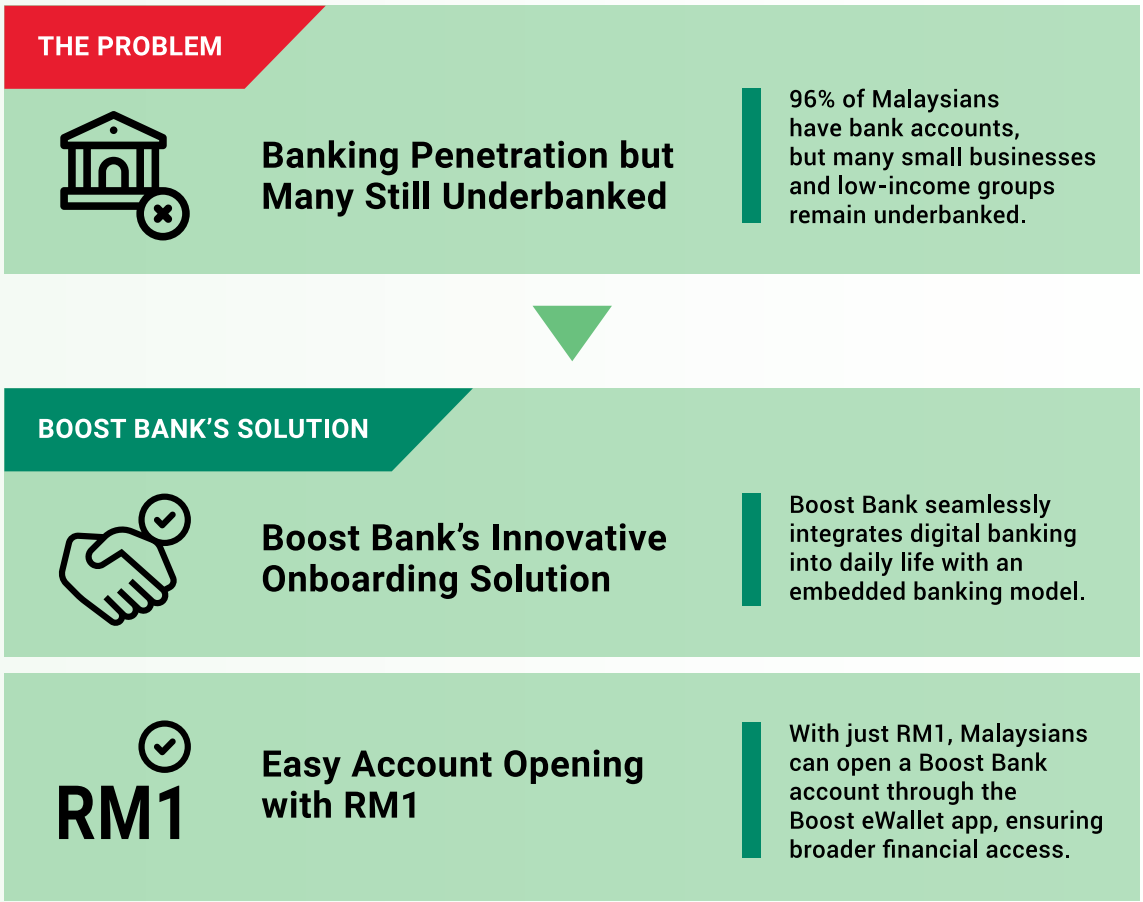
Selecting the right partner for our digital banking license was crucial. We sought a partner with deep expertise in Malaysia's financial and regulatory environment. Given our history of successful collaborations with RHB Banking Group across various projects, they were the natural choice to complement our strengths. This partnership enabled us to bridge gaps and ensure that our vision for a digital bank was realised.

On June 6, 2024, we proudly launched Boost Bank by Axiata & RHB, marking the introduction of our innovative embedded banking app. This app is designed to revolutionise how Malaysians interact with financial services, making banking more effortless and integrated into daily life.

As a digital bank, we consider ourselves ecosystem players who complement traditional banks. Through the unique partnership of Boost and RHB Banking Group, Boost Bank is the first in the market to merge the technology-first mindset and agility of a fintech with the trust and stability of a large financial institution. This combination offers an enhanced user experience where customers can explore new financial solutions with peace of mind.

While Malaysia's banking penetration rate is impressively high at around 96%, a significant portion of the population, particularly small businesses and low-income groups, remains underbanked. This is precisely where Boost Bank steps in, leveraging its pioneering embedded banking model to address this critical gap, seamlessly integrating digital banking solutions into the daily lives of Malaysians, making financial access more inclusive and straightforward.

A key feature of our embedded banking approach is our innovative onboarding process. With just RM1, Malaysians who do not have existing bank accounts can easily open a Boost Bank account directly or through the Boost eWallet app. This approach addresses a crucial gap in Malaysia's financial landscape by ensuring broader access to essential banking services.



Strategic partnerships and extensive ecosystems position us as a thriving digital bank. Successful digital banks worldwide rely on robust ecosystems, whether independently developed or through strategic partnerships. In this respect, Boost Bank has a significant competitive advantage. We have over 11 million users on the Boost app, and more than 656,000 merchant touchpoints across Malaysia, and the broader Axiata ecosystem.

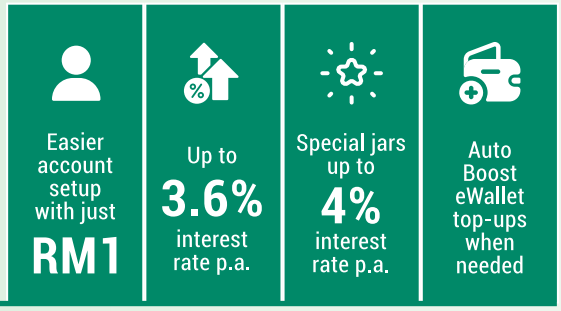
We are also capitalising on long-term partnerships to enhance our offerings and expand our reach. Recently, we announced exclusive partnerships with MYDIN, CelcomDigi, and four supermarkets and hypermarkets in East Malaysia – Bataras, CKS Retail, Servay and Farley. Through our data-driven approach, we can tap into both our own and our partners' ecosystems to bring banking directly to our customers by seamlessly embedding our digital banking products and services within these ecosystems and existing transaction journeys.

For customers, this familiarity with the environment makes the transition to digital banking smoother and more intuitive.

A key insight we've gained since launching Boost Bank is the importance of remaining customer-centric. Underbanked and unbanked customers often lack digital expertise and are considered thin-file customers, making it counterproductive to force a behavioural shift. Instead, the customer journey must be embedded into their daily routines.

Equally important is listening to customer feedback and continuously improving. We embrace the opportunity to learn from other successful digital banks and recognise that setbacks offer valuable insights. By staying focused on our customers and prioritising a seamless user experience, we ensure that our digital banking solutions enhance their financial journey. Our goal is to empower our customers, making their banking experience as smooth and positive as possible.

We've made several enhancements to the Boost Bank app recently to provide greater value and convenience for our customers. This includes easier account setup with just RM1, , a 3.6% interest rate p.a., special jars with up to 4% interest rate p.a., and automatic Boost eWallet top-ups when needed.



Every challenge is an opportunity to learn and innovate. Setting up a digital bank involves unique challenges, such as attracting and retaining the right talent. It's essential to have a mix of fintech and banking expertise to foster an innovative, collaborative, and agile mindset while ensuring strict regulatory compliance.

Developing a secure technology infrastructure and implementing strong cybersecurity measures are also critical tasks. The right decisions must align with the bank's strategy to ensure the technology is both scalable and reliable.

A significant challenge for digital banks is the absence of a physical presence. However, this is also our greatest advantage. With Axiata and RHB Bank as our shareholders, we offer the confidence of household names, a large ecosystem, and the security of strong governance and risk management.

This backing is crucial to gaining customer trust and providing reliable alternative access to banking services in a market new to digital banking. We continuously learn from our journey, and by placing customers at the heart of all decisions, we believe this ensures a trusting relationship.

Since its launch, Boost Bank has experienced encouraging growth, with a steadily growing customer base and positive market response. We are pleased with the initial uptake and the steady increase in new account openings. Our goal is to continue expanding our customer base and deepening our relationships with existing customers.

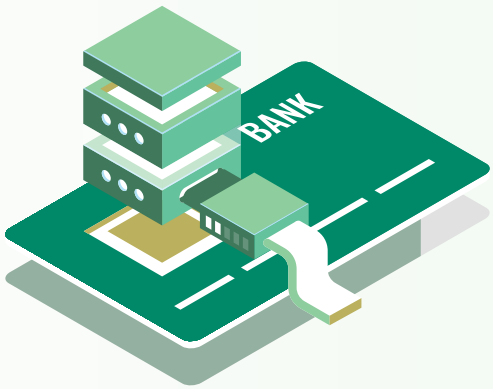
We are strategically expanding our product offerings to cater to the evolving needs of our customers, with a robust pipeline of products scheduled for introduction in the coming year to cater to both consumers and businesses. In October 2024, we launched our debit card powered by PayNet and Mastercard, which allows users to make transactions at over 100 million locations worldwide.

In October 2024, we launched our debit card powered by **PayNet** and **Mastercard**, which allows users to make transactions at over **100 million locations worldwide.**

Central to the development and rollout of these products is our focus on customer-centric simplicity and innovation. We ensure that every product is not only easy to use but also offers meaningful value to our users.

Our approach is rooted in rigorous governance and risk management, ensuring that all new offerings meet the highest standards of security and compliance. We place a strong emphasis on listening to and addressing customer feedback; a top priority in our product enhancement efforts to drive loyalty across our user base.

Our vision for Boost Bank extends beyond offering another digital banking option. We aim to champion a future of embedded banking, where digital banking seamlessly integrates into everyday life, providing a banking experience where technology works for you, not the other way around. Our aspiration is for everyone to bank like they never have to. Ever.



Views from a Director

Rohan Krishnalingam
Non-Independent Non-Executive Director, Boost Bank

As a director at Boost Bank, the role is distinct from that in traditional financial institutions, with a stronger emphasis on innovation, agility, and a comprehensive understanding of digital ecosystems. At the core of this position is the ability to leverage cutting-edge technology to significantly enhance customer experiences, particularly in serving the underserved and unserved market segments all while navigating the rapid pace of change inherent in digital banking.

The environment at Boost Bank is characterised by a tech-centric culture that fosters continuous digital innovation and prioritises customer-centric solutions. Boost Bank promotes a collaborative, cross-functional approach to culture, breaking down departmental silos to encourage creativity, rapid problem-solving, and swift decision-making. This culture is deeply influenced by the merger of traditional banking expertise from RHB with the agile mindset of Boost as a fintech trailblazer, creating a unique organisational dynamic focused on customer value.

Governance at Boost Bank also reflects these differences, requiring directors to be more proactive, adaptable, and forward-thinking in their oversight roles. The bank's governance structure is designed to be highly adaptable to rapid changes in technology and evolving customer expectations. There is a heightened focus on cybersecurity, data privacy, and the integrity of digital transactions, which are paramount in a fully digital banking environment. This ensures that Boost Bank remains responsive to market changes but also secure and trustworthy for customers.

Note: At the time of writing this article, consortiums led by KAF Investment Bank and SEA Ltd-YTL Digital Capital consortium have yet to announce banking operations.

Revitalising Banking with Innovative Products

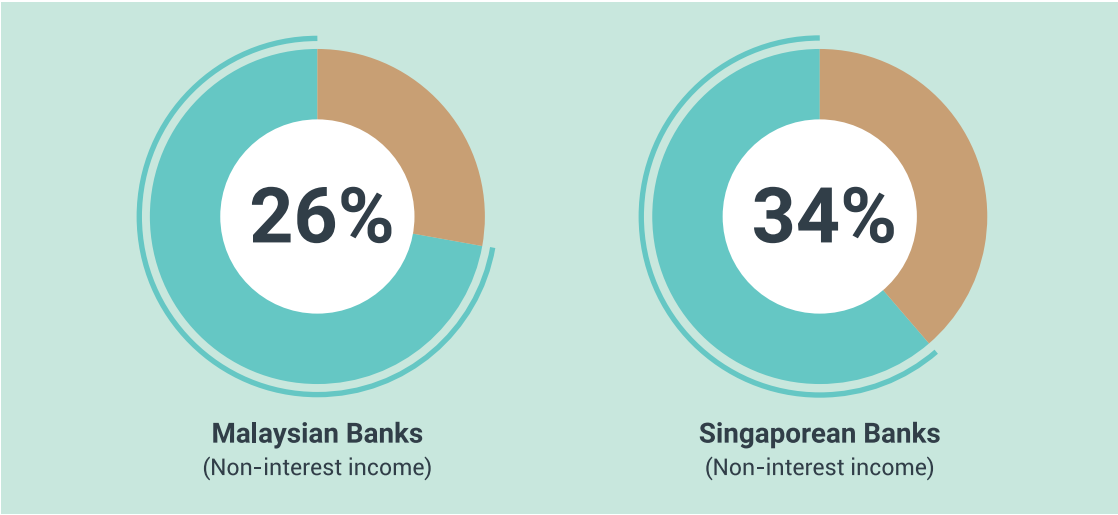
AUTHOR

Pankajkumar a/l Bipinchandra

Managing Director of DARE

DATAMETRICS RESEARCH AND INFORMATION CENTRE

The Malaysian banking industry has evolved as technology and new product innovation has helped it diversify its earnings base from pure interest income. Non-interest income is a huge area of growth as banks tap into fee-based income to generate additional income. Of course, most banking groups are already well diversified with income earned from investment banking, Islamic banking, asset management, and in some instances, even insurance. Some of our financial institutions are also well diversified geographically with a presence in some ASEAN countries and elsewhere. Based on the latest data, Malaysian-listed banking groups on average derive approximately 26% of their income from non-interest income businesses. Among the local banking groups, non-interest income ranged from lows of 12% to highs of 29%. This is far lower than what we observed among more diversified Singapore-listed banking groups with non-interest income, at 34%.



To grow the banking business is relatively tough as banking products have become rather homogeneous; hence we are increasingly seeing the financial sector turning to technology and innovation to create new products for its clientele. Gone are the days when banks were dependent on just lending activities to generate profits; non-interest income and fee-based income are the new growth areas.

In the age of the Internet, banks have it tough to compete, not only to attract the traditional banking need for the placement of funds that earn mediocre returns, but also to be the choice of funding for consumers and businesses when it comes to lending activities. With the multiple choices out there and the borderless world that we live in today, traditional banking needs are slowly being overtaken by new and disruptive market players, providing alternatives for investors to place funds and platforms to raise funds. The emergence of digital banks and insurers, peer-to-peer financing, and equity crowdfunding platforms is a testament to the challenges faced by the Malaysian financial industry. Hence, change is inevitable and those who do not move with the market needs will be left behind as the disruption that is breaking barriers when it comes to banking is real, fast, and furious.

Given the evolving nature of the banking industry, financial institutions will have no choice but to rise to the challenge and compete with these newbies at their own game with innovative and transformative banking experiences. After all, when it comes to levels of trust, consumers have a higher level of trust in licensed institutions, and are unlikely to "try their luck" with those offering alternative options, especially in an era where scams are rampant.

What new, innovative, and technologically-advanced products can the banks offer?

1. Digital Banks

Malaysia's move to introduce digital banks is a blessing in disguise for the traditional market players as in essence, what these newbies can do or provide is not extraordinarily different from what the incumbents are doing for their customers, given the clear head-start in terms of funding and information technology (IT) infrastructure. While these newbies are funded by investors with deep pockets, having a winnable business model is not going to be easy as digital bank market players will have to have a significant customer deposit base before they can embark on providing lending facilities. Marketing costs and upfront customer acquisition costs in the form of a better deposit rate can only last for a limited offer period. Thereafter, it will be tough to retain these deposits unless the offer is extended over a longer period. With higher deposit rates, these digital banks will have to ensure that they have a decent spread in their lending activities to generate what is known as net interest income.

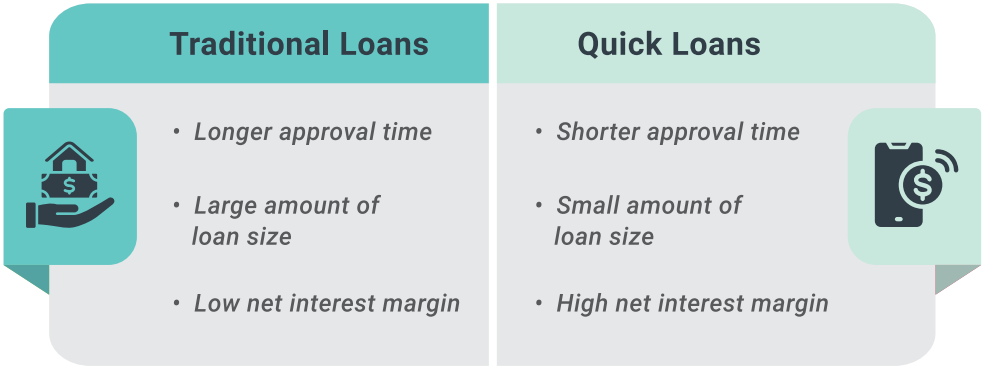
For traditional banking institutions, the step towards being a "digital" bank is only a click away as most banking transactions today are done online anyway. These banks are already enjoying the economies of scale that come with their deposit base, and can easily scale up their product offerings, both in deposits and lending. They have enough capability to not only be able to match what digital banks are providing, but to beat them at their own game.

2. Generative AI

Artificial Intelligence (AI) is today's buzzword for businesses, and traditional banks cannot ignore the threat that generative AI brings to how business is carried out today. Providing customised services in banking based on customer preferences and behaviours is today's new age of banking. This entails focusing on improving customer engagement and satisfaction by fulfilling their banking needs and not by what the bank has in terms of products.

Most of these are data-driven, as it will allow the banks to understand customers' needs better and use the data to offer them personalised banking products. A Banking AI platform could also offer customers a real-live interface that is well suited to individual customer's needs, which then translates into closing a transaction. By capitalising on AI, financial institutions are redefining processes from customer service to data-driven decision-making.

One of the reasons for the success of disruptors is due to the hassle and time-consuming nature of obtaining financing facilities from traditional financial institutions. Although there has been some improvement in this space, most local banks are unable to compete with the new wave of competition from these disruptors. The thrust here is to make products that are simple and affordable for the mass market, targeting the unbanked population as well as low ticket sizes. In this space, it is more about volume; but the higher net interest margin should more than compensate the lower credit quality of these borrowers. With an online presence, be it via web-based services or a mobile app, financial institutions can reach out to a greater number of customers, widening their market reach to anyone who is seeking a banking solution.



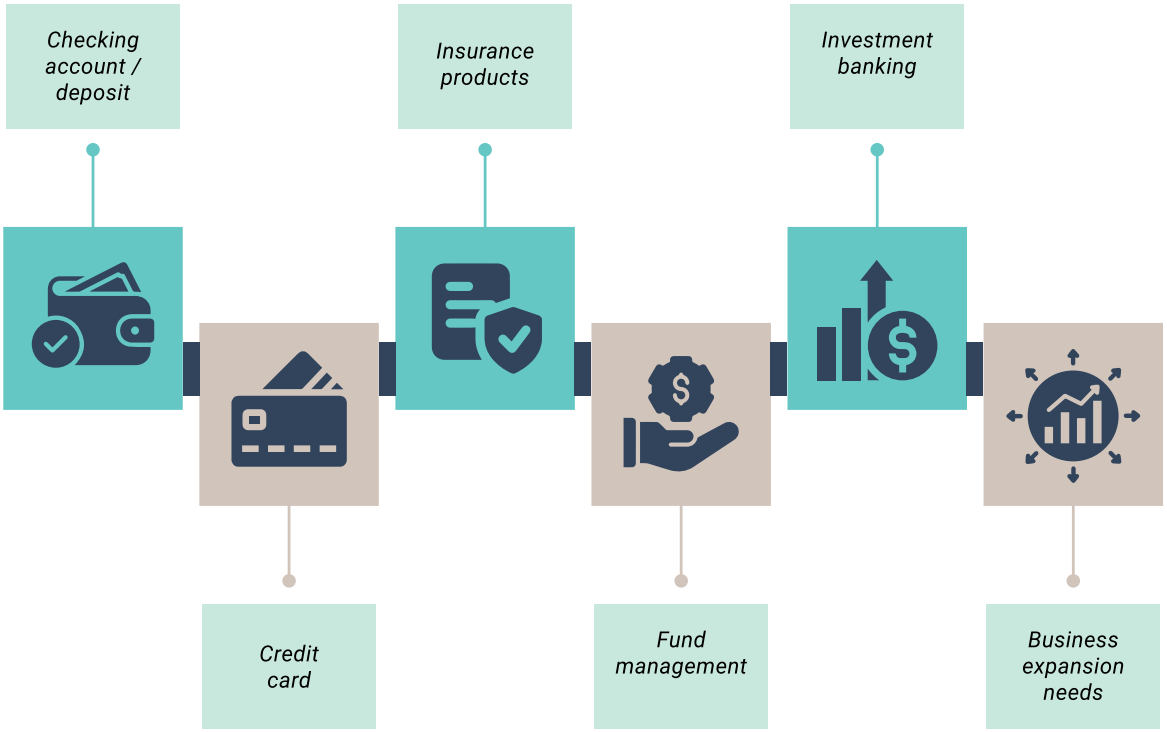
4. Products for HNWIs

Post-Asian Financial Crisis, Malaysia's capital market was seen as limited in scope as bankers were unable to provide more sophisticated products, especially in foreign currencies. That void was slowly filled-up by bankers out of Singapore, servicing individual clients and corporates in Malaysia, armed with an array of products, services, and strategies, especially for High Net-Worth Individuals (HNWI). To this day, we still see these Singapore-based Relationship Managers playing an active role in harnessing Malaysia-based clients as it also become a legitimate and legal mode of investing outside Malaysia. No doubt, this worked, not only from a currency perspective, due to the weaker Ringgit, but also due to a diversified portfolio based across multiple jurisdictions. Given that capital market products today are becoming more homogeneous, Malaysian financial institutions must build this in-house capability to cross-sell these products to their HNWIs. There is so much fee-based income to earn from this move and certainly, Malaysia does not lack talents when it comes to building a stand-alone private banking team, focusing on the needs of HNWI as well as affluent investors.

5. Cross-Selling

While most banks are able to generate additional fee-based income via cross-selling of products, there is still much to be tapped from this vast opportunity. The Malaysian banking industry has a huge deposit base and despite other income-generating opportunities out there, depositors continue to grow, rising to almost RM2.5 trillion as of the end of August 2024. With 44.6% in fixed deposits, there are still untapped opportunities for these deposits to earn a better return with other low-risk investment ideas. Savings and Foreign Currency Deposits, which make up slightly more than 20% and 10% respectively of the system deposits, are ripe for the picking. After all, 70% of the holders of all deposits are businesses and individuals.

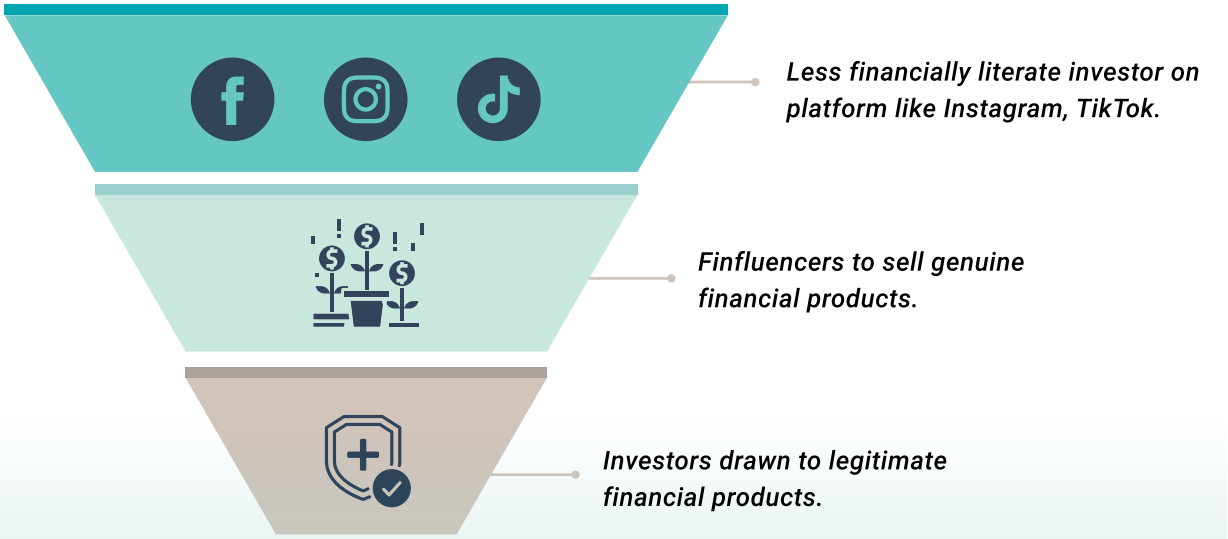
In today's competitive banking landscape, client retention and the ability to meet customers' varied banking needs is crucial. Whether it is a checking account, deposit, insurance products, fund management, credit card, investment banking, or even business expansion needs, a financial institution has the capability and capacity to fulfil every client's needs. The more dependent a customer becomes on a financial institution and is happy with the services provided, the higher the level of customer 'stickiness' – thereby enabling financial institutions to generate more fee-based income.



6. Legitimate Platforms for Investors

One of the fastest growing industries in the market today is the impact of financial influencers or 'finfluencers' who use social media to sell investment-related products that target certain demographics. The target market here is the less financially literate investors, who in most instances are taken for a ride with the promise of high returns. Driven by greed, these investors are sometimes sucked into money games that are nothing but scams. For the financial industry, this has opened up an avenue for growing another leg of the business by using the right finfluencers to sell genuine financial products that deliver decent returns.

As the trust level is high among financial institutions, the ability to sell via social media can be rewarding. Products that can be sold from this type of social media platform have to be investment or insurance protection products, i.e., medical, healthcare, unit trust, or other wealth products.



Other than fee-based income, Malaysian financial institutions have also another avenue for growth, which has largely not been explored. When it comes to Islamic banking, Malaysia is at the forefront globally and although we have developed the market segment well over the past couple of decades, there is still room for growth, given the growing demand for Islamic banking products. This is not only limited to Muslim customers; non-Muslims too have embraced Islamic banking as more customer-centric. Malaysian financial institutions that have mastered the art of Islamic banking should explore venturing into other markets where there is a demand for Islamic banking. This can be either via joint ventures with overseas local partners or by seeking new licenses in these markets.

In conclusion, despite being a mature industry, financial institutions have a long runway to improve profitability, thanks largely to technology as well as learning from market disruptors to adapt to changing customer needs. For Malaysian financial institutions, given their relatively lower non-interest income compared to their Singapore counterparts, there is indeed room for growth in the areas mentioned.

Digital Assets:

Growing Prominence in the World of Finance

AUTHOR

Fuad Alhabshi

Executive Director & Fund Manager, Halogen Capital

Halogen

In the present realm of finance, there is arguably nothing more divisive than digital assets[1]. The late, great Charlie Munger of Berkshire Hathaway fame criticised cryptocurrency, the most well-known component of the blanket term digital assets, for being useful to kidnappers and extortionists. Jamie Dimon, CEO of JPMorgan Chase, also expressed strong scepticism.

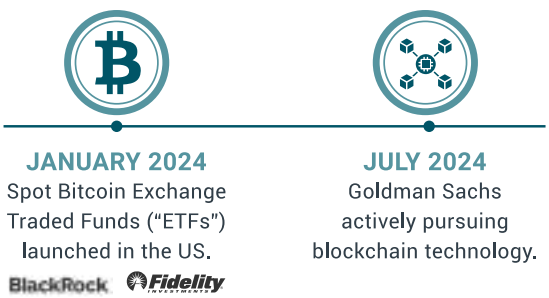
However, the winds of change are blowing. A former naysayer, Larry Fink of BlackRock, has since changed his stance. Fink now considers Bitcoin to be "digital gold" amidst Blackrock launching a Bitcoin Exchange Traded Fund ("ETF") alongside ten other large fund managers on the 5th of January 2024. The US-based firms that launched Bitcoin ETFs read like a who's who of the asset management industry: Franklin Templeton, Fidelity, Invesco and ARK, just to name a few.

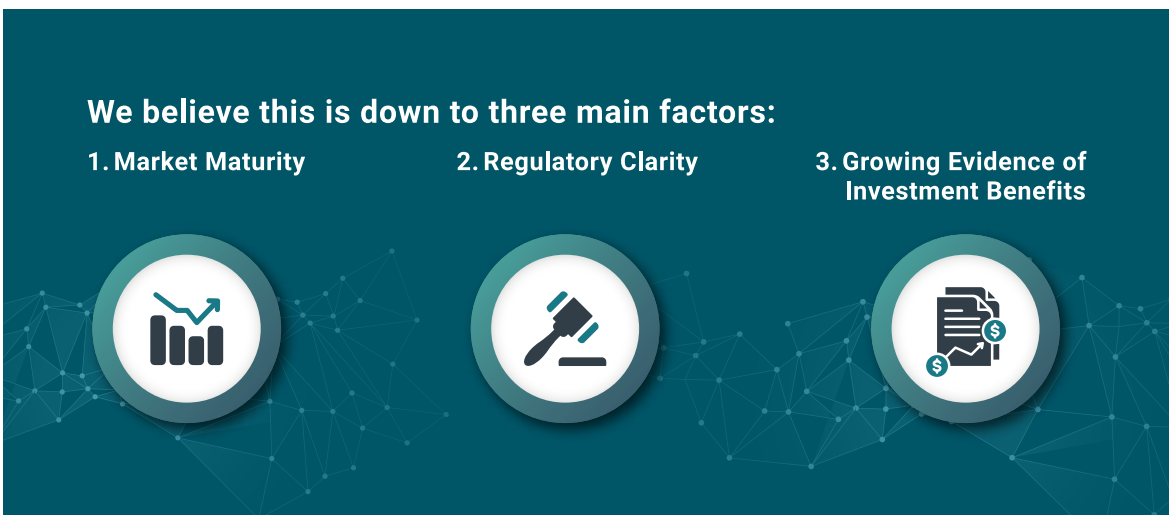
Despite Dimon's initial views, JPMorgan Chase had in fact utilised blockchain technology during his stewardship. It must be emphasised that blockchain technology is the underpinning mechanism of all cryptocurrency.

As recently as July 2024, a 150-year old financial institution, Goldman Sachs, publicly announced that they were actively pursuing blockchain technology, focusing on the tokenisation of financial assets[2], reworking the plumbing of the financial market infrastructure and the impact that digital money will have across markets.

The fact that these mega institutions are late in the game cannot be overlooked. Despite this, for the first time in modern history, an asset class was adopted by retail investors before institutional investors had a chance.

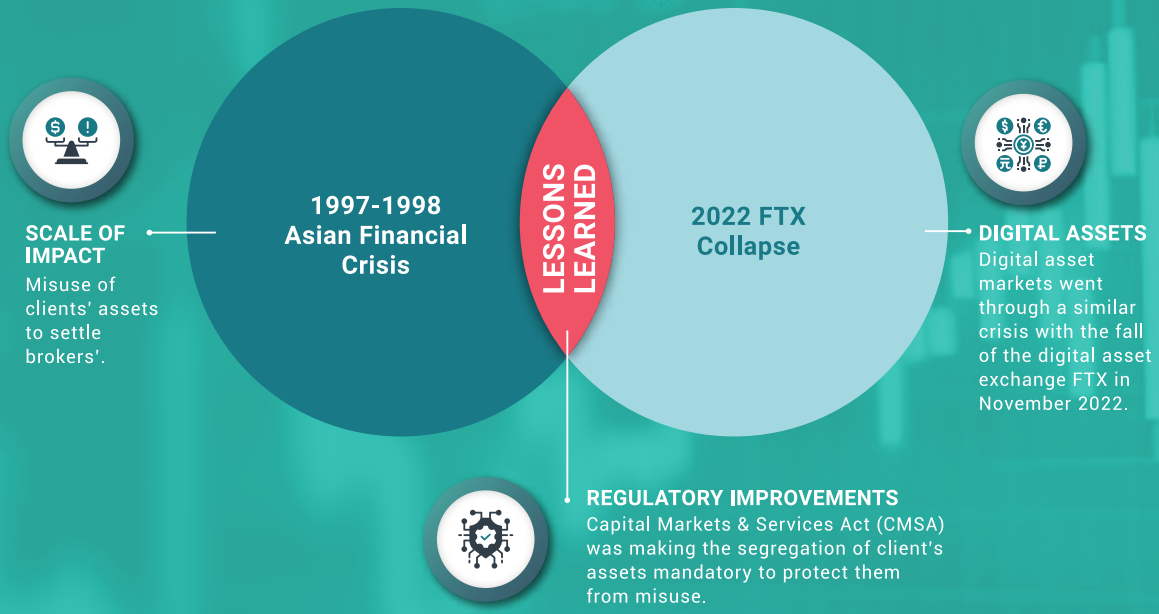
The crucial question at this point is to ask what has caused this shift amongst institutions.





[1] *The Securities Commission of Malaysia defines digital assets as both digital currencies and digital tokens as part of the regulatory framework established by the Capital Markets & Services (Prescription of Securities)(Digital Currency and Digital Token) Order 2019.*
[2] *Arnaldur, S.J. (2024, July 13). Goldman Sachs Expands into Tokenization. The Tokenizer. https://thetokenizer.io/2024/07/13/goldman-sachs-expands-into-tokenization/*

Market Maturity



Financial markets across the world have gone through numerous crises, some of which were global in scale while others were more localised. Regardless of scale, in the aftermath of each crisis, market practitioners and regulators learn valuable lessons on how to prevent similar events from recurring by enhancing governance and legal frameworks appropriately.

To draw from a domestic example, the Capital Markets & Services Act (CMSA) was introduced in 2007, making the segregation of client's assets mandatory to protect them from misuse. One of the reasons for the introduction of the Act was the rife misuse of clients' assets to settle brokers' debts during the Asian Financial Crisis of 1997/1998.

More than two decades later, the nascent but burgeoning digital asset markets went through a similar crisis with the fall of the digital asset exchange FTX in November 2022. This came off the back of the Covid era's low rate environment and fiscal stimulus-driven hubris which had led many to chase returns and let their guards down, including FTX investor Temasek Holdings of Singapore. This highlights the same deficiencies in controls, regulations, and risk management experienced during the Asian Financial Crisis.

Since then, the market has adopted an infrastructure that would prevent another Sam Bankman-Fried scenario from taking advantage of customers. A spotlight was then turned towards improving security and custodial services, with a particular focus on the need to enhance the service level to suit the institutional class.

Regulatory Clarity

This is one area where there has been a secular trend of improvement despite the incongruence across different jurisdictions. Regulators have made concessions on their previous prohibitive and protective stance, to a more nuanced approach that recognises the potential benefits with the need to protect investors. This is evidenced by the launch of cryptocurrency ETFs in the US and in Hong Kong.

Regulators have their work cut out for them, given the complexities of managing financial stability in a new asset class, on top of the world just recently exiting a period of outsized stimulus. Yet, they seem up to the challenge with many choosing to regulate rather than resort to an outright ban.

In this respect, Malaysia has done a commendable job of having a clear approach to digital assets with the Digital Currency and Digital Token Order 2019 being added to the CMSA. This laid the groundwork for digital assets to be considered securities in Malaysia, whereas many other regulators are still struggling at this stage.

This also paved the way for the Shariah Advisory Council of Securities Commission Malaysia to produce a groundbreaking resolution in which the council viewed the trading of and investment in digital assets to be permissible. This, in turn, made it possible for Halogen to launch the world's first Shariah-compliant cryptocurrency fund: the Halogen Shariah Bitcoin Fund.

Growing Evidence of Investment Benefits

Lastly, but by no means the least, comes the facet of digital assets that tends to invite scepticism. This is due to its past track record of booms and busts. Past price movements have often exhibited a pattern of cycles, not unlike the cyclicality seen in other investment asset classes.

The most recent cycle saw Bitcoin (as a proxy) reaching a then all-time high of USD 67,545 per Bitcoin on 8 Nov 2021[3] but swiftly dropping to USD 46,206 by the end of that year amid an uncertain macroeconomic environment characterised by multi-decade high inflation and rapidly rising interest rates.

The following year saw collapses of certain frail cryptocurrencies that sought to emulate the value of the US Dollar with the use of blockchain technology (such as Luna and Terra), and eventually culminated in the downfall of the world's second largest digital asset exchange at the time, FTX, in November 2022. Bitcoin ended the year at a price of USD 16,538 or a year-on-year fall of 64%. Around the same time, the term "crypto winter" became ubiquitous in the media and fear surrounding the digital asset class was high in supply.

2023 saw Bitcoin recovering from its lows from the previous year to end the year at a price of USD 42,260, a 160% gain year-on-year.

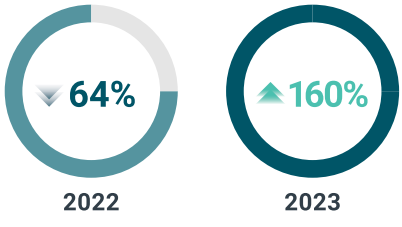
This was influenced by various events including the filing of a spot Bitcoin ETF by the world's largest asset manager, BlackRock[4].

Price movements of the asset class have typically dominated news headlines on this topic and the evidential view has been grossly underrepresented in said channels. The fact of the matter is that cryptocurrency is an investable class of assets with a long track record and readily available data over its decade-long existence.

This data can be scrutinised with the same well-established lenses that are often used on traditional assets for which there are many measures. To streamline discussions, we shall focus on Modern Portfolio Theory (MPT), a methodology to select investments across multiple asset classes in order to maximise overall returns for any chosen level of risk. Multiple MPT studies across major asset classes and publicly published empirical evidence show that a right-sized allocation to digital assets in an investment portfolio enhances overall portfolio returns over three- and five-year periods, with minimal increases to overall volatility. It is the rise of this empirical evidence that has led some of the world's largest asset managers to make inaugural inclusions of cryptocurrencies into their existing funds and asset allocation models.

BITCOIN RECENT CYCLE

2021	2022	2023
USD 67,545	USD 16,538	USD 42,260

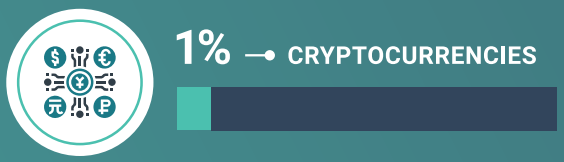


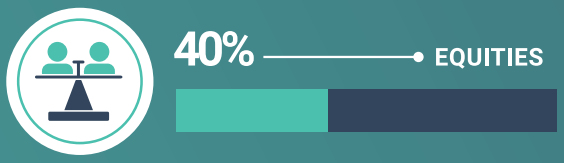
[3] *According to data from CoinDesk.com*
[4] *Pound, J. (2023, June 15). BlackRock files for spot bitcoin ETF, with Coinbase as a crypto custodian. CNBC. https://www.cnbc.com/2023/06/15/blackrock-files-for-spot-bitcoin-etf-with-coinbase-as-a-crypto-custod ian.html*
[5] *Franjkovic, T. (2024, February 8). Fidelity All-in-one ETF Allocates Up to 3% in Bitcoin as Institutional Crypto Investing Normalized. CCN.com. https://www.ccn.com/news/fidelity-all-in-one-etf-bitcoin-institutional-crypto-investing-normalized/*

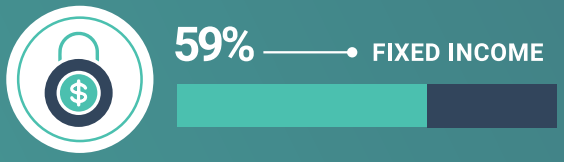
These are two examples:

In February 2024, Fidelity Investments Canada incorporated a 1% to 3% allocation to Bitcoin in its "All-in-One" range of funds[5]. One of these funds, the Fidelity All-in-One Conservative ETF, offers a balanced investment approach with a mix of around 40% in equities, 59% in fixed income, and 1% in cryptocurrencies.

In March 2024, BlackRock made a filing to include Bitcoin exposure as part of their new non-traditional bond fund. The BlackRock Strategic Income Opportunities fund is set to primarily invest in fixed income securities but can also purchase alternative assets if the portfolio managers see fit.







Conclusion

There are many sides to this USD 1 trillion industry that is on the cusp of impactful change. It is estimated, that tokenisation will continue to grow as it attracts institutional investment and has the potential to enhance existing financial markets from an operational perspective. There has been many a murmur about the yet unknown dangers of settlement cycles moving from T+2 to T+1 in the US. A potential solution lies in integrating blockchain technology, a possibility that some of the largest banks have begun exploring.

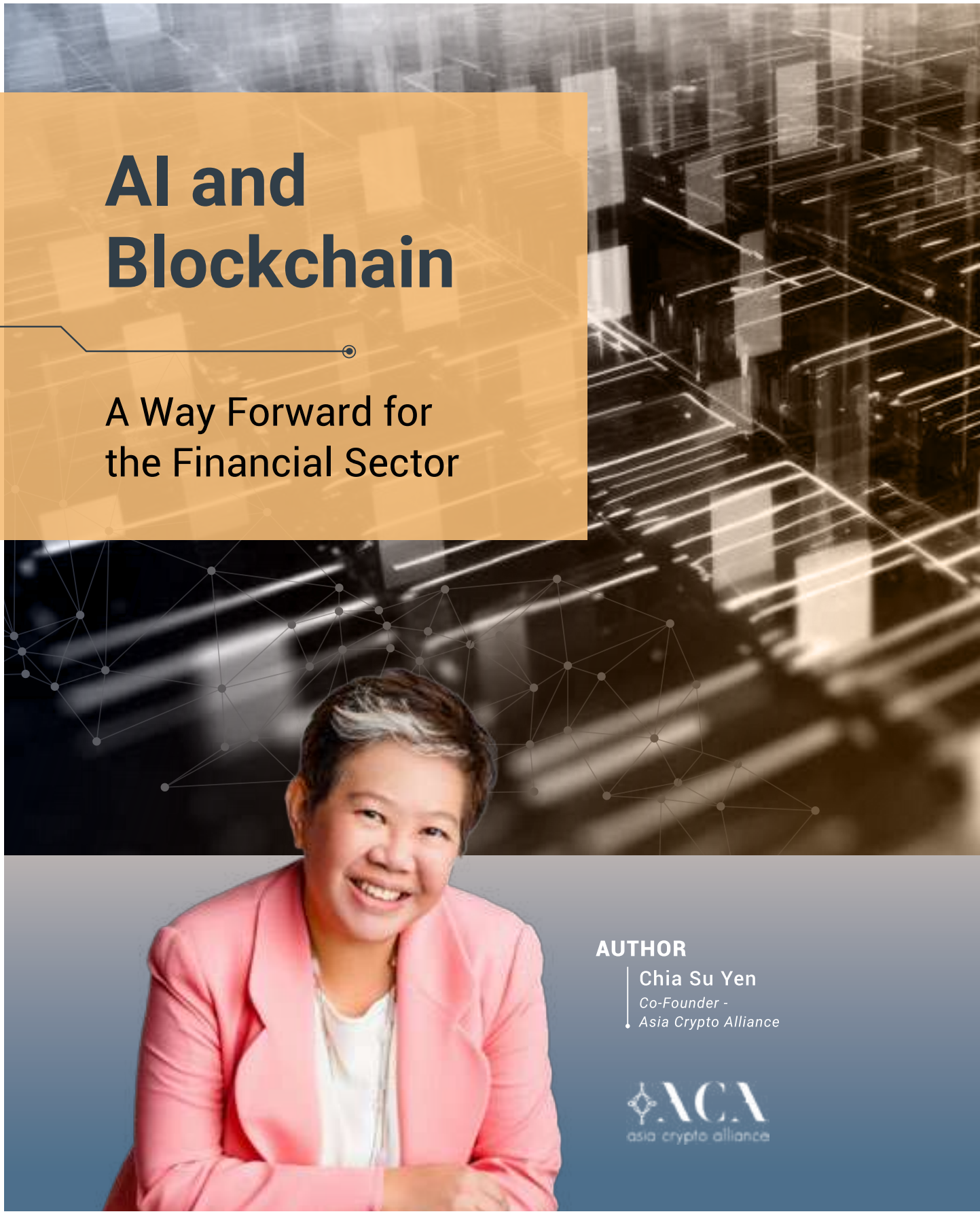
Central banks around the world are conducting feasibility studies on Central Bank Digital Currency, with the initial attraction being an efficient system of domestic and international payments. It could also foster additional benefits such as virtually eliminating all occurrences of counterfeiting. There is an additional sense of urgency as BRICS nations have publicly stated their ambitions to harness this technology as a viable alternative to the US Dollar's previously unshakable status as the world's reserve currency.

Digital assets are also likely to transform human capital. While the world has been fixated on how artificial intelligence could disrupt labour markets, the field of digital assets has been driving employment on all fronts. There is a demand for talent that is native to the technology, and for experienced hires who are able to use their transferable skills to adapt to the requirements of dealing with this next phase of financial market development.

At this juncture, it is clear that most finance professionals have had to consider the impact digital assets will have on the future of the industry. Whether this asset class and technology can flourish beyond the investment subsegment remains to be seen. It is important to realise that digital assets offer a rare moment of competition for traditional finance. Competition tends to make for better systems in the future, no matter the victor.

AI and Blockchain

A Way Forward for the Financial Sector



AUTHOR

Chia Su Yen

Co-Founder -
Asia Crypto Alliance

ACA
asia crypto alliance

Introduction

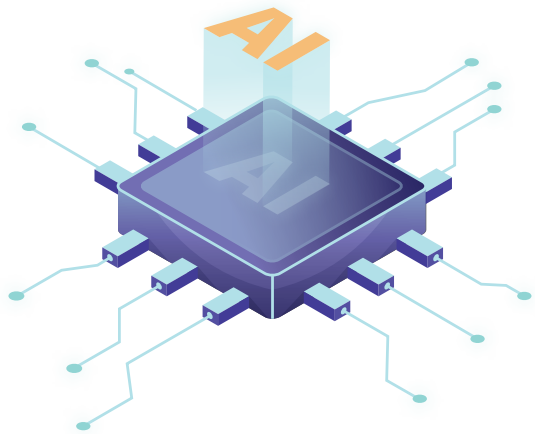
Much has been written and debated about the role of new technology and its relevance to the financial sector. This is not surprising as the financial industry is essentially data-driven by nature.

Risk management, fraud detection and customer service are some of the few functions, amongst many, dependent on timely and precise data. As such, blockchain technology ('BC'), with its decentralised and immutable record keeping capabilities, coupled with artificial intelligence tools ('AI'), and their ability to analyse large complex data sets including predictive and decision-making capabilities, may present many opportunities for innovation in a financial organisation.

Artificial Intelligence and Blockchain

Management will always try to find new ways to unlock opportunities to improve security, optimise processes and provide cutting-edge services and products to clients. Hence, the intersection of blockchain technology with AI tools may come to the fore in cases where blockchain maintains the integrity and transparency of transaction records, while AI-powered tools can analyse large amounts of data to identify patterns far quicker than humans can.

AI tools possess advanced data processing capabilities where predictive modelling and automated decision-making can be an evolutionary step for financial institutions. For example, in trade and investments, AI-powered algorithms can assess large scale risk models that can incorporate many different variables, examine market trends speedily, triggering automated transactions as a result, when certain parameters are met. Some asset management and private wealth management firms, such as JP Morgan and BlackRock, have already announced their intent to utilise AI tools to provide support services to their client-facing officers. Blockchain technology, on the other



hand, offers a digital decentralised platform for immutable chronological record keeping functions to exist in real time as much as possible. The security coupled with the veracity of records are maintained by a network of participants, also known as nodes. A consensus is required among the network of nodes before any new transactions can be added to the ledger. In this regard, there is a constant mechanism of control preventing the manipulation of data, errors and quality of data.

There are various types of blockchains, the most well-known being a public blockchain – the most secure but the least efficient. Private blockchains, which have greater efficiency or speed in validating transactions, are not as transparent as a public blockchain; only certain users with proper authorisation can access a private blockchain. Cryptocurrencies are relevant as a form of payment to nodes, aka participants, for them to maintain the integrity of the blockchain especially in the case of public blockchains.

Most blockchain projects are built around three core properties namely, scalability, decentralisation or the extent of decentralisation, and security. In conceptualisation projects utilising blockchain technology, in most cases, developers will encounter the 'blockchain trilemma.' This trilemma comes about when the greater the scale of a blockchain project, and the more decentralised the blockchain, the slower the speed of transaction verification, as a greater number of nodes are needed to achieve consensus before new transactions can be added. To achieve scale and maintain a certain speed to ensure transactions are verified at an acceptable rate, there needs to be some consideration in regards to how much security developers are willing to sacrifice for any specific blockchain project. Generally, the more nodes required to approve transactions, the more "secure" these transactions are, but this comes at the cost of speed.

The most well-known and biggest cryptocurrencies and public blockchains are **Bitcoin ('BTC') and Ethereum ('ETH')**. Both these blockchains rely on cryptography and use digital ledger technology.

Bitcoin (BTC)

A BTC network is a public decentralised peer-to-peer payment network that allows participants to receive and send BTC without any financial intermediary getting involved. There isn't any entity that controls the blockchain supporting the BTC network; in short there isn't any third-party involvement, neither is there an "owner" of the technology. A public blockchain is akin to the internet that makes e-mail work.

Some classify BTC as 'digital gold' because of its decentralised system and store of value. The BTC blockchain contains all BTC transactions and tracks the ownership of BTC. Furthermore, there is a limit to the amount of BTC that can be minted, meaning supply of BTC is constrained by 21MM BTCs. This 21MM BTCs is expected to be reached by year 2140 and it will have implications on how the BTC network is maintained.

Ethereum (ETH)

Ethereum ('ETH') on the other hand is primarily created to deploy decentralised applications ('Dapps') and smart contracts. Hence, aside from it being a public decentralised peer-to-peer payment network i.e. it can receive cryptocurrency – in this case Ether ('ETH') – it has more uses for its network than BTC. For example, a smart contract can be programmed to send a designated person a portion of ETH almost immediately when proof is provided that someone has passed away. A BTC network is not built for such functions.

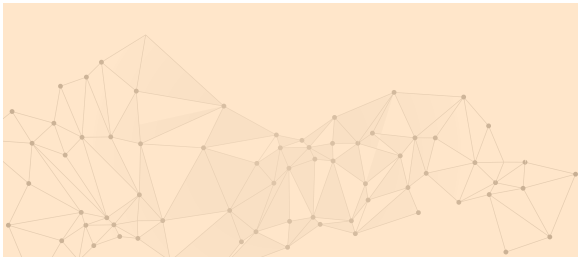
Integrating AI and Blockchain

When we explore the possibility of combining these two technologies perhaps there is a useful case to be made for AI to analyse blockchain data to extract useful information for financial applications. For example, can there be pro-active risk management and compliance monitoring tools that are not so labour intensive, where AI tools can be deployed to identify or spot fraudulent activities or decipher market trends much faster than a human mind can? In terms of a process lifecycle, can we utilise smart contracts built on a blockchain platform that can be programmed to automatically execute instructions and limit human errors when certain parameters are met? Such automatic actions are enhanced by blockchain technology which offers a tamper-proof record, hence allowing for auditability and transparency of AI-affected choices.

In thinking ahead of competitive pressures that are forcing traditional financial institutions to get leaner and more efficient for the cost-conscious consumer, some larger traditional financial institutions are already selling their proprietary business payment technology e.g. Bank of America's CashPro Insights, that incorporate AI and blockchain technology to optimise corporate payments. For large institutions such as Bank of America, with a significant domestic and international client base, it pays to make the requisite investments that will have a significant network effect for them and their clients. Even FinTech companies are constantly looking at ways to shave costs by deploying AI tools. One such is Klarna, which operates under a tight cost regime. Recently its CEO, Sebastian Siemiatkowski, said Klarna boosted its average revenue per employee from about USD$400k to USD$700k within 12 months by leveraging on AI tools.

What about large Malaysian financial institutions? Can we explore possibilities where there could be economies of scale to be had by deploying new technologies such as blockchain and AI, seeing as some Malaysian financial institutions may have sufficient touch-points with a diverse pool of economic actors, if it's not already being thought of? Furthermore, there are the network effects to be considered. Malaysian banks have relationships not only with other local economic actors, but also with their international counterparts such as Bank of America. Can Malaysian financial institutions reap the benefits of another institution's new technology set-up if they prepare their technology stack to ride on their counterparty's?

In Asia, regional banks such as Kotak Mahindra and DBS have announced their intention to investigate and invest in blockchain and AI tools to increase their service offerings. Institutions such as Siam Commercial Bank have been actively investing in and offering digital products which leverage on a blockchain platform. Such interest demonstrates that financial institutions are actively exploring and finding new pathways to incorporate new technology into their operating and business models. It is worth noting that new technology does not only pertain to back-office related activities. It is also relevant to the front office in terms of financial products, e.g. crypto ETFs, tokenisation of certain types of assets, or digital/crypto custody services.



Factors to Ponder

Despite significant investments made by some financial players, it pays to remember some crucial truths, namely, blockchain technology and AI tools do not completely remove the human element from the provision of financial services, i.e. the need for either human interaction or human intervention. Neither does it mean mistakes do not occur just because processes are automated; rather it is about automation decreasing the number of human errors, and when human errors do (and will) occur, what remedies are in place to counter such errors.

When it comes to AI tools, an element to consider is how AI algorithms are programmed. This is important as it may result in certain biases, thereby impacting certain segments of society. Equally important is the data set being utilised for machine learning purposes because how results are determined is also dependent on the input. In such cases, how does an institution put in the required brakes to prevent undue harm to its customers? What does the institution's governance structure look like and where does accountability lie? What are the possible remedies if something untoward occurs?

Presently

Deep-pocketed financial institutions with access to significant data flows, or data sets, are testing AI-powered tools. As much as there is interest to integrate AI into present business processes, it is still early days yet in terms of whether AI tools can be monetised to create valuable outputs, aside from it being a cost reduction tool.

Secondly

Anchors of good sound banking and financial regulations such as system stability and resiliency, legal protections, banking secrecy, privacy rules and international standards in AML, KYC and terrorist financing remain important considerations.

Thirdly

Regulators and policymakers play an important role in encouraging the adoption of new technology while ensuring rules do not get ahead of themselves, thereby stymying the industry's efforts.

It is also worth noting that demography plays an important role when evaluating the need for new technology to take its place in the financial industry.

Malaysia has a population size of approximately **34.1 million as of August 2024**, with a growth rate of roughly **2% per year** not inclusive of migrant labour. There are expectations that Malaysia will be an aged society sooner than anticipated:

17%

17% of its population will be aged 60 years and older by 2040.

27%

Interestingly, at present, the percentage of children under the age of 18 years is roughly 27% of the population.

70%

Malaysians between the age of 15 and 64 years represent about 70% of the population[1].

97.4%

Coupled with an internet penetration rate of 97.4%.

129.2%

High mobile usage rates of 129.2% of the total population.

it will not be surprising if Malaysia's customer base will drive demand that will **"forge the iron"** for management to look into how new technology plays an increasingly important role in the provision of banking and financial services for the future.

With a smaller population size than some of her neighbors, and a tighter labour pool, the possibility of shrinking operating margins, lower working capital and higher capital costs for financial players may not be very far from the minds of most management teams. Thus, if Malaysia wishes to maintain diversity in its financial sector's eco-system and remain competitive, it is even more crucial for institutions to find avenues that tap into new technologies to create new business propositions/output relevant for the market.

[1] *Malaysia's Department of Statistics*
[2] *https://datareportal.com/reports/digital-2024-malaysia and UN-ESCAP*

A tech-savvy population base used to "on-demand" services at cut-throat prices, and familiar with using mobile phones for most of its financial needs, will be more demanding of its service providers. Thus, the need for technology to keep pace with customer demand is crucial. However, there is always a need for the "human touch" when something goes wrong (not everything can be answered by a Chatbot!). So, in effect, in addition to the provision of financial products or services engendered from new technological advances, a stringent monitoring of operating cost remains important to ensure healthy margins.

Issues related to employability and shifts in labour participation are also elements to grapple with. As the world gets more digitalised there is always a danger that schisms will form. Governments will be considering the ramifications on how these technologies will potentially create social disparity in wealth and employment opportunities. Among the myriad of challenges, chief amongst them will be training and re-skilling domestic labor supply to be fit for purpose in a digital-driven economy. It is also about how the private sector plays a role in developing the work force for tomorrow by determining the type of investments needed now to meet a borderless financial world.

Lastly, though the "toothpaste is out of the tube," it doesn't mean that the technology in and of itself doesn't face roadblocks. There are limitations inherent in these technologies that hopefully, over time, can be overcome.

One of the main issues is scalability in integrating blockchain technology with AI in financial processes. Large volumes of data are required to be processed and this imposes a strain on computing power and network capability, not to mention the heat being generated during such processes, which will mean an impact on climate scores. There are also privacy and security considerations especially when using public blockchains. Inter-operability between various blockchain platforms, and also with an institution's legacy system, is always going to be a perennial complication, when system resiliency and stability are critical requirements for the financial sector.

Policy and Regulation

The lack of clear regulatory guidance over how the output of some of these technologies will be deemed acceptable by the supervisors, is an important consideration. Policies and regulatory requirements that form the lattice of sound supervision created over years of tackling financial crises are being challenged by some of these new technologies.

The abilities of these technologies to achieve the end objective using novel methods have yet to meet the regulators' standard of confidence. Furthermore, new products engendered by such technology, e.g. digital assets/tokenisation, are also in a grey zone as long as regulators remain on the sidelines.

As the digital world is borderless, and these technologies can reside in different legal jurisdictions, it further complicates matters for the regulators. Regulators not only have to contend with their own local operators, but must now keep an eye on how foreign players without a local presence can affect the domestic financial eco-system.

Such issues are not new to the regulators; neither is global coordination amongst regulatory agencies foreign to them. There exist various forums and international bodies that tackle common regulatory challenges, e.g. IOSCO, BCBS, etc. but as new technology comes to the fore, the need for regulators to be agile while ensuring a certain level of regulatory harmonisation, and that standards are maintained, is not easy. Regulators are assailed by the need to be constantly educated and kept abreast of how new technologies are developing and becoming entrenched in the financial eco-system.

Regulators have the unenviable task of making sure the regulatory framework is fit-for-purpose when embracing new technology, while ensuring the financial system is not being harmed by such technology.

As can be seen, the active engagement among the different central banks these past few years on creating an interoperable Central Bank Digital Currency ('CBDC'), where pilots on wholesale CBDCs are being launched e.g. Project mBridge, Project Agora, Project Rialto, etc., is in response to private companies using blockchain technology platforms to create digital representations of a nation's currency and establishing alternative payment gateways. Some are of the opinion that if left unchecked, these private companies may not always have the best interests of the public at heart. Hence, it becomes incumbent on various central banks to step up and harness the technology's capability in a manner that benefits both society and financial markets.

Nevertheless, these technologies are here to stay and as technologies converge there will be regulatory dilemmas around algorithmic transparency, accountability and good governance. Regulators will face a delicate balance between fostering innovation and keeping pace with the industry, while ensuring consumer protection and systemic stability of the entire financial system is kept on an even keel.

What Does the Future Look Like?

The government is spurring Malaysia towards becoming a data centre hub and is actively looking for partners to propel Malaysia to the next level of technological prowess in AI. So it is worth asking how Malaysian financial players can better tap into these players' strengths to create new avenues of growth and efficiency for the Malaysian financial system.

Are Malaysian financial institutions able to form partnerships with data centres and AI companies operating in Malaysia to create better synergies by working on specific projects or running pilots on new product offerings?

Can the government put in place policies and incentives beneficial for these stakeholders to partner with Malaysian financial sector players, if this is not already occurring?

After all, foreign investors who are establishing data centres in Malaysia are already running projects and partnering with financial players in their own countries to create new efficiencies and products for their own financial sectors.

Malaysia's regional competitors are already running pilots and adapting some of their operations to new technologies. Recently, Standard Chartered Bank partnered with Crypto.com to give accessibility for their customers to deposit and withdraw fiat currency via the Crypto.com app. Crypto.com also partnered with PayPal to enable clients to access digital assets. Such tie-ups enable traditional financial institutions to tap into new payment rails enabled by blockchain technology.

If we are to size Malaysia up within the ASEAN context in terms of adopting new technology for our financial sector, how will we stack up and what are the gaps that require both private and public sector attention to ensure Malaysia's financial sector remains agile yet stable and secure to meet the challenges of the future? If blockchain technology, AI tools and data centres play an important role in helping secure the future of Malaysia's financial sector, what can be done now to keep pace and where are the gaps that need to be addressed? We must not forget our ASEAN neighbours' financial institutions are rapidly adopting new technology in their own backyards while they have a business presence in ours.

Conclusion

The financial sector can strongly support the government's intention to pave the way for Malaysia to become a vibrant digital economy.

By coordinating and aligning some of the work already being done, or looked at, the financial sector can look towards potentially finding new synergies with foreign investors establishing their presence in the tech space. Alternatively, given the increasing interest of large technology firms looking to relocate to Malaysian shores, there can be a myriad of opportunities created for local financial players in terms of new product launches or new methods to improve business processes. If it is not already occurring, the time is also ripe for our financial sector regulators and policymakers to craft regulatory frameworks that encourage financial players to harness the capabilities of new technologies, take the required risks, and partner with a different set of economic actors for the future of Malaysia's financial sector.

Leveraging AI in the Fight Against Financial Crime

A Strategic Approach

AUTHOR

Robin Lee

General Manager, Hawk AI

Introduction

The rapid evolution of financial services, coupled with the increasing sophistication of financial crime, has necessitated a robust, dynamic response from financial institutions worldwide. The fight against financial crime – encompassing fraud, money laundering, terrorist financing, insider trading, bribery, corruption, and cybercrime – has become a paramount concern for banks, fintech companies, and regulators. This essay explores the current landscape of financial crime, the challenges institutions face, and how artificial intelligence (AI) is being deployed as a powerful tool to combat these threats.

Understanding Financial Crime

Financial crime is any illegal act committed by an individual or group that involves taking money or property from someone else for financial or professional gain. The financial crime spectrum is broad, covering activities such as fraud, money laundering, terrorist financing, insider trading, and cybercrime. Each of these activities poses significant risks to financial institutions in terms of financial losses, reputational damage, and regulatory penalties.

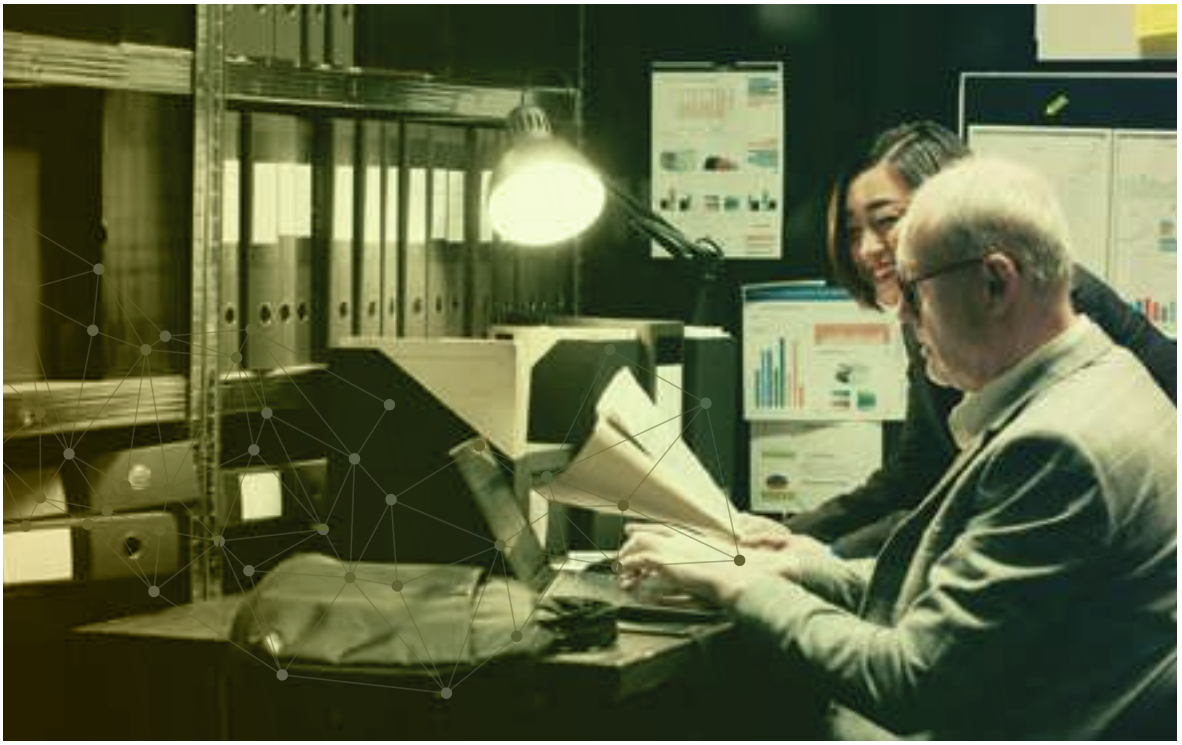
In recent years, financial crime has grown in complexity and globality. Criminals have increasingly turned to sophisticated methods, often leveraging technology to bypass traditional detection systems. The rise of digital banking, cryptocurrencies, and online transactions has expanded the avenues through which financial crimes can occur. As a result, financial institutions are under immense pressure to enhance their defenses and ensure compliance with stringent regulatory requirements.

Challenges in Fighting Financial Crime

One key challenge in combating financial crime is the reliance on outdated technologies and fragmented systems that cannot scale effectively. These legacy systems often suffer from poor data quality, limited accessibility, and high false positive rates. Additionally, real-time monitoring and rapid response are becoming more critical as financial transactions become increasingly instantaneous and complex.

Disparate systems also pose a significant hurdle. Financial institutions often rely on a patchwork of technologies, each handling different aspects of financial crime prevention, such as Know Your Customer (KYC), transaction monitoring, and fraud detection. This fragmented approach creates inefficiencies and results in gaps in risk coverage, making it difficult to gain a comprehensive view of potential threats. Moreover, as the volume of transactions and the complexity of financial services increase, the scalability of these systems becomes a pressing issue. The inability to scale effectively can lead to delayed responses, missed threats, and increased exposure to financial crime risks.

Another challenge is the manual, labour-intensive nature of traditional financial crime detection methods. Compliance teams are often overwhelmed by the sheer volume of alerts generated by these systems, many of which are false positives. This drains resources and diverts attention from genuine threats, making the entire process less effective. Furthermore, the political landscape, with varying regulations across jurisdictions, adds another layer of complexity, requiring institutions to adapt to comply with different regulatory frameworks continuously.



The Role of AI in Financial Crime Prevention

Artificial Intelligence (AI) has emerged as a game-changer in the fight against financial crime. AI technologies, such as machine learning (ML), natural language processing (NLP), and deep learning (DL), enable financial institutions to analyse vast amounts of data in real-time, identify patterns and anomalies, and make more accurate and timely decisions.

AI-powered solutions offer several advantages over traditional methods:

1. Enhanced Detection Capabilities:

AI can quickly process and analyse large datasets, identifying suspicious patterns that human analysts or rule-based systems might miss. For example, AI can detect unusual transaction patterns that could indicate money laundering or fraud.

2. Reduction in False Positives:

One of the biggest challenges with traditional financial crime detection systems is the high number of false positives, which can overwhelm compliance teams and lead to inefficiencies. AI, particularly machine learning models, can learn from past data to improve accuracy, reducing false positives and allowing compliance teams to focus on genuine threats.

3. Real-time Monitoring and Response:

AI systems can monitor transactions in real-time and provide instant alerts for suspicious activities. This real-time capability is crucial in today's fast-paced financial environment, where delays in detection can result in significant economic losses.

4. Behavioural Analytics:

AI can analyse customer behaviour over time, creating profiles that help predict and detect deviations from normal behaviour. This is particularly useful for identifying insider trading, fraud, and other types of financial crime that involve subtle changes in behaviour.

5. Scalability and Flexibility:

AI systems are designed to scale with the institution's needs. Whether the volume of transactions increases or new regulations are introduced, AI systems can adapt quickly, ensuring financial institutions remain compliant and protected against evolving threats.

AI Applications in Financial Crime

KYC and KYB

AI enhances Know Your Customer (KYC) and Know Your Business (KYB) processes by automating the verification of customer identities and business entities. AI-driven KYC systems can scan documents, cross-reference data against various databases, and flag inconsistencies, thereby speeding up onboarding processes and ensuring compliance with regulatory standards.

Transaction Monitoring

AI-driven transaction monitoring systems can analyse thousands of transactions per second, flagging any that deviate from established norms. This includes identifying unusual transaction patterns that could indicate money laundering, fraud, or other illicit activities.

Client and Payment Screening

AI is used to screen clients and payments against global sanctions lists, watchlists, and politically exposed persons (PEP) lists. AI enhances the accuracy of these screenings, reducing false positives and ensuring that financial institutions comply with international regulations.

Adverse Media Monitoring

AI-driven NLP tools can scan and analyse vast amounts of media content in real-time to identify adverse information related to clients or transactions. This is crucial for identifying reputational risks and ensuring financial institutions are not inadvertently facilitating financial crime.

Behavioural Analytics for Insider Threats

AI can monitor employee behaviours to detect potential insider threats. AI can flag activities that deviate from the norm by analysing patterns such as unusual access to sensitive information or irregular working hours, allowing for early intervention.

The Future of AI in Financial Services

The integration of AI into financial crime prevention is still in its early stages, but the growth potential is enormous. As AI technologies evolve, we can expect even more significant advancements in the speed, accuracy, and effectiveness of financial crime detection and prevention.

However, the adoption of AI also comes with challenges. Financial institutions must ensure that AI systems are transparent, explainable, and free from bias. This is particularly important in ensuring that regulators and customers can understand and trust AI decisions. Regulatory compliance is another concern, as AI systems must adhere to current and emerging regulations. Institutions must also consider the ethical implications of using AI, particularly in areas like data privacy and fairness.

In addition to these challenges, the operational impact of AI adoption must be considered. Implementing AI systems requires significant investment in infrastructure, training, and change management. Institutions must ensure that their teams have the necessary skills to work alongside AI systems and that the transition does not disrupt ongoing operations.

Another aspect to consider is the dependency on technology. As financial institutions rely more on AI for critical functions, the risk associated with technological failures increases. Institutions must have robust disaster recovery and business continuity plans in place to mitigate these risks.

Ethical Considerations and the Role of Governance

Ethical considerations become increasingly important as AI becomes more integrated into financial crime prevention. Financial institutions must ensure that their AI systems are not only effective but also operate in a manner that is fair, transparent, and accountable. This includes addressing issues such as data bias, where AI systems might inadvertently favour or disadvantage certain groups based on the data they are trained on.

Governance is crucial in ensuring that AI systems adhere to ethical standards. This involves implementing robust oversight mechanisms, such as regular audits and transparency reports, to ensure that AI systems perform as intended and that their decisions can be explained and justified. Financial institutions must also engage with regulators to ensure that their AI systems comply with existing laws and regulations and adapt to new regulatory requirements as they emerge.

Conclusion

The fight against financial crime is a complex and ongoing battle that requires a multifaceted approach. AI has proven to be a powerful tool in this fight, offering enhanced detection capabilities, real-time monitoring, and the ability to reduce false positives. However, to fully realise AI's potential, financial institutions must address the challenges associated with its adoption, including regulatory compliance, transparency, and ethical considerations.

As financial crime continues to evolve, so must the strategies and technologies used to combat it. By leveraging AI, financial institutions can stay one step ahead of criminals, protecting their assets, reputations, and customers in an increasingly digital world. The future of financial crime prevention lies in the successful integration of AI technologies, coupled with a strong commitment to ethical practices and regulatory compliance. As institutions navigate this new landscape, those that effectively harness the power of AI will be best positioned to safeguard their operations and maintain the trust of their stakeholders.

AI is Magnifying Risks for Southeast Asia's New Digital Citizens

Improving Technology Also Helping to Root Out Fraud at Earlier Stage

AUTHOR

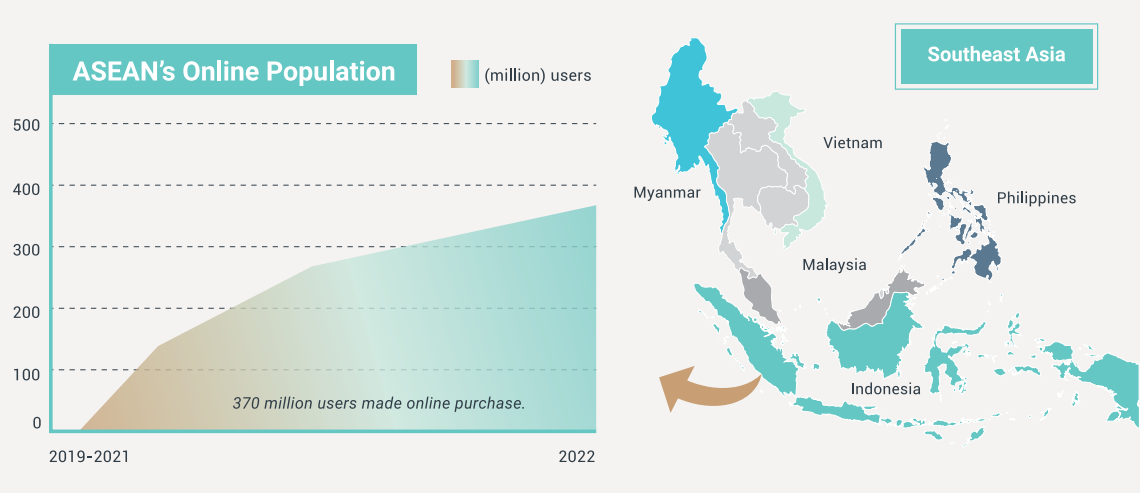
Safdar Khan

Division President, Southeast Asia, Mastercard

Motorcycle taxi drivers getting customers from ride-hailing apps. Night market stall keepers selling handicrafts online. Family-run noodle shops taking delivery orders for dispatch across the city.

The rise of the platform economy, along with the urgency triggered by the pandemic to digitalise, has helped Southeast Asian emerging markets to leapfrog into modernity.

ASEAN's online population reached 460 million in 2022 thanks to the addition of 100 million new users over the previous three years. Of this group, 370 million are already making purchases online.



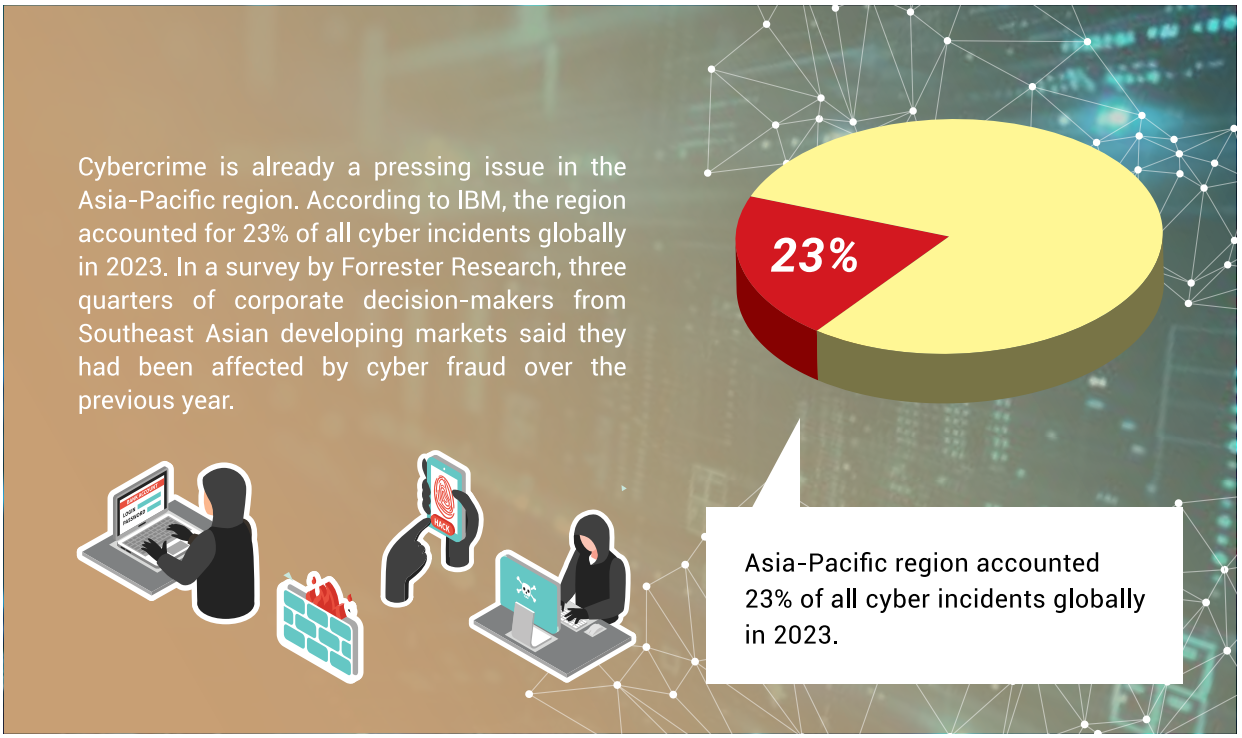
Historically underbanked populations are now embracing financial technology to access financial services and a suite of app- and platform-based offerings. By 2025, up to US$138 billion could be flowing through the region's digital wallets, according to data from Euromonitor.

This is great news for financial inclusion, especially in Southeast Asia where nearly half of all adults do not have a bank account or lack sufficient access to financial services.

This leapfrogging is exciting but comes at a complex time in technology evolution. The rise of artificial intelligence, in particular generative AI, has made broadly available a powerful tool that can exacerbate the threat of fraud against a newly online population. As criminals begin to use AI, organisations within the financial system must also deploy this technology to thwart them.

Often, but not always, the kinds of attacks being scaled up using AI are those that may have previously required human input. One common tactic is "spear phishing," in which victims are sent seemingly authentic e-mails containing links that can trigger malware if clicked. Another tactic is payment fraud in which a scammer impersonates someone trustworthy to persuade a target to make a money transfer.

Generative AI helps fraudsters smooth out telltale imperfections that can belie their tactics while also magnifying the volume of their attacks. Such scams can disproportionately affect vulnerable segments of society. With the benefit of generative AI, the volume of sophisticated e-mail attacks rose 135% in the first two months of 2023 compared with the same period a year before, according to cybersecurity company Darktrace, who also saw this trend continue in 2023.



It is essential that everyone involved in the digital economy play their part in combatting fraud. For major entities, including large payments companies and financial institutions, this means developing and applying the most advanced tools, including AI-powered solutions, to meet fraudsters at the level on which they operate or higher.

This is because AI and machine learning have made it possible to catch criminals earlier, by analysing patterns and data points to identify fraudulent behaviour in real time.

In 2023 alone, AI models enabled Mastercard to safeguard more than 143 billion transactions on our global network by using billions of data points to analyse things like how users hold their phones and type on their keyboards and when and where a transaction is taking place to identify patterns of possible fraud and allow real human interactions to be distinguished from bot-based manipulations. This has prevented US$20 billion in potential fraud losses from attempted global fraud and cybercrime attacks between 2022 and 2023.

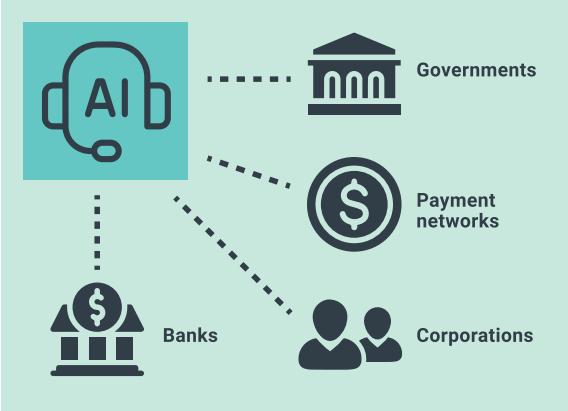
Across our industry, network intrusion-detection systems are now able to actively monitor and identify suspicious behaviour using machine learning. AI is being harnessed to detect deepfake videos with nearly 100% accuracy by analysing the movement of facial features and audio quality for telltale signs of manipulation.

These new approaches go beyond ensuring security and the validity of transactions. We are moving toward a future in which AI can ensure the trustworthiness of digital interactions.

As the number of participants in Southeast Asia's digital economy surges, there are many more entry points that can be exploited by criminals. This could be a single consumer or an intern at a small startup. It could be a point-of-sale system at a corner shop.

While an attack through one of these vulnerable entities is unlikely to immediately have far-reaching effects throughout the ecosystem, that is cold comfort for shoppers or small businesses whose livelihoods can be severely impacted, especially in a region in which many lack a financial safety net.

In the longer term, such attacks will discourage those affected and those around them from using digital services. This will not bode well for Southeast Asian digital economies looking to drive greater inclusion and digital trust.

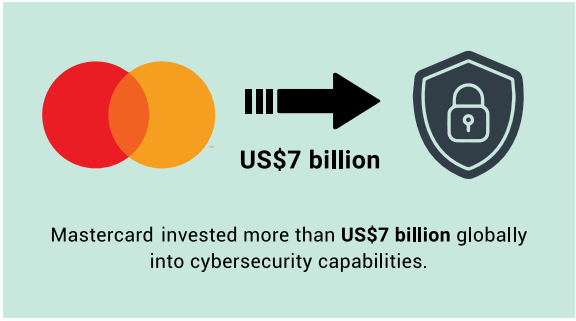


The vulnerabilities at all levels of the digital ecosystem require a united approach to defense. While educational outreach for individual consumers and workers will continue to be imperative, the responsibility for building and fortifying AI-enhanced cybersecurity will largely fall on entities at higher echelons within the system, such as banks, governments, corporations and payment networks.

We are already seeing governments partnering with the private sector on digital security. For example, at the ASEAN-Singapore Cybersecurity Centre of Excellence, the Cyber Security Agency of Singapore has joined with other bloc member states to engage experts on cyber issues.

But not all solutions will be top-down. New cybersecurity technologies deployed by high-level entities may end up coming from startups or fintechs that have been able to develop innovative ways of using AI to fight fraud.

Partnerships will bring together entities that have the ability to innovate quickly with those which can implement at scale. Since 2018, Mastercard has invested more than US$7 billion globally into cybersecurity capabilities and contributed to the launch of more than 20 cybersecurity-focused startups.



The possibility that the smallest entities could play a decisive role in securing the digital ecosystem inspires optimism about the future. Even as bad actors adopt AI, the democratising effect of technology is also empowering more entities to play an active role in strengthening cybersecurity.

Security systems are only as strong as their weakest points. Connected and collective action can help ensure the benefits of digitalisation are both sustainable and broadly felt.

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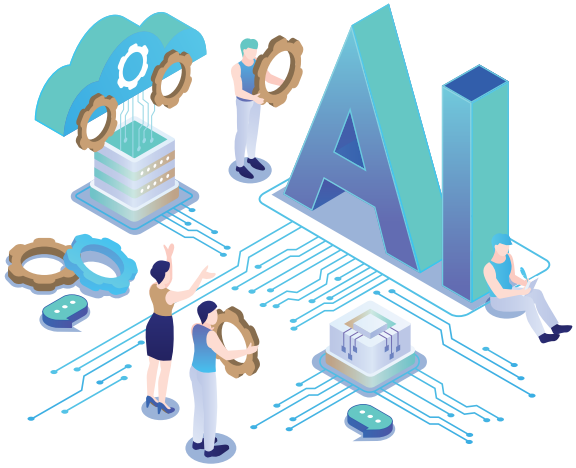


Future-Proofing Banks in an Era of Emerging Digital Technology

The Case for Adoption of Alternative Data

AUTHOR

Yushida Husin

Chief Executive Officer of CGC Digital

Driven by digitalisation and advancements in big data, alternative data is increasingly being recognised for its potential to enhance traditional credit risk assessments and decisioning among financial service providers. In keeping pace with developments, FI boards should strive to develop a greater understanding of alternative data and its potential benefits and challenges, and cultivate an open-minded, informed approach towards implementing alternative data initiatives in their institutions.

The Emergence of Alternative Data in Financial Services

In recent years, the world has witnessed an exponential rise of the digital economy and enhancements in technologies ignited by the COVID-19 pandemic.

The accelerating drivers of this global digitalisation were widespread capture and storage of information on digital platforms and applications, which generated volumes of large-scale data, alongside generative artificial intelligence (AI) and machine learning (ML), sophisticated algorithms specifically designed to synthesise data and extract valuable insights.

These trends have led to considerable transformations in the global financial services landscape. Significantly, within the banking sector, the proliferation of big data has prompted a turn to using non-traditional or alternative forms of data to drive customer-centric insights, conduct risk assessments, and improve decision-making.

The figures alone tell the story of alternative data's rise; in 2022, the global alternative data market size was valued at USD 4 billion[1]. On top of this, the global market for alternative data providers is poised to reach USD 156.23 billion by 2030, growing at a CAGR of 51.8% from 2022 to 2030, according to a 2023 report published by global research and consulting firm The Insight Partners[2].

[1] *Endnotes*
PricewaterhouseCoopers, "Beyond Traditional Data: Leveraging Alternative Data in Banking," Financial Services Data and Analytics, April 2024, https://www.pwc.in/consulting/technology/data-and-analytics/beyond-traditional-data-leveraging-alternative-data-banking.html.
[2] *The Insight Partners, "Alternative Data Market Size and Forecast (2020-2030), Global and Regional Share, Trend and Growth Opportunity Analysis Report," accessed September 16, 2024, https://www.theinsightpartners.comreports/alternative-data-market.*

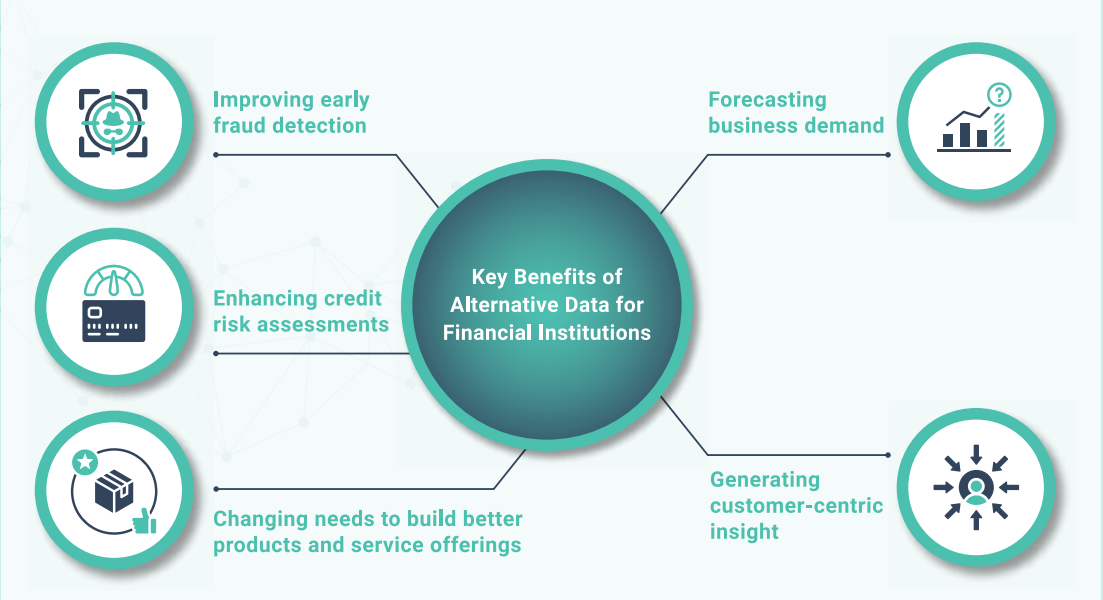
What Is Alternative Data, and How Is It Being Used by Financial Service Providers?

Across the board, data serves several important core functions for financial service providers, including traditional financial institutions (FIs). Not only is access to data key to performing market research, user experience improvement, and business development, but it is also the backbone of day-to-day operations, decision-making and the key to enabling growth and competitiveness.

While traditional data sources have been utilised to their fullest, alternative data is growing increasingly popular among financial services players, owing to its extensive scope and potential to mine deeper information and insights.

In simple terms, alternative data refers to data that falls outside of traditional financial sources, including data from e-commerce platforms, payment partners, digital wallets, accounting systems, geolocation apps, websites and social media[3]. However, this is not an exhaustive list.

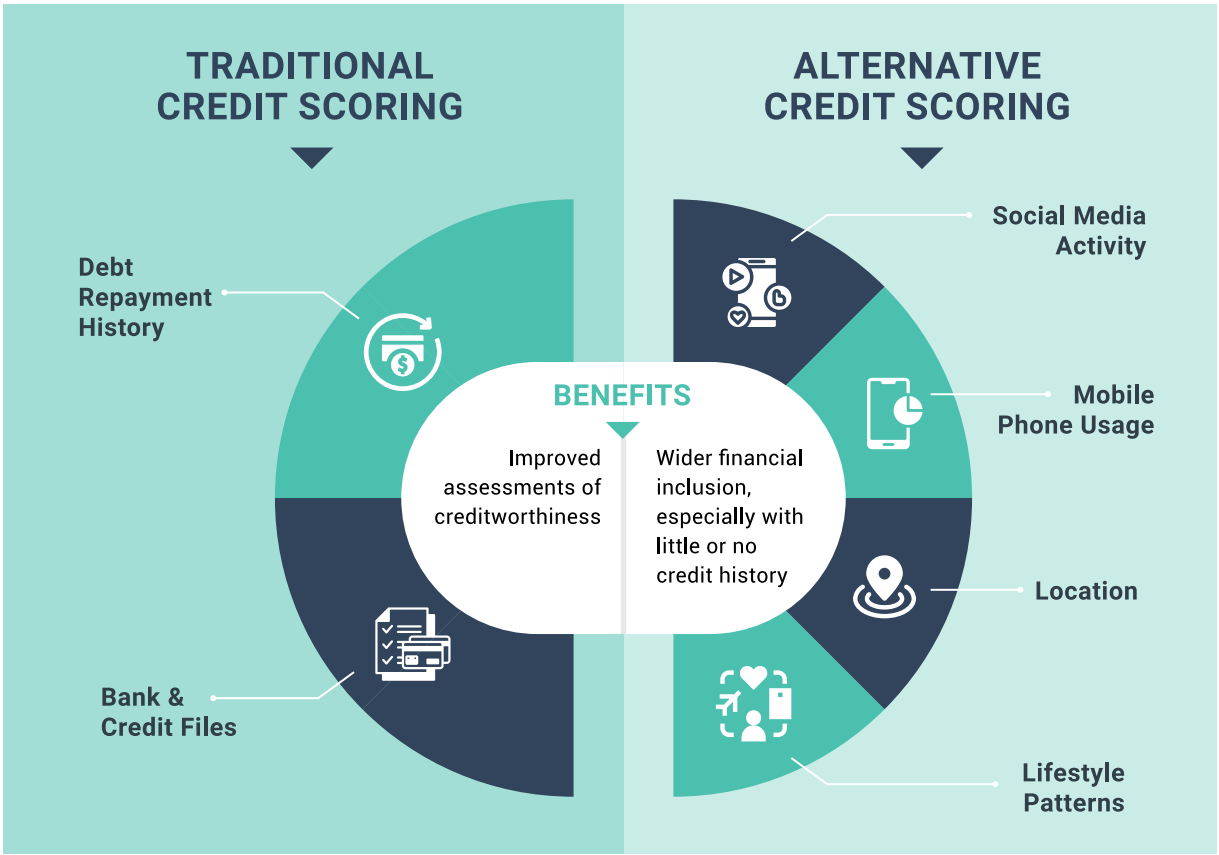
As an unstructured set of information, alternative data is continuously expanding in proportion to the volume of data produced in the digital world[4]. Its uses to financial service providers are wide-ranging: from improving early fraud detection and forecasting business demand, to enhancing credit risk assessments and generating customer-centric insights to identify gaps and changing needs to build better products and service offerings.



[3] *PricewaterhouseCoopers, "Risk and Regulatory Outlook 2021: Key Developments in Southeast Asia: Use of Artificial Intelligence, Machine Learning and Alternative Data in Credit Decisioning," Banking Outlook in Southeast Asia, Risk and Regulatory Outlook, 2021, 8.*

[4] *David Navetta, Michael Egan, and Nicolas H. R. Dumont, "Alternative Data – A COSO Perspective," The Harvard Law School Forum on Corporate Governance (blog), April 23, 2024, https://corpgov.law.harvard.edu/2024/04/23/alternative-data-a-coso-perspective/.*

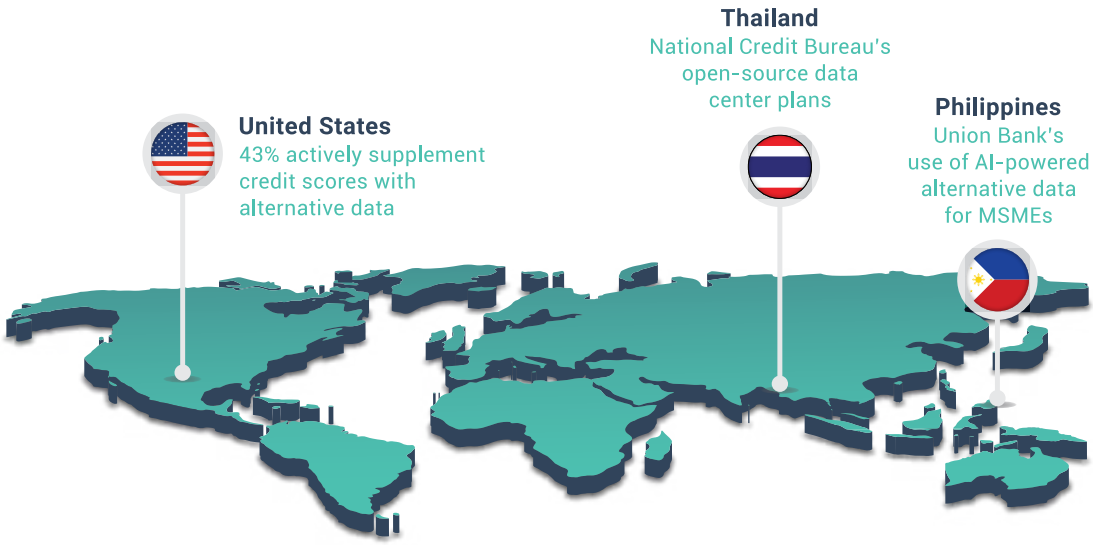
Alternative Credit Scoring in Banking: Global and Regional Use Cases



In the case of credit lending, alternative data can help with making more accurate assessments of a borrower's creditworthiness. In essence, information from alternative sources (such as social media activity, mobile phone usage, location etc.) is analysed using AI and machine learning tools to generate insights into spending habits and patterns, as well as more qualitative or behavioural indicators, such as social interactions and lifestyle patterns[5].

Alternative credit scoring can help banks to form a more complete picture of the borrower's risk profile when it comes to assessing the ability and propensity to repay their loans. In other words, alternative data augments traditional financial data (such as debt repayment history and bank and credit files) that most FIs already use to determine creditworthiness. This is especially useful when expanding access for 'thin file' applicants with little or no credit history[6].

[5] *Visa Consulting & Analytics, "Sourcing New Data for Richer Credit-Risk Decisions," n.d., https://corporate.visa.com/content/dam/VCOM/corporate/services/documents/vca-sourcing-new-data-for-c redit-risk-vf.pdf.*
[6] *PricewaterhouseCoopers, "Risk and Regulatory Outlook 2021: Key Developments in Southeast Asia: Use of Artificial Intelligence, Machine Learning and Alternative Data in Credit Decisioning."*



In the US, alternative data adoption is growing among financial service providers, with a majority using this data to enhance credit risk assessments. For example, in 2023, a nationwide survey of senior decision makers in US financial institutions revealed that at least two-thirds of respondents used alternative data in their credit risk assessments for underwriting and portfolio management, while 84% had used alternative credit data in prescreening and credit risk across the customer lifecycle[7]. Meanwhile, a 2024 survey conducted by Nova Credit revealed that 43% of lenders in the sample actively supplemented their credit scores with alternative data in their risk assessments, while 90% felt that access to alternative data would help improve their credit underscoring models[8].

Across Southeast Asia, several governments, banks and key stakeholders are also becoming increasingly interested in the potential of alternative data. In December 2022, the National Credit Bureau of Thailand announced a plan to launch an open-source data centre containing non-credit information such as consumers' utility payments data. This data centre was envisioned as a source of alternative data for banks looking for another avenue of analysis to determine loan approvals for applicants, especially those from underserved populations. At the time, the NCB had also considered consolidating this data into its existing credit database[9].

In 2021, the Credit Information Centre (CIC), a public credit registry in the Philippines, announced plans for an open policy to enable accessing entities to utilise its credit bureau data with alternative data to create a complete picture of a borrower's credit profile[10]. The country's leading digital bank, UnionBank, uses alternative data and an AI-powered risk scoring solution to facilitate more efficient loan provision for unbanked individuals and MSMEs. Powered by machine learning, the solution considers non-traditional data from publicly available sources, government data and partners to assess creditworthiness more inclusively and accurately[11].

[7] *LexisNexis Risk Solutions, "2023 Alternative Credit Data Impact Report," February 15, 2023.*
[8] *Nova Credit, "The State of Alternative Data in Lending 2024," Survey Report (Researchscape, April 10, 2024), https://marketing.novacredit.com/hubfs/2024%20Pardot%20Migration/Reports/2404_Nova_Credit_The_S tate_of_Alternative_Data_in_Lending_Report.pdf.*
[9] *Somruedi Banchongduang, "Alternative Data Centre for Lenders Planned for next Year," Bangkok Post, December 24, 2022, sec. Business, https://www.bangkokpost.com/business/general/2467915/alternative-data-centre-for-lenders-planned-for-n ext-year.*
[10] *Bianca Cuaresma, "CIC Eyes Alternative Data to Expand Credit Access | Bianca Cuaresma," BusinessMirror, November 2, 2021, sec. Banking & Finance, https://businessmirror.com.ph/2021/11/02/cic-eyes-alternative-data-to-expand-credit-access/.*
[11] *Nurdianah Md Nur, "Revolutionising Finance: Leveraging Alternative Data for Inclusion and Crime Prevention," The Edge Singapore, December 4, 2023, https://www.theedgesingapore.com/digitaledge/digital-economy/revolutionising-finance-leveraging-alternative-data-inclusion-and-crime.*

Why Should Malaysian Banks Care About Alternative Data?

Digital lending represented a significant driver of Southeast Asia's USD 30 billion revenue from digital financial services in 2023 due to high lending rates and consumer demand, according to recent research by Google, Temasek and Bain & Company[12].

In Malaysia, the widespread public adoption of digital payment and e-commerce transactions has catalysed the generation of data with potential to add value and help drive better decision making for financial services providers. On top of this, MSMEs and small businesses, the key driving forces in the region's economies, are increasingly participating in the digital economy.

With alternative data, banks can identify better creditworthy borrowers who may not meet traditional credit requirements and thus widen their customer base, while widening financial inclusion for the proportion of unbanked and underserved segments that may not meet traditional credit requirements.

Indeed, Malaysia's central bank and financial institutions regulator, Bank Negara Malaysia (BNM), in its Financial Sector Blueprint 2022-2026, has emphasised the higher usage of "forward-looking and alternative data" as a main pillar of sustaining a strong economic recovery[13].

[12]*Google, Temasek, and Bain, "E-COnomy SEA 2023," n.d., https://services.google.com/fh/files/misc/e_conomy_sea_2023_report.pdf.*
[13]*Bank Negara Malaysia, "Financial Sector Blueprint 2022-2026," January 2022, https://www.bnm.gov.my/publications/fsb3.*

The Blueprint moots the "greater use of alternative data alongside traditional metrics for more differentiated pricing and inclusion" and has committed to the following measures to drive greater usage:

Facilitate banks' access to a wider range of data sources on borrowers, such as real-time payment information and analytical tools, to allow for richer and more predictive insights on borrowers' credit capacity and quality.

Work with the industry to explore broader application of behavioural models and tools, such as psychometric assessments, to complement credit underwriting.

Facilitate the implementation of common standards to enable data exchange within and beyond the financial sector.

Strengthen the digital data governance framework to ensure responsible and ethical use of data, including through appropriate safeguards such as consent frameworks[14].

Given this scenario, it will surely not be long before the trend of using alternative data and emerging technologies spreads across the local financial sector.

Instilling a Culture of Change From The Top

Adoption will not be a straightforward process, and FIs on the cusp of embarking on their alternative data journey may find it rather challenging to balance growth with managing risk prudently, especially since the environment is still evolving and in the early stages of maturity.

Nevertheless, organisations willing to embrace an open-minded perspective will be more likely to uncover and create opportunities to utilise alternative data in their value chain. Critically, a clear technology strategy and roadmap for integrating alternative data, which includes investing intelligently in digitalisation and tools to drive business growth, will be needed.

This trend underscores the fact that leveraging alternative data is as much about shaping the organisation's collective mindset as it is a technological issue. In this regard, FI boards have a critical role in charting the course and setting forth clear and purposeful thought leadership for the organisation while providing guidance and oversight on which risks to embrace or avoid. Board risk committee members primarily represent the

[14]*Bank Negara Malaysia.*

vanguard of boards for overseeing risk and providing a lens on whether a risk is more of a threat or an opportunity.

As a starting point, boards should collectively increase their literacy and understanding of alternative data and relevant cutting-edge technology tools to be better able to join up and understand risk and opportunity across functions and business lines. Such knowledge could be acquired, for example, through training and engagement with experts and data science specialists, collaboration with third party providers, and recruiting directors with a background in data science to be part of the board.

Once this knowledge base has been consolidated, boards will be better equipped to elevate their assessment of alternative data to a strategic level. In turn, this will allow them to engage management in discussions on how to integrate data to enhance the business value chain in an informed manner while also establishing procedures for risk management ahead of implementation.

Instilling a Culture of Change for Financial Institutions (FIs) through Alternative Data

Instilling a Culture of Change from the Top

Improve board literacy on alternative data and relevant technology via training and engagement with data specialists, recruiting directors with data science background etc.

Invest in strategic collaborations with third party providers that can assist in integrating alternative data into the business value chain.

Engage management in strategy discussions to balance technology-driven business growth with risk management.

Keep abreast of developments pertaining to regulatory standards concerning alternative data.

Balancing Growth & Risk with Alternative Data

Challenges

To balance growth with managing risk in evolving data environment.

Opportunities

Open-minded perspective creates opportunities to utilise alternative data in value chain.

Roadmap

Clear technology strategy and roadmap for integrating alternative data.

On top of this, boards should also strive to keep abreast of developments pertaining to regulatory standards surrounding alternative data, even as the regulatory environment continues to evolve (see below).

Regional Trends in Alternative Data Regulations

Within ASEAN, the regulatory environment on data analytics is still evolving, though in recent years there have been signs of acknowledging the use of alternative data within certain jurisdictions:

- In 2018, Singapore's Monetary Authority (MAS) published an information paper on the responsible use of AI and data analytics. Two years later, the government's Smart National and Digital Government Office developed a National Artificial Intelligence (AI) Strategy detailing plans to increase the nation's adoption of AI, alongside a model AI Governance Framework[15]. In 2023, as part of this National Strategy, MAS launched its Veritas Toolkit initiative, a multi-phased collaborative project with the financial industry, which put in place a framework for financial institutions to promote the responsible adoption of AI and data analytics, with the aim of driving fairness metrics in credit scoring and customer marketing[16].

- Another key movement is APIX, an initiative of the Asean Financial Innovation Network, a not-for-profit entity that was jointly formed by the MAS, the World Bank Group's International Finance Corporation and the Asean Bankers Association in 2018. It is a global, open-architecture platform that supports FIs and Fintech firms to connect to one another in Asean markets and around the world[17].

- However, in other countries like Thailand and Indonesia, data analytics and governance regulations still focus largely on the areas of data protection and privacy. For example, while the Thai government has developed a Digital Government Plan to digitalise government agencies with the use of AI, and Indonesia has similarly put in place a national strategy for developing AI spanning the next two decades up to 2045[18], these regulations still focus mainly on the area of data protection and privacy, while the use of alternative data as a specific subset is arguably less emphasised.

[15] *PricewaterhouseCoopers, "Risk and Regulatory Outlook 2021: Key Developments in Southeast Asia: Use of Artificial Intelligence, Machine Learning and Alternative Data in Credit Decisioning."*
[16] *FinTech Global, "Singapore's MAS Launches Veritas Toolkit 2.0 for Responsible AI in FinTech," FinTech Global (blog), July 3, 2023, https://fintech.global/2023/07/03/singapores-mas-launches-veritas-toolkit-2-0-for-responsible-ai-in-fintech/.*
[17] *"World's First Cross-Border, Open-Architecture Platform to Improve Financial Inclusion," Government, September 17, 2018, https://www.mas.gov.sg/news/media-releases/2018/worlds-first-cross-border-open-architecture-platform-to-improve-financial-inclusion.*
[18] *PricewaterhouseCoopers, "Risk and Regulatory Outlook 2021: Key Developments in Southeast Asia: Use of Artificial Intelligence, Machine Learning and Alternative Data in Credit Decisioning."*

Partnerships to Drive Alternative Financing: A Potential Game Changer

Besides providing strong leadership, FI boards that are looking to adopt alternative data for their institutions would do well to consider partnering with digital-first industry players already driving data and technology-driven innovations in the financial ecosystem. Such collaborations can help gain valuable support and assistance to stream alternative data into the business process effectively.

CGC Digital, the digital startup arm of Credit Guarantee Corporation focused on assisting MSMEs in accessing financing and scaling up their businesses through data-driven innovation, is one example of a fintech that has collaborated with other financial sector stakeholders to bridge the MSME funding gap by relooking how credit assessment is performed and using alternative data points to complement traditional assessments of creditworthiness.

To conclude, as FI boards look to the future of alternative data, the opportunity for first-mover advantage is wide open to those willing to embrace an open-minded perspective to acquire knowledge and forge strategic partnerships with like-minded industry players to harness the potential of alternative data. Adopting this mindset would be a game changer for FIs in creating a more resilient footprint and charting a course towards adopting alternative data in 2024 and beyond.

Navigating the Future of Finance:

An Educator's Perspective of Future-Proofing Financial Education to Evolve Alongside Workforce Needs

AUTHOR

Prof Dr.Vinitha Guptan
Vice Chancellor,
Saito University College

SAITO UNIVERSITY COLLEGE

Introduction

As the financial sector continues to undergo a profound transformation driven by digitalisation, the need for a workforce proficient in both traditional financial skills and advanced technologies such as fintech, blockchain, artificial intelligence (AI), and cybersecurity has never been more urgent (Gomber et al., 2018; Marr, 2020). This rapid technological evolution has introduced new paradigms and complexities into the financial landscape, demanding a shift in how educational institutions prepare future financial professionals (Philippon, 2016). Universities and other educational bodies are now tasked with equipping students not just with knowledge of financial principles but with the ability to apply advanced technologies in a real-world context. This article explores how universities can adapt to these changes, emphasising inclusivity, accessibility, and diversity in financial education to build a resilient and adaptable workforce. The focus will be on Malaysia's efforts to integrate these new demands into its educational framework, providing current examples to illustrate the progress and challenges.

The Impact of Digitalisation on the Financial Sector

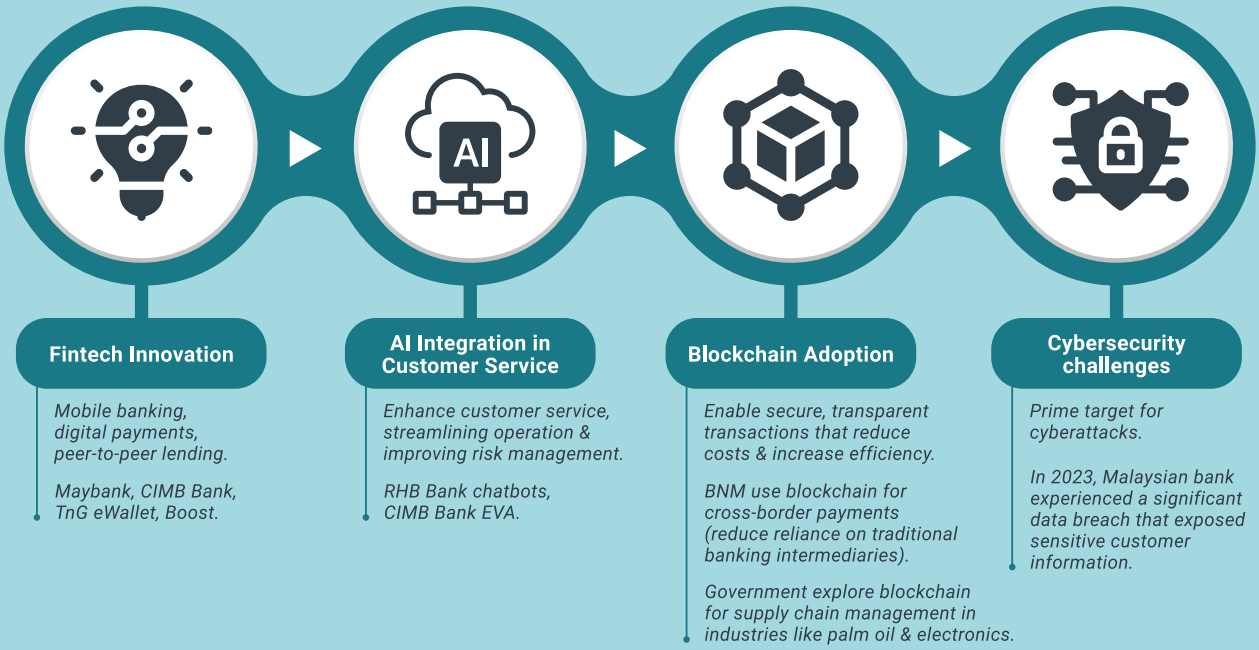
Digitalisation has fundamentally transformed the financial sector, reshaping everything from customer interaction to back-end processing, creating new conveniences and seamless efficiencies. The rise of fintech companies has disrupted traditional banking by setting new standards in mobile banking, digital payments, and peer-to-peer lending, driven by consumer demands for convenience and personalised services (Arner et al., 2017; Marr, 2020). In Malaysia, digital banking has gained significant traction, with banks such as Maybank and CIMB leading the way in mobile banking innovations (Bank Negara Malaysia, 2023). The introduction of digital wallets like Touch 'n Go eWallet and Boost has further accelerated the shift towards cashless transactions, reflecting a broader global trend (Zhang et al., 2023).

Digital banks, which operate without physical branches, have emerged as a significant force within our landscape, offering seamless banking experiences entirely online. These banks cater to a mostly tech-savvy, urban population that values speed and efficiency, often providing higher interest rates on savings and lower fees compared to traditional banks. However, while digital banks promote financial inclusion by offering access to banking services via mobile apps, they also risk deepening the societal divide. Communities without reliable internet access or digital literacy may find themselves excluded from these new financial services, exacerbating the existing disparities in access to banking (Pazarbasioglu et al., 2020).

Moreover, the integration of AI into financial services is enhancing customer service, streamlining operations, and improving risk assessment (Bredt, 2019). For instance, in Malaysia, RHB Bank has leveraged AI to enhance its customer service operations through chatbots, which provide 24/7 customer support (RHB Bank, 2024). Similarly, CIMB Bank's "EVA" chatbot assists customers with a range of services, from account inquiries to fund transfers, showcasing the potential of AI in transforming customer service in the financial sector (CIMB Bank, 2023). However, the shift towards AI-driven customer interactions can also alienate segments of the population who are less comfortable with digital technology, further contributing to the digital divide.

Blockchain technology is another significant driver of change, enabling secure, transparent transactions that have the potential to reduce costs and increase efficiency (Papathomas & Konteos, 2024; Iansiti & Lakhani, 2017). In Malaysia, the application of blockchain is still in its early stages, but there are promising developments. For example, Bank Negara Malaysia (BNM) has explored the use of blockchain for cross-border payments, which could revolutionise how transactions are conducted by reducing the reliance on traditional banking intermediaries (Bank Negara Malaysia, 2023). The Malaysian government is also exploring blockchain for supply chain management, particularly in industries like palm oil and electronics, which are critical to the country's economy (Malaysian Palm Oil Council, 2023).

However, these advancements also bring new challenges, particularly in cybersecurity. As financial institutions become more digitised, they become prime targets for cyberattacks (He et al., 2024). Malaysia has not been immune to these threats, with increasing incidents of cyberattacks targeting financial institutions (The Edge Malaysia, 2023). For example, in 2023, a major Malaysian bank experienced a significant data breach that exposed sensitive customer information, highlighting the growing cybersecurity risks in the financial sector (Star Media Group, 2023). Regulatory bodies like the Securities Commission Malaysia (SC) and Bank Negara Malaysia (BNM) are now under pressure to keep pace with innovation while ensuring system stability and security (Zetzsche et al., 2018).



Beyond cybersecurity, the rapid digitalisation of the financial sector introduces other significant challenges. One pressing issue is the potential for increased financial exclusion. As banks and financial services become more dependent on digital platforms, individuals without access to reliable internet or digital literacy may find it difficult to participate fully in the financial system. This digital divide can exacerbate existing social inequalities, creating a two tiered society where the tech-savvy enjoy greater financial benefits and those without digital access are left behind (Pazarbasioglu et al., 2020).

Moreover, the reliance on complex algorithms and AI in decision-making processes could lead to unintended biases. Automated systems used in credit scoring, loan approvals, and fraud detection may inadvertently discriminate against certain demographic groups, reinforcing systemic inequalities. These biases might be difficult to detect and rectify, leading to long-term societal impacts that are currently being overlooked (O'Neil, 2016).

Another challenge lies in the erosion of privacy. As financial institutions collect and analyse vast amounts of personal data, there is a growing risk of misuse or unauthorised access. Even with strong data protection regulations, the sheer volume of data being processed increases the chances of breaches or unethical exploitation. This can lead to a loss of trust in financial institutions and a reluctance to engage with digital services, particularly among more vulnerable populations (Zuboff, 2019).

The pace of technological change also poses a challenge for regulatory frameworks, which often struggle to keep up with innovations. This regulatory lag can result in gaps in oversight, where new financial products and services operate in a grey area, potentially leading to market instability or consumer harm. The effects of these gaps may not be immediately apparent but could have profound societal consequences, such as financial crises or increased economic inequality (Arner et al., 2017).

The societal effects of these challenges may not be fully visible now but could have long-term implications. If not addressed, the digitalisation of finance could contribute to deeper societal divides, undermining efforts towards inclusive economic growth and social cohesion. It is crucial for policymakers, industry leaders, and communities to remain vigilant, ensuring that the benefits of digital finance are shared broadly and equitably, while mitigating the risks that could blindside society in the future.

The Demand for a Digitally-Savvy Workforce

The digital revolution in the financial sector has significantly reshaped consumer expectations, compelling financial institutions to innovate rapidly and adopt technologies that enhance both customer experience and operational efficiency (Deloitte, 2020). This shift has fuelled an unprecedented demand for professionals skilled in managing digital solutions, analysing large datasets, and ensuring cybersecurity (Marr, 2020). In this evolving landscape, data scientists, cybersecurity experts, and tech-savvy financial professionals have become essential, not only influencing organisational strategies but also playing a critical role in safeguarding financial systems from cyber threats (Brynjolfsson & McAfee, 2017; He et al., 2024).

The future of work in the financial sector, both in Malaysia and globally, hinges on having a workforce that is proficient in digital technologies. As industries increasingly prioritise digital transformation, the demand for digitally-savvy employees is expected to grow. A report by the World Economic Forum (2020) highlighted that by 2025, around 85 million jobs globally could be displaced by automation, while 97 million new roles may emerge, heavily centred on digital and technological skills. In Malaysia, this demand is mirrored by the country's strategic initiatives. The Malaysia Digital Economy Blueprint (MyDIGITAL), launched in 2021, outlines the government's vision to transform Malaysia into a regional leader in the digital economy by 2030 (Malaysia Digital Economy Corporation, 2021). A key component of this blueprint is the development of a digitally-skilled workforce, with a focus on upskilling the population to meet the demands of the digital economy. This includes initiatives to integrate digital skills into educational curricula and promote lifelong learning (Ministry of Communications and Multimedia Malaysia, 2021).

Malaysian universities are responding to this demand by evolving their programmes to incorporate technological competencies alongside traditional finance education. For instance, Universiti Malaya has introduced a Master of Financial Technology programme that teaches students the application of blockchain, AI, and cybersecurity in finance (Universiti Malaya, 2023). The programme is designed to equip graduates with the skills necessary to thrive in the digital economy, ensuring they are well-prepared for the demands of the modern financial sector (Bredt, 2019). However, the challenge remains in ensuring that academic institutions have the appropriately equipped and qualified faculty to deliver such courses effectively and ahead of the curve.

World Economic Forum (2020)
highlighted that by 2025, automation could displace **85 million** jobs globally, but **97 million** new roles will emerge, focusing on digital and technological skills.

The Malaysia Digital Economy Blueprint (MyDIGITAL)
was launched in 2021.

It is intented to transform Malaysia into a regional leader in the digital economy by 2030.

Development of a digitally-skilled workforce by upskilling the population, integrating digital skills into education, and promoting lifelong learning.

Malaysian universities are updating finance programs to include tech skills. Universiti Malaya now offers a Master of Financial Technology focused on blockchain, AI, and cybersecurity.

As digitalisation continues to reshape the workforce, the concept of digital nomadism has gained traction. Digital nomads—professionals who leverage technology to work remotely from anywhere in the world—are becoming a significant trend, especially in the post-pandemic era. Countries like Malaysia have recognised this shift, with initiatives like the DE Rantau programme under Malaysia Digital Economy Corporation (MDEC), aimed at attracting digital nomads to the country by offering conducive environments and necessary infrastructure (MDEC, 2023). This trend could revolutionise the global workforce by allowing companies to tap into talent pools from different parts of the world. However, it also raises concerns about potential discrimination in global hiring practices.

As companies become more inclined to hire talent from digitally advanced countries, professionals from less advanced regions may face challenges in securing positions, perpetuating global inequalities. This could create a divide where those from more digitally developed nations or regions are preferred over equally talented individuals from countries with less access to advanced digital infrastructure. Additionally, the emphasis on digital skills could marginalise workers who lack these competencies, further widening the gap between different socioeconomic groups (OECD, 2021). The risk is that the global digital workforce could become polarised, with opportunities concentrated among the digitally literate while others are left behind.

We must never forget that, while a digitally savvy workforce is indeed the future of work, especially in sectors like finance, there are broader implications that need to be addressed. Both Malaysia and the global community must ensure that the benefits of digitalisation are inclusive, and promote equitable access to digital education and opportunities. Moreover, as digital nomadism rises, it is crucial to implement policies that prevent discrimination in global hiring practices, ensuring that talent, regardless of geographic location, has equal access to opportunities in the digital age.

Integrating Technological Competencies into Financial Education

As the financial sector becomes increasingly digitised, the importance of various technological competencies cannot be overstated. However, to ensure that Malaysian graduates stay ahead of the curve and can meaningfully contribute to the financial sector, education must go beyond the common buzz on cybersecurity, and encompass a broader range of technological and digital competencies. This holistic approach will better prepare students to navigate and lead in a rapidly evolving financial landscape.

Firstly, data analytics and machine learning are critical skills that should be integrated into finance curricula. The ability to analyse vast amounts of data, identify patterns, and derive actionable insights is increasingly valuable in the financial sector. Data-driven decision-making can enhance everything from customer segmentation to risk assessment. For instance, predictive analytics is now being used to forecast market trends and optimise investment strategies, making it essential for future professionals to be proficient in these technologies (Marr, 2020).

Another vital area is blockchain technology, which is revolutionising how transactions are conducted by offering transparency, security, and efficiency. Understanding blockchain application in areas such as digital currencies, smart contracts, and decentralised finance (DeFi) is crucial for graduates entering the financial sector. Universities should integrate courses that not only explain blockchain technology but also explore its potential to disrupt traditional banking and financial systems (Iansiti & Lakhani, 2017).

Artificial intelligence (AI) and robotic process automation (RPA) are also transforming the financial industry by automating routine tasks, enhancing customer service, and improving decision-making processes. Educating students on AI's role in automating everything from customer inquiries to complex financial modelling will be essential. Additionally, understanding RPA and its application in streamlining operations and reducing human error will give graduates a competitive edge in the job market (Brynjolfsson & McAfee, 2017).

The role of educators and the need for curricula changes are pivotal in this transformation. Educators must stay abreast of technological advancements to effectively prepare students for the challenges of the modern financial world. This includes not only updating course content but also adopting innovative teaching methods, such as experiential learning and partnerships with industry players, to provide students with practical, hands-on experience. Collaborative programmes that bring together academia and industry can ensure that students are not only learning theoretical concepts but are also able to apply them in real-world contexts. Education institutions need to refocus and evolve, allowing academics space to try new things and not be bogged down with administrative work and fixation on rankings.

Curricula must also evolve to include interdisciplinary learning, where finance students are exposed to courses in computer science, data science, and engineering. Such cross-disciplinary education fosters a more holistic understanding of how technology drives the financial sector, enabling graduates to innovate and adapt more effectively. This requires the Ministry of Higher Education and The Malaysian Qualifications Agency to innovate and update their systems and processes to support the dynamic changes that are made in a less cumbersome manner.

Moreover, Malaysia's regulatory bodies, such as Bank Negara Malaysia and the Securities Commission, have introduced guidelines that emphasise the need for robust digital competencies within financial institutions. These guidelines not only stress cybersecurity but also highlight the importance of continuous learning and adaptation to new technologies. Financial institutions in Malaysia are increasingly recognizing the need to invest in sophisticated infrastructure, technology, and expertise to stay competitive on a global scale (Bank Negara Malaysia, 2023).

With the rapid pace of digital changes, while cybersecurity remains a critical focus, ensuring that Malaysian graduates are well-versed in a broad range of technological skills – such as data analytics, blockchain, AI, and RPA – is essential for their success in the financial sector. Educators play a key role in this endeavour, and curricula must be continuously updated to reflect the dynamic nature of the industry. By doing so, Malaysia can build a workforce that is not only prepared for the future but capable of leading the way in the global digital economy.

However, as the digital landscape evolves, so too does the sophistication of cybercriminals. Malaysia has seen a significant rise in online scams, with cybercriminals exploiting digital platforms to deceive unsuspecting individuals and businesses. According to the Royal Malaysia Police, there were over 17,000 reported scam cases in 2022 alone, resulting in losses exceeding RM 610 million (Royal Malaysia Police, 2023). These scams range from phishing attacks and fraudulent investment schemes to impersonation scams, where scammers pose as legitimate financial institutions to steal personal information.

This alarming trend underscores the need for not only robust cybersecurity measures but also comprehensive education on scam prevention. Financial education in Malaysia must include modules that teach students how to identify and mitigate scam threats. By equipping graduates with the knowledge to recognise and counteract these scams, Malaysia can create a financial sector that is more resilient to the ever-evolving tactics of cybercriminals. This proactive approach will be crucial in safeguarding both individuals and the integrity of the financial system as a whole. Malaysians should continuously update and upskill themselves and this needs to be intentional and purposeful.

The Role of Continuous Learning and Professional Development

In a rapidly changing financial landscape, continuous learning is vital for professionals to stay ahead of technological advancements. The pace of innovation necessitates ongoing education to prevent skill obsolescence and foster career growth (Palmieri & Geretto, 2023; Illanes et al., 2018). However, to truly embrace technological changes, systemic learning approaches in Malaysian schools must evolve, addressing key areas such as educator competence, remuneration, and language capabilities.

Malaysian educators play a crucial role in this transformation. For the workforce to stay competitive, educators themselves need to be well-versed in emerging technologies and digital pedagogy. This requires ongoing professional development, supported by adequate remuneration that reflects the importance of their role in shaping the future workforce. Without competitive pay and resources, attracting and retaining skilled educators capable of teaching complex digital subjects remains a challenge. The Malaysia Education Blueprint 2013-2025 emphasises continuous professional development, but its success hinges on ensuring educators are adequately compensated and motivated to continuously update their skills (Ministry of Education Malaysia, 2019).

Language capabilities also play a critical role in this educational shift. As English is the dominant language in global technology and finance, proficiency in English among Malaysian students and educators is essential. Without strong language skills, there is a risk that Malaysian graduates may struggle to keep pace with international peers, particularly when engaging with global digital resources and advancements. Improving English proficiency across the education system is therefore crucial to fully capitalise on the benefits of digital transformation.

Access to learning has been facilitated by many public and private universities. While universities, such as Universiti Malaya and Universiti Kebangsaan Malaysia (UKM), are increasingly adopting Massive Open Online Courses (MOOCs) and micro-credential programmes to promote lifelong learning, these opportunities must be made more accessible and affordable. These courses on fintech, blockchain, and AI are designed to be flexible, allowing professionals to upskill at their own pace (Universiti Malaya, 2023; UKM, 2023). However, high fees can be a barrier for many, limiting the reach of such programmes. To drive a national trajectory toward a digitally adept workforce, these educational initiatives need to be not only flexible but also affordable, ensuring they are within reach for all segments of society.

Professional Development	Resilient & adaptable workforce	Continuous Learning
• Educator competence • Remuneration • Language capabilities		• Access to MOOCS *(flexible & affordable so all segments of society can access)*

These initiatives align with Malaysia's broader educational goals, as outlined in the Malaysia Education Blueprint, which emphasises the importance of lifelong learning for economic growth. By fostering a culture of continuous learning from early education through to professional development, and addressing systemic issues in educator competence, remuneration, and language skills, Malaysia can build a workforce that is not only resilient and adaptable but also capable of thriving in a rapidly evolving financial landscape.

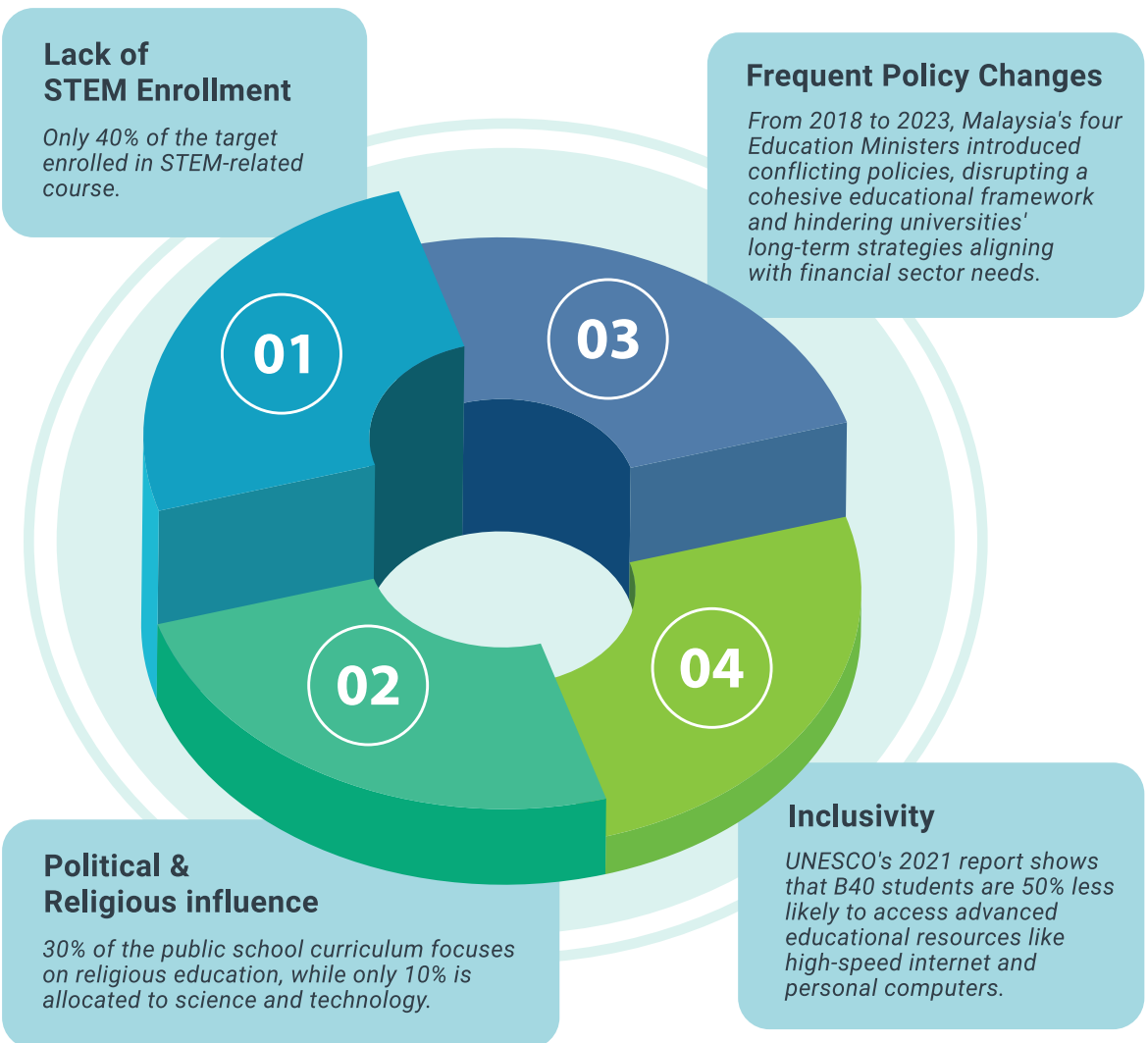
Challenges in Educating a Future-Ready Workforce

Despite strides in integrating digital skills into the education system, Malaysia faces significant systemic challenges in transforming its educational system to meet the demands of a future-ready workforce. One key issue is the state of STEM (Science, Technology, Engineering, and Mathematics) education. Although the government has promoted STEM, the number of students pursuing these fields remains below national targets. As of 2023, only 40% of secondary students in Malaysia were enrolled in STEM-related courses, falling short of the 60% target set by the Ministry of Education (Penang Institute, 2023). This gap severely limits the talent pool needed to fill roles in the digitalised financial sector.

Frequent policy shifts and changes in educational leadership further disrupt the continuity of reforms. From 2018 to 2023, Malaysia saw four different Ministers of Education, each bringing new policies that have sometimes contradicted previous initiatives. This lack of consistency hampers the development of a cohesive educational framework, making it difficult for universities to implement long-term strategies that align with the evolving needs of the financial sector (The HEAD Foundation, 2024; Guptan, 2023). Guptan, V (2023) highlighted that these frequent changes in leadership and policy have contributed to an "education system in flux," where the lack of long-term planning hinders progress.

Political and religious influences on the curriculum add another layer of complexity. These influences sometimes prioritise ideological perspectives over globally competitive standards, potentially hindering the development of curricula that meet global economic demands. A 2018 study found that 30% of the national curriculum in public schools was dedicated to religious education, compared to only 10% for science and technology subjects (Hamid, 2018). This imbalance can limit the exposure students have to critical subjects like technology and finance, which are essential for preparing them for a digitalised financial landscape.

Inclusivity remains a significant challenge, particularly for marginalised groups such as the B40 (bottom 40% income group) and other disadvantaged communities. According to UNESCO's 2021 report, students from the B40 group were 50% less likely to have access to advanced educational resources like high-speed internet and personal computers, which are critical for participating in digital learning environments. Despite efforts like targeted scholarships and infrastructure improvements, these deep-seated inequities persist, limiting access to quality education and opportunities in high-demand sectors like finance and technology (UNESCO, 2021). This disparity hinders the ability of students from low-income backgrounds from competing in the digitalised financial sector. Addressing these issues is critical if Malaysia is to remain competitive on the global stage.



The Future of Financial Education

In the context of a rapidly changing financial landscape and the struggle to cope, there is an urgent need for a national agenda that drives institutions of higher learning in Malaysia to fully embrace digitalisation in both operations and education. This digital transformation is not just a possibility but a necessity if Malaysia is to keep pace with global advancements and prepare its workforce for the future. However, the shift from traditional systems to fully digital platforms presents significant challenges, and its feasibility depends on comprehensive support from both the government and industries.

Abandoning traditional systems entirely may seem daunting, but a phased approach toward digitalisation is crucial. The first step is for educational institutions to integrate digital tools and platforms into their existing frameworks, gradually moving towards more sophisticated digital ecosystems. This includes adopting online learning management systems, utilising AI for personalised learning experiences, and implementing blockchain for secure credentialing and record-keeping (World Bank, 2020). While a complete transition may not be immediate, the goal should be to create a blended learning environment where digital and traditional methods coexist, eventually phasing out outdated practices.

To support this transformation, the government must play a proactive role by providing funding and incentives for digital infrastructure development in higher education. This includes subsidies for the adoption of digital tools, grants for research and development in educational technology, and policies that encourage innovation in teaching and learning methods (Ministry of Finance Malaysia, 2022). The Malaysia Digital Economy Blueprint already sets a foundation, with aims to increase the contribution of the digital economy to GDP from 22.6% in 2020 to 25.5% by 2025 (Economic Planning Unit, 2021), but more targeted efforts are needed to ensure that higher education institutions are not left behind in the digital shift.

Industries also have a critical role to play. By forming partnerships with educational institutions, companies can offer real-world insights and resources that help bridge the gap between academic learning and industry needs. These collaborations can take the form of internship programmes, co-designed curricula, and investment in educational technology. Such industry-education partnerships will ensure that the skills being taught are relevant to the current and future job market, making graduates more employable and better prepared for the digital economy (PricewaterhouseCoopers, 2022).

Moreover, educator competence must be a focal point of this digital agenda. Continuous professional development is essential to equip educators with the skills needed to teach in a digital environment. This includes training in digital pedagogy, familiarity with online learning platforms, and the ability to integrate emerging technologies into their teaching (UNESCO, 2020). Adequate remuneration and support are crucial to attract and retain educators who are capable of leading this transformation. Data from the Ministry of Education Malaysia indicates that teacher remuneration remains a challenge, with many educators feeling undervalued despite their critical role in the education system (Ministry of Education Malaysia, 2021).

Language capabilities also remain vital, especially proficiency in English, which is the dominant language in global technology and finance. Without strong language skills, there is a risk that both educators and students may struggle to engage with international resources and keep pace with global advancements. Improving language education across the system will be key to fully leveraging the benefits of digital transformation (British Council Malaysia, 2022).

By fostering a culture of continuous learning and balancing technical proficiency with soft skills, educational institutions in Malaysia can produce graduates who are not only technically proficient but also capable of leading and innovating in a rapidly evolving financial landscape. As the sector continues to advance, the role of education in shaping a resilient and adaptable workforce will be pivotal in maintaining the integrity and security of global financial systems. Education institutions need to focus on the needs of the nation and work with industries, and the industries need to make time to work with education institutions, to design programmes that are relevant and dynamic. While academic research is needed and respected, it defeats the purpose if it cannot impact the individual, industries and communities to propel them ahead.

Moving towards a fully digital education system in Malaysia is not only possible but essential for future-proofing the workforce. The success of this transformation depends on strategic support from the government, active collaboration with industries, and a strong emphasis on educator development and language proficiency. By aligning these efforts with a national digital agenda, Malaysia can create a higher education system that is innovative, inclusive, and capable of driving the nation's economic growth in the digital age.

Conclusion

In conclusion, the digital transformation of the financial sector presents both opportunities and challenges that require a proactive approach from educational institutions. Universities must evolve by integrating advanced technological competencies such as fintech, blockchain, AI, and cybersecurity into their curricula to prepare a workforce capable of navigating the complexities of a digitised financial landscape. Malaysia, with its strategic initiatives like the Malaysia Digital Economy Blueprint, is making significant strides in this direction. However, to fully capitalise on these opportunities, it is essential to address systemic challenges, such as ensuring inclusivity, maintaining consistent educational policies, and providing educators with the necessary tools and support to adapt to these changes.

Moreover, as the financial sector continues to digitise, the importance of lifelong learning and continuous professional development cannot be overstated. The integration of interdisciplinary learning, coupled with the need for robust cybersecurity measures and a focus on digital literacy, will be crucial in building a resilient and adaptable workforce. Malaysia's efforts to align its educational system with these demands are commendable, but the journey requires ongoing commitment from all stakeholders to ensure that the benefits of digitalisation are equitably shared, and that the workforce is not only prepared for the future but also capable of leading in the global digital economy.

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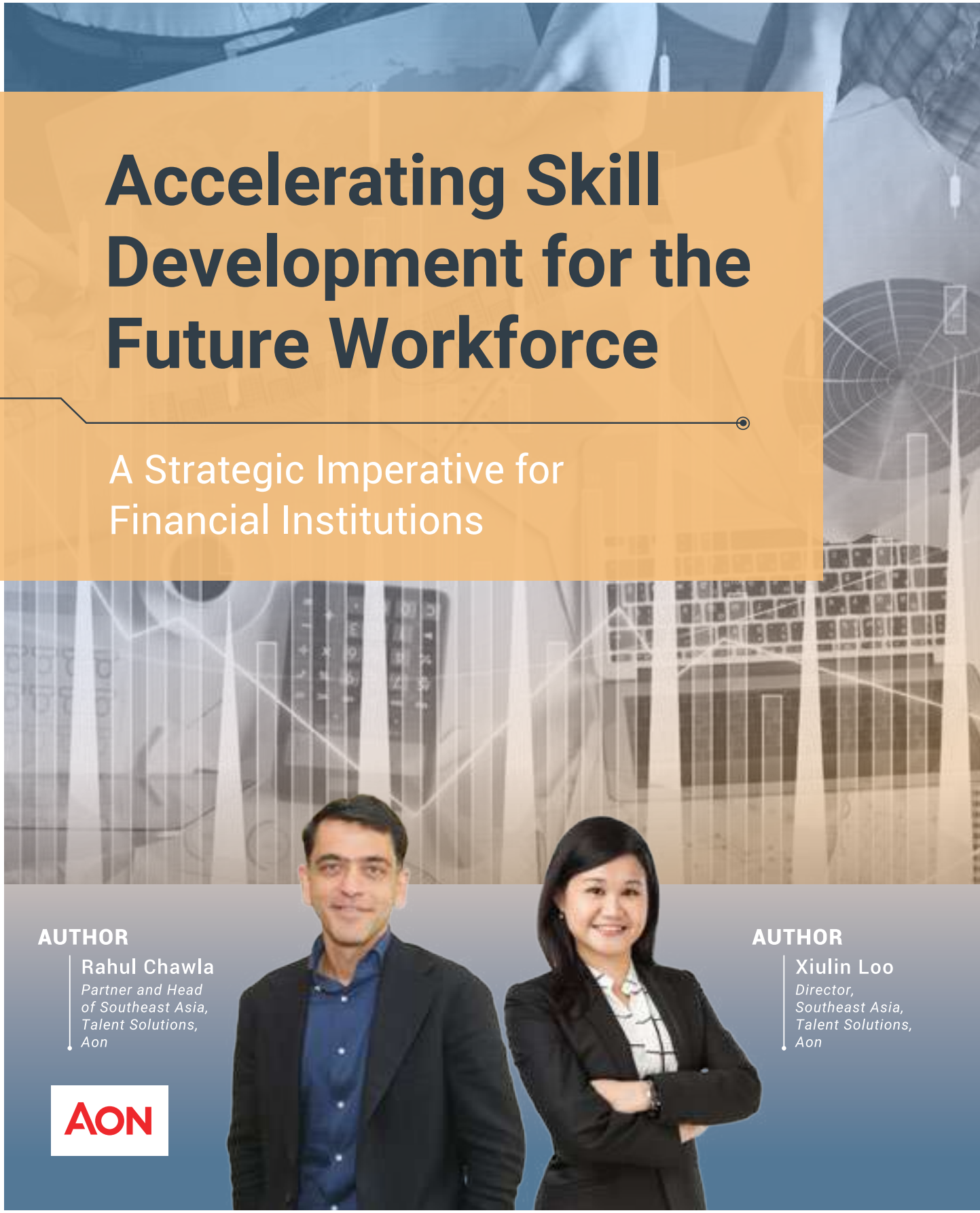
Accelerating Skill Development for the Future Workforce

A Strategic Imperative for Financial Institutions



AUTHOR

Rahul Chawla
Partner and Head of Southeast Asia, Talent Solutions, Aon

AUTHOR

Xiulin Loo
Director, Southeast Asia, Talent Solutions, Aon

The financial industry is undergoing a seismic shift, driven by technological advancements that demand a complete reimagining of the workforce. While the adoption of new technologies is crucial, the real challenge lies in cultivating talents capable of harnessing their full potential. As the digital economy accelerates, boards face the pressing question:

"How can we prepare our organisations to remain competitive in the digital age?"

As a board director your responsibility goes beyond choosing the right technology to propel the business; you also need to address how to accelerate the development of future skills needed to thrive in the digital age. In the following sections, we'll explore strategic approaches to execute the development of your workforce, including identifying key skill sets at various organisational levels, integrating these skills into your existing workforce, and understanding the critical role of leadership in driving this transformation.

What are Future Skills?

Future skills are those which are essential for the ever-changing market and work environments. These skills are not solely focused on the recognisable hard skills one might expect but include the behavioural competencies needed for the growth of a more digitalised, automated organisation which uses data-driven decisions as an additional differentiator.

The Future of Skills in Financial Institutions

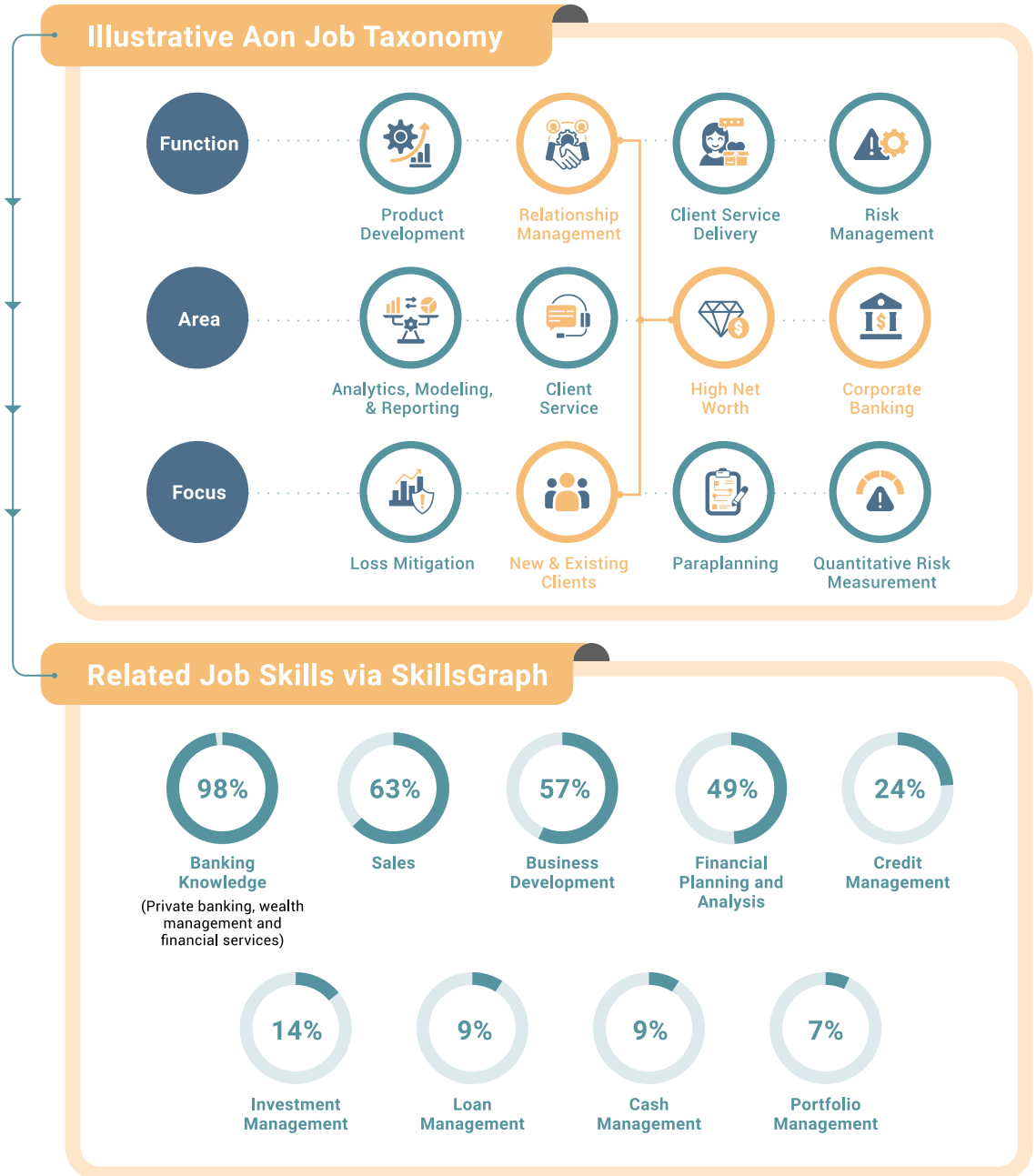
Financial institutions can significantly improve their capabilities by investing in cutting-edge tools and systems. This modernisation is already enhancing business performance and competitiveness. For instance, the integration of artificial intelligence (AI) is automating routine tasks like customer service enquiries and fraud detection, freeing up valuable resources for strategic initiatives.

At the leadership level, strategic thinking, digital literacy, and change management are paramount. Leaders must not only understand the potential of new technologies but also guide their organisations through the complexities of digital transformation, balancing both technological and human elements.

To fully harness the potential of these advancements, necessary competencies must be cultivated, including skills in data analytics, artificial intelligence, and cybersecurity, to ensure effective implementation and management of new technologies. Moving forward, this allows teams to develop tailored products and services that meet the evolving needs of customers, such as personalised financial planning or predictive analytics-driven risk management.

The evolution of the talent landscape has placed a greater emphasis on skills-based workforce strategies. As outlined in the illustration below, organisations need to align leadership vision with practical skill development for the successful implementation of digital initiatives.

This process paints a robust skills picture for business and HR leaders, who can then quickly and easily identify current and future skills that are critical to business success.



Building Skills Faster: Strategic Approaches for Financial Institutions

Leverage Technology for Efficient Learning and Development

Advanced technologies offer powerful tools for accelerating learning and development. AI-driven learning platforms will personalise training, adapting to individual learning styles and pacing to optimise outcomes. Virtual and augmented reality can provide immersive, hands-on training experiences, particularly for complex skills that require hands-on practice, like IT support staff and cybersecurity.

By integrating these technologies, financial institutions can create more engaging learning environments that accelerate skill acquisition, ensuring employees are well-prepared to meet the challenges of an evolving industry. Board directors should champion the adoption of such technologies, recognising their potential to transform traditional training methods and drive more effective skill-building across the organisation.

Emphasise Internal Skill Development over External Hiring

Investing in current employees often yields better returns than external hiring, retaining valuable institutional knowledge while equipping the workforce for future challenges. Boards should advocate for rigorous talent performance evaluations to identify high-potential employees and offer tailored development opportunities that align with their motivations.

For instance, the rise of digital channels demands marketing professionals skilled in social media, content marketing, and search engine optimisation (SEO). By focusing on internal development, institutions can cultivate versatile teams that can navigate the digital landscape more effectively, turning potential liabilities into strategic assets.

Identify and Bridge Skills Gaps

To stay ahead, financial institutions must proactively assess their existing capabilities and identify skills gaps across all organisational levels. This involves understanding how roles are evolving, what skills are becoming obsolete, and what new skills are required. Regularly reviewing job descriptions and adjusting skills requirements can help ensure alignment with the rapidly changing industry landscape.

For example, with routine tasks like deposits and withdrawals increasingly automated, tellers can transition to roles in customer service, relationship management, or digital banking by developing relationship-building and tech-savvy skills. Similarly, relationship managers must adapt to digital client interactions, leveraging digital tools to enhance personalised service delivery. By identifying these opportunities early, boards can drive targeted upskilling initiatives that keep the workforce agile and competitive.

Integrate Skills Development with Business Strategy

To drive success, skill development initiatives must be seamlessly integrated with the organisation's broader business strategy. Leadership should treat skill-building as a strategic priority, embedding it into the business model and ensuring proper resource allocation.

This means crafting a comprehensive workforce roadmap that aligns with the organisation's strategic goals, leveraging data to pinpoint skills gaps, and adjusting headcount to match economic conditions. Board directors need to consistently communicate the business strategy and the critical role of digital skills training, inspiring the workforce with a shared vision to secure their buy-in and commitment.

Future Proofing Your Workforce: Case Study of a Global Bank's Digital Talent Strategy

Understanding the Impact of Digital Transformation on the Workforce

One of the most pressing organisational challenges today is building a workforce capable of success in an increasingly digital and agile world. With its extensive industry data and analytical expertise, Aon works with clients to solve the most complex people decisions and provide the clarity needed to guide strategy and prioritise action based on sound evidence.

One global bank had a clear vision of its future: to become more digital by embracing the customer and product opportunities afforded by technology. Business leaders understood that this would impact the shape of its workforce and the people skills needed; however, they were unclear on how to take the steps necessary to realise their vision.

The Challenge

- How to effectively identify and develop future-ready skills amidst unclear roadmaps and difficulty assessing current skills?

The Solution

- Identifying future-relevant skills in current role
- Determining skill development and talent acquisition needs

The Outcome

- Aligning talent strategy with future business goals
- Addressing digital skills gaps

Recommendations

- Optimize workforce structure
- Bridge the future skills gap
- Revise reward strategy for technology roles

The Challenge

With a strong desire to change but lacking a road map of how to progress and an understanding of the impact of change, the firm partnered with Aon. This is a story of not simply a move to more digital ways of working, but to those actions needed for organisational and talent transformation by harnessing the value and insights from numerous collated talent data points.

In most organisations, including our banking client, future skills may be discussed but are often hidden beneath competencies or buried in job descriptions. This makes it hard to get a baseline view of which skills exist among current employees.

The challenge for most organisations is identifying the available data, having the skills to consolidate this into analysis and the insight to translate the findings into action. We worked with our banking client to determine:

- Current skills amongst its workforce
- Where gaps exist
- How pay needs to evolve in order to recruit and retain employees with future skills
- A location strategy for meeting these hiring goals
- How future skill requirements translate into roles and workforce mix

The Solution

Our starting point was to understand current talent that held future skills the bank would need to achieve its digital business strategy. We drew on established skills taxonomies to classify each role within the firm. From these, we were able to understand how those currently employed skills would be needed to support the future business strategy. By understanding how current jobs – and the associated skills – are likely to be of use in the future, the client was able to fully understand where there may be skills gaps which need to be developed or acquired.

As talent needs change, organisations have three options to acquire skills:

- Buy new talent
- Grow skills among current employees
- Rent skills from contractors if skills are needed for a limited time

Aon's analysis also looked at identifying and quantifying the transferability and mobility of current skills. This helped to determine how talent could be redeployed in other areas of the business.

The Outcome

Making Sense of the Data to Inform Talent Strategy

Aon consolidated the bank's diverse individual talent and job role data and conducted a comprehensive benchmarking analysis to compare the bank against its peers. The analysis revealed a significant future skills gap between the bank's current state and its desired digital future. While the bank's existing skills profile and workforce structure were well suited to its past operations, they were not aligned with its digital aspirations.

While seeing the gaps is interesting for any organisation, the real value comes from interpreting the data and exploring the opportunities and implications. Our analysis found the bank's digital transformation journey had been slower than its peers. It had made comparatively low investment in technology, choosing instead to deploy people rather than technology to solve challenges. This led to having fewer revenue-generating roles than its peers. Technology spend had focused more on business maintenance rather than transformative technology.

A Future Skills Pay Gap

Our analysis also examined rewards data, looking not at current market rates, but rewards based on the role's future skills profile. Such analysis can inform rewards strategy and ensure that organisations recognise and properly value job roles with future skills. Our analysis flagged areas of flight risk should pay levels be below market rate.

For our client,

78% of its future pivotal talent roles were identified as having a possible flight risk.

Many of these jobs were found in mid-career levels, which are more costly to replace than entry and support-level roles.

The analysis was clear. It showed that while there is limited opportunity to redeploy current employees given their likely skill set based on their current role, new skills and competencies can be acquired. With development, training and support to understand possible career routes, the current workforce could move to the future.

Recommendations

Based on the analysis, our recommendations to this global bank were clear:

Align the workforce structure to reflect investment in a digital banking model.

Address the future skills gap through development and career support to help redeploy talent in the future.

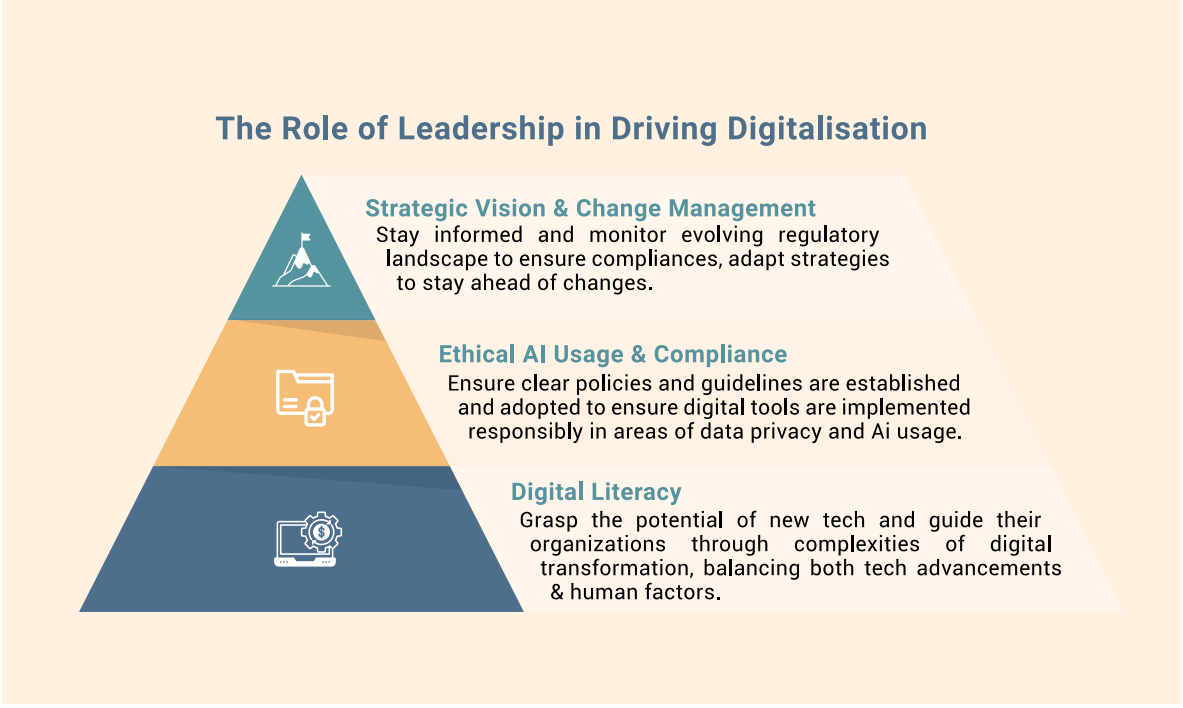
Explore rewards strategy for technology roles in line with the market to reduce any future skills pay gap.

The Role of Leadership in Driving Digitalisation

Financial institutions can significantly improve their capabilities by investing in cutting-edge tools and systems. This modernisation is enhancing business performance and competitiveness, however ethical practices such as privacy, bias and transparency must remain a focus for boards. Leaders must be responsible for ensuring clear policies and guidelines are established and adopted to ensure digital tools are implemented responsibly, particularly in areas such as data privacy and AI usage. Embedding ethical principles into digital strategies is not merely about risk management; it's essential for maintaining trust and achieving successful digital transformation for the business.

Leadership's role extends beyond the implementation of technology; strategic thinking, digital literacy, and change management are critical components of effective digital leadership. Leaders must grasp the potential of new technologies and guide their organisations through the complexities of digital transformation, balancing both technological advancements and human factors.

In an evolving regulatory landscape with emerging directives like pay transparency, leaders in financial institutions need to stay informed about these developments and act swiftly to ensure compliance. This proactive approach not only mitigates risks but also enhances trust among employees and stakeholders. Boards should continuously monitor the regulatory landscape, adapting strategies to stay ahead of changes.



What Board Directors Need to Know

The digital revolution is reshaping the financial landscape in Malaysia, and by embracing innovation and fostering a digital-first mindset, boards can steer their organisation toward a future where technology is a strategic advantage, not just a necessity.

1. Enhance Digital Expertise in the Boardroom

Recent research from MIT has underscored the pivotal role of digital expertise in boardrooms. Their findings indicate that companies with at least three digitally savvy board members significantly outperform those with fewer. This increased performance is evident in higher return on assets, revenue growth, and market cap growth. Digital fluency within the board is no longer a luxury but a necessity that can drive effective digital transformation throughout the organisation.

Boards must ensure that digital expertise is well-represented, fostering a collective understanding of how digital trends impact the business. This means being up to date with the latest digital advancements, understanding the evolving regulatory landscape, and appreciating the financial implications of digital transformation. The goal should be to integrate digital thinking into all strategic decisions, not just those explicitly related to technology. As the cost and complexity of digitalisation continues to grow, financial institutions need a leadership team that can navigate these challenges with insight and foresight, ensuring that digital strategies are not just implemented but are aligned with the broader business goals.

2. Incorporate Digital Thinking into Strategy

With a robust strategy in place, digital transformation goes beyond merely implementing new tools; it's about redefining business models, processes, and customer interactions to meet future challenges. A digital-first approach should be embedded in the core of the organisation, where technology and data inform every aspect of strategic oversight. This approach encourages a culture of experimentation, adaptability, and continuous innovation, allowing the business to evolve in step with rapid technological changes.

A shift in mindset is crucial, as exemplified by DBS's journey to become 'digital to the core.' This transformation highlighted that change must permeate every level of the organisation – not just among executives or IT, but across all departments and roles. By embedding digital thinking into the strategic fabric of the business, boards can foster an environment where innovation thrives, and digital initiatives are not just supported but are central to the organisation's future success.

3. Redefine Job Architecture

The advent of digitalisation is fundamentally altering both customer and employee experiences. This shift necessitates a revaluation of job architecture within financial institutions. Boards should focus on identifying roles that can be enhanced or streamlined through digital tools, while also considering the creation of new positions that align with evolving business needs.

Automation and digitalisation are likely to replace low-value, time-intensive tasks, increasing productivity and allowing human capital to be redirected towards strategic initiatives. The role of the board is to enable this transformation by ensuring that the organisation's structure and roles are aligned with its digital strategy.

4. Drive Greater Integration Across the Organisation

For a digital strategy to be truly effective, it must integrate seamlessly into every aspect of the business. This means breaking down silos and ensuring that digital initiatives are embedded into both online and offline processes.

Boards should challenge the status quo, advocating for the integration of digital technology in all areas of the business and across all levels of employees. This holistic approach not only enhances operational efficiency but also fosters a more cohesive and adaptive organisational structure.

5. Empower Employees to Innovate and Adapt

Empowering employees to take ownership of digital initiatives is essential for fostering innovation and adaptability within an organisation. Boards should champion strategies that incentivise employees, giving them the freedom to explore new digital solutions and drive transformation from within. As demonstrated by DBS's success, providing staff with the right tools, autonomy, and incentives can result in significant breakthroughs in digital implementation. This approach not only accelerates the pace of change but also fosters a culture of ownership and accountability across the workforce.

Given the rapid advancements in AI and other emerging technologies, it is imperative to equip employees with the knowledge and skills necessary to navigate these industry shifts. Boards should prioritise upskilling initiatives that encompass comprehensive training in AI, data analytics, and other digital competencies. By proactively investing in continuous learning and reskilling, financial institutions can empower their teams to confidently embrace new technologies and drive innovation.

Furthermore, to foster a culture of adaptability and innovation, organisations should consider rewarding employees who have demonstrated a faster pivot towards digital adoption. This recognition can serve as a powerful motivator, encouraging employees to embrace change and explore new opportunities. Additionally, providing incentives for employees to create and innovate can further stimulate a culture of experimentation and creativity. By fostering a work environment that values adaptability, innovation, and continuous learning, financial institutions can position themselves as industry leaders and attract top talent in the evolving digital landscape.

The Road Ahead: Leading into the Digital Age

The financial services industry is at a tipping point. The ability to rapidly develop the necessary skills will determine organisational success. As technology reshapes the industry, prioritising skill development is no longer optional – it is mandatory for success. By leveraging technology, fostering a culture of continuous learning, integrating skill development into organisational strategy, and investing in reskilling and upskilling, financial institutions can ensure they are prepared for the challenges of the digital age.

For board directors and industry leaders, the time for action is now. Embrace a proactive approach to skill development, invest in the future of your workforce, and lead your organisation into the digital age.

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Enhancing Board Efficacy Across Financial Institutions

Deloitte.

AUTHOR

Kasturi Nathan
Partner,
Deloitte Southeast Asia

Deloitte.

AUTHOR

Krishman Varges
Director,
Deloitte Southeast Asia

"You can ask me for anything you like, except time" is a quote by French statesman, Napoléon Bonaparte that is increasingly being exemplified by board members of financial institutions. Simply put, being a director of a financial institution is highly demanding. Faced with intense scrutiny amidst an increasingly complex financial environment marked by digital transformation, financial value chain fragmentation, as well as ESG considerations, many financial institutions recognise that the role of board oversight in managing the affairs of financial institutions cannot be overemphasised.

As the demands for financial institutions are set to increase in the foreseeable future based on market complexities and regulatory imperatives, it is only appropriate that attention is placed on building an enabling environment for directors of financial institutions to discharge their fiduciary duties while considering the rising physical, transition and litigation risks in the quest to attain stronger financial returns and business resilience.

In this regard, it will be worthwhile to explore the progressive practices that selected financial institutions in Malaysia have instituted to enhance board efficacy. More specifically, the ability to comprehensively involve board members in the strategy setting process, harness their network within regulatory confines and engage them in key developments of their financial institutions, will be represented in the value drivers expounded as follows:

1. Enabling a Holistic Strategic Focus

Strategy-setting sets the compass for a financial institution and boards are the pivot of it. Sharpening the board's focus on strategic matters can significantly uplift the governance and management of a financial institution's affairs.

An increasing number of financial institutions are tuning directors into strategic mode by having strategy reviews at the onset of board meetings, helping to jog their minds on the strategic imperatives of the financial institution, and keep a finger on the pulse of big-ticket initiatives. This is often augmented by the prefacing or provision of economic updates by the chief economist on leading economic indicators in the financial services industry. By bringing data and trends to life, boards of financial institutions will be better able to navigate cross-sections of key developments and visibly establish connections across different agenda items that may ensue in the later part of board proceedings.

Moreover, in enabling a comprehensive frame for strategy, selected apex financial institutions or financial holding companies with key operating subsidiaries have embarked on separate board-level strategy retreats or planning sessions, prior to holding a group-wide strategy retreat. This may serve to enhance the robustness of entity-specific strategic considerations that are being channeled upwards for aggregation at the holding level. In other words, reconfiguring the strategy retreat to a group-wide affair represents a value-adding proposition to pave the way for generative discussions on a comprehensive basis.

In a similar vein for Islamic financial institutions, there is a growing recognition that it is important to carefully plan and schedule the Shariah Committee strategic retreat well ahead of time from the board strategy retreat. This allows sufficient time for the board to soak up the relevant information and ideas provided by the Shariah Committee members.

Given that strategy setting is not a "one and done" exercise, an iterative follow up represents an integral component of this process. As practised by several financial institutions, it may be worthwhile for matters arising from the strategic retreat to be discussed at management committee meetings, or for periodic workshops to be held between board and management for follow up discussions on major tactical matters. Monitor strategic milestones with coverage on the status and timelines of key initiatives are also of paramount importance to ensure that progress is tracked and timely interventions can be effected, if needed.

Strategy Reviews

Help to jog their minds on the strategic imperatives of the financial institution.
Keep a finger on the pulse of big-ticket initiatives.

Economic Updates

Leading economic indicators in the financial services industry. Bring data and trends to life to navigate cross-sections of key developments and visibly establish connections across different agenda items that may ensue in the later part of board proceedings.

Board-Level Strategy Retreats

Enhance the robustness of entity-specific strategic considerations. Pave the way for generative discussions on a comprehensive basis. Carefully plan and schedule the Shariah Committee strategic retreat well.
Allow sufficient time for the board to soak up the relevant information and ideas provided by the Shariah Committee members.

Follow-Up Discussions & Tactical Workshops

Held periodic workshops between board and management for follow up discussions on major tactical matters. Monitor strategic milestones with coverage on the status and timelines of key initiatives to ensure that progress is tracked and timely interventions can be effected, if needed.

2. Fostering a Facilitative Environment for Boards to Create Passages

Directors of financial institutions would have often amassed a rich of vein of contacts and built trust with their network through past experiences. They therefore represent an outlet for exchange of business leads and referrals which can help financial institutions harness business opportunities or forge strategic alliances. Indeed, mechanisms are needed by which board members can open doors or direct opportunities for consideration of the financial institution.

Notwithstanding, it would be prudent for board members to take heed of regulatory considerations surrounding conflicts of interest and the nuance of high power distance culture within the local setting. To add a veneer of clarity, directors should not be constrained to lend weight and create business passages; rather, an environment of non-obligation must arise from the referrals provided by board members.

In internalising examples, boards may, during board meetings, have an agenda item under the category of "any other business" for board members to provide leads for partnerships or business pursuits from their recent networking undertakings, such as participation in conferences and business events. In line with statutory requirements, any actual or perceived interests in these referrals should be declared and placed on record. Management is then accorded with the latitude to evaluate the merits of pursuing these leads as they are made in a transparent setting. As for cases where the referrals are time-sensitive in nature, they can be escalated in writing to management with board members being informed based on the prevailing procedures of the financial institution.

Given that accountability is essential for successful pursuits or partnerships, it is observed that some boards may assign management personnel to act as a sponsor and promote synchronisation of these initiatives. It is also important for metrics to be formulated to allow the board to monitor the success of these pursuits or partnerships.

Director's Network

Directors of financial institutions often amass a rich of vein of contacts and build trust with their network through past experiences.

1

Leads and Referrals

Leads and referrals help financial institutions harness business opportunities or forge strategic alliances.

2

Evaluation by Management

Regulatory considerations surrounding conflicts of interest and the nuance of high power distance culture within the local setting should not be constrained to lend weight and create business passages.

3

Strategic Partnership

Metrics to be formulated to allow the board to monitor the success of these pursuits or partnerships.

4

3. Providing a Platform for Directors to Be Engaged

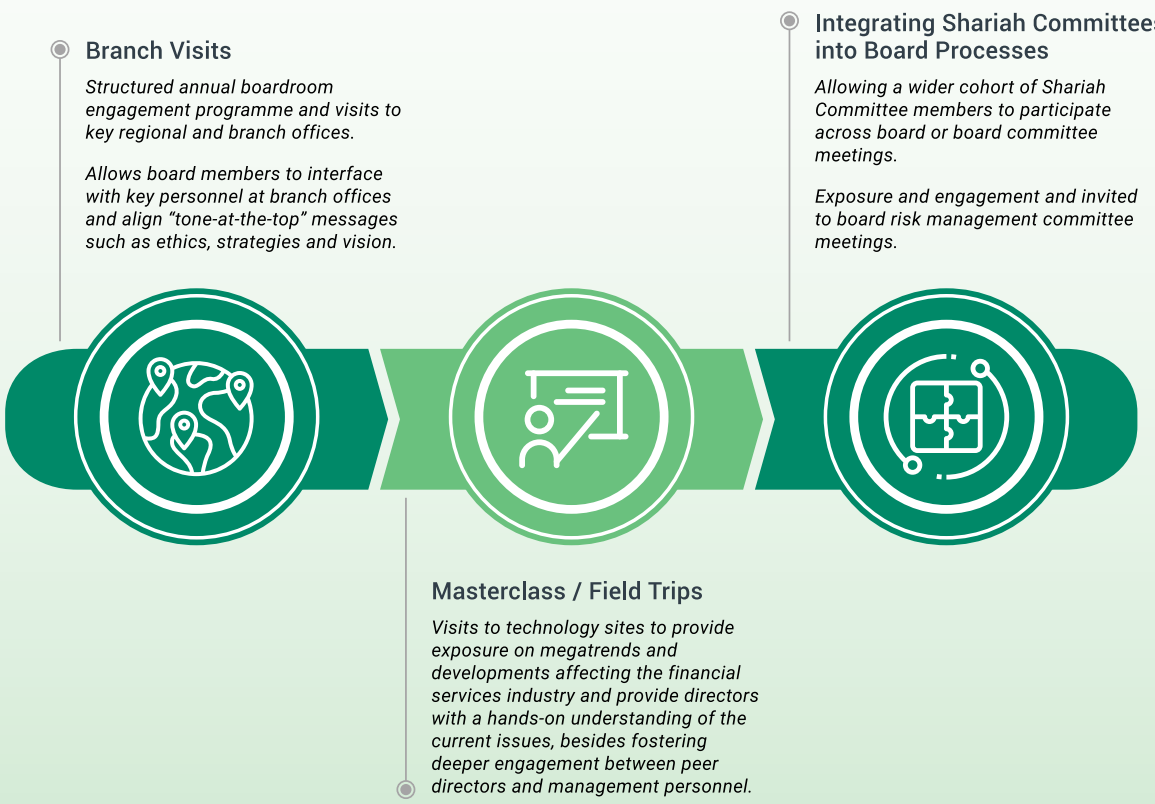
Obtaining insights leads to the development of intelligence. In order to glean first hand insights, it is important for directors to get a sense of the matters on the ground. Premised on this, several financial institutions have drawn up a structured annual boardroom engagement programme for directors. The annual schedule typically covers visits to key regional and branch offices.

This allows board members to interface with key personnel at branch offices and align "tone-at-the-top" messages such as ethics, strategies and vision. When opportune and if logistical conditions permit, the site visit programme can be braced with board meetings for optimality. In fact, financial institutions that have implemented this practice have found that there is a better appreciation of issues at ground level, and more practical decision-making when the head honchos are exposed to branch visits.

Selected financial institutions also organise experiential masterclasses or field trips such as visits to technology sites to provide exposure on megatrends and developments affecting the financial services industry. These visits can provide directors with a hands-on understanding of the current issues, besides fostering deeper engagement between peer directors and management personnel. For example, a visit to an electric vehicle plant may allow directors in the general insurance industry to understand the practical risk management nuances that may shape the insurance policy considerations for the said motor vehicle category. It is important to underscore that any identification of experiential masterclass or field trips should be premised on the needs of the directors and potential value-add to directors, as gathered from a structured process such as the conduct of a board effectiveness evaluation exercise.

As for Islamic financial institutions, allowing a wider cohort of Shariah Committee members to participate across board or board committee meetings in the form of meeting invitees is seen as a means of keeping them engaged on broader issues surrounding the financial institution. The rotation of Shariah Committee members across board or board committee meetings as meeting invitees serves to augment the widely-instituted practice of having one fixed bridging member between the Shariah Committee and board. The choice of participation across board or board committee meetings can be premised on the desired nature of exposure and engagement for Shariah Committee members. For instance, in one particular Islamic financial institution, Shariah Committee members are invited to board risk management committee meetings on a rotational basis, given that substantive and detailed business-centric discussions take place at this committee.

All in all, given the systemic importance of the financial services sector to the real economy, the need for directors to spearhead financial institutions in a strategic and progressive manner represents a non-negotiable consideration. Instituting progressive practices that would aid directors in the discharge of their duties will go a long way, especially as they are confronted with radically unfolding international and domestic developments. Just as how Napoléon Bonaparte revolutionised military organisations to face adversaries, continuous adaptation and reforms are needed in boardroom processes to enable board members of financial institutions to contend with contemporary challenges.



Note: The views expressed here are the writers' own and do not necessarily reflect those of their organisation.

Navigating Geoeconomic Balance: BRICS, Global Shifts, and Malaysia's Role

Trading Nation Must Deal with Decoupling Dynamics Amidst Fragmenting Landscape

AUTHOR

Qarrem Kassim

Analyst, Institute of Strategic & International Studies (ISIS) Malaysia

Scepticism about globalisation has increased. The US-Sino economic rivalry, Covid-19 pandemic, conflict in the Ukraine and the recent escalation of tensions in the Middle East have placed pressure on globalisation, upending the long-term trend of universal economic integration. Current trends point to a gradual fragmentation of a highly integrated financial and economic system with major power blocs seeking to decouple dependence from one another.

Global cooperation is slowly realigning; major economies are adopting a policy of strategic autonomy aimed at reducing economic dependency in various key sectors, which could potentially lead to geoeconomic fragmentation and zero-sum reasoning. Recent moves, such as the scrutiny over Chinese investments and trade in strategic sectors by US and EU authorities, serve as an important reminder that the strategic rebalancing of global trade remains an ongoing geoeconomic agenda. Moreover, such strategies encourage countries on the global periphery – such as Malaysia – to machinate their own brand of geoeconomic hedging, exercising caution, and examining the shadows of great powers.

Geopolitical tensions often imply adverse consequences for macro-financial stability. The imposition of financial restrictions, increased policy uncertainty and heightened risk aversion associated with these could exacerbate decoupling. Such policies might cause investors to reallocate their portfolios and reconsider credit lines along geopolitical fault lines, leading to unpredictable capital flows and declines in asset valuations. A fragmented geoeconomic landscape along geopolitical allegiances could, therefore, make the world more vulnerable to adverse shocks amid insufficient risk diversifications.

Against this backdrop of geoeconomic fragmentation, strategic realignments have emerged, including one in which the Global South could widen its influence in the world's financial architecture. Groupings like BRICS, a loose alignment of Global South nations, have stated their intent to explore new mechanisms to diversify traditional cross-border settlement systems, despite substantial challenges. Increasing discussion of cross-currency trade to strategically leverage against the dollar-dominated system in global finance is still in its early stages and has emerged somewhat in reaction to an increasingly weaponised dollar against geopolitical “threats” and “rivals.”

Notably, the future entry of trade-friendly, middle-income states like Malaysia and Thailand into BRICS might create further momentum for a more diversified global financial architecture. While long-held reliance on the traditional dollar-based trade system is unlikely to be upended any time soon, due to the entrenched role of traditional financial systems and institutions, new possibilities are emerging that could refocus the global economic and financial balance towards the Global South.

BRICS: Geopolitical Power Shifts or Pragmatic Alliance

BRICS, an acronym for Brazil, Russia, India, China, and South Africa, is primarily a forum for economic cooperation among emerging markets that aims to combine their geoeconomic weight and influence to promote the rights and interests of the Global South, particular in G20 and WTO talks and negotiations. BRICS is also presenting itself as an opportunity to deepen financial and market interlinkages and diversify the global payment architecture as declared at the 2023 BRICS summit[1].

In particular, the BRICS Payment Task Force (BPTF) announced plans to develop a report on the exploration of cross-border payment mechanisms, emphasising national currency use in trade and financial transactions. The strong desirability of national currency utilisation within and outside BRICS members has been a long-discussed topic, allowing flexibility both in settling balance of payments and financing national debts. Noting the undeniable role of the US dollar in global trade (making up 88% of foreign exchange transactions, 58% of global foreign exchange reserves and 55% of trade invoicing in 2023), the declaration deliberately avoided confrontational language and, crucially, was not proposed as a counterbalance against the prevailing role of the dollar-backed financial system.

Nevertheless, in a new age of geopolitical uncertainty, it signals that more nations are at least contemplating diversifying their financial options beyond the dollar for trade, especially in a time of geostrategic uncertainty. This effort is, however, driven by different levels of national security concerns. For countries like Russia and Iran, in particular, whose economies have been deeply affected by US sanctions, the internationalisation of national currencies is far more likely to serve a primary geoeconomic agenda. For nations like China, however, although already subject to some trade restrictions, primarily in sector-specific high-tech goods and sectors linked to human rights concerns, the possibility of facing more aggressive US trade action amid an escalating US-Sino trade rivalry is enough to place BRICS settlements high on its agenda to ensure market access.

In contrast, for Brazil, India and South Africa, BRICS serves both as a platform for WTO cooperation and possibility for more diversified trading options with major consumer markets in the Global South. Nevertheless, another major driver for BRICS financial integration may be two-fold: first, the use of national currencies to raise debt mitigates exchange rate risk exposure compared to borrowing in dollar terms. Second, by encouraging the use of their own currencies, BRICS countries may also diversify their foreign exchange reserves, providing strategic autonomy in the global financial system. For some nations in the bloc, keeping strategic reserves in US dollar is often seen as a geoeconomic vulnerability – despite its stability and liquidity – should relations with the US deteriorate and sanctions expand.

BRICS | Brazil, Russia, India, China, and South Africa

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The economies of Russia and Iran have been deeply affected by US sanctions. China faces more aggressive US trade action amid an escalating US-Sino trade rivalry. Brazil, India and South Africa are a platform for WTO cooperation and possibility for more diversified trading options with major consumer markets in the Global South.

[1] D.R.Chaudhury. 21 August 2023. The Economic Times. "15th BRICS Summit: BRICS expansion, national currency use among top agenda". https://economictimes.indiatimes.com/news/india/15th-brics-summit-brics-ex

Diversifying Global Financial System Remains a Complex Task

Despite the political intentions of its members, forming a BRICS payment system remains a substantial challenge. The lack of a systemic, institutional structure within BRICS hinders meaningful integration. While its flexibility may be attractive to Global South states, as it does not place many obligations on its members, the lack of an institutional framework or overarching agreed-upon financial integration strategy prevents any meaningful financial integration. Trust and transparency issues, even between BRICS founding nations like China and India, whose relations remain hostile over border disputes, could complicate cross-currency settlements and the expansion of both currencies as a diversified reserve.

Additionally, it is important to note that international banks within BRICS members must still comply with US sanctions. Due to the financially integrated nature of many BRICS members and BRICS aspirants with the US-centric financial settlement system (this also applies to China), most commercial banks may not be willing to facilitate trade in sectors where US sanctions are most aggressively enforced, fearing secondary retaliation. This is evident given that even the New Development Bank (NDB), often referred to as the "BRICS Bank," continues to employ the US dollar to finance large-scale transactions[2]. Such arrangements underscore the complexities involved in establishing diversified financial systems.

Lastly, the BRICS architecture presents a substantial problem in settling balance of payments in national currencies. Due to the less ubiquitous nature of non-US dollar currencies, a surplus of one nation's currency may not be readily convertible with other BRICS and non-BRICS members for settlement. Consider, for instance, in bilateral trade relations between Russia and India, where due to the former's trade surplus with India, there is an excess of rupees held by Russian banks. As such, if India is unable to produce the goods Russia wants to import, there are issues of convertibility that create currency imbalances that need to be resolved. Likewise, more advanced real-time algorithms and a robust system of currency convertibility will also need to be developed. Of course, as the economic and trade landscape within the bloc is highly China-centric, the Chinese yuan could, in principle, be used to link payments from one BRICS nation to another. However, whether China is ready to freely internationalise the yuan, and whether other BRICS members are willing to attach themselves to the yuan, is debatable.

Challenges of Forming BRICS Payment System

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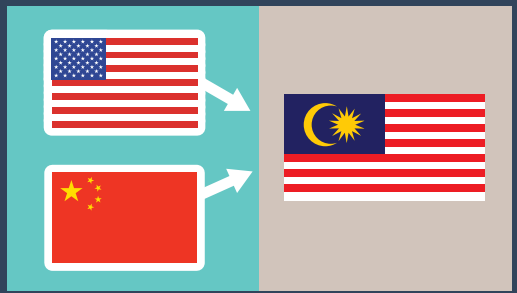
[2] Projects. New Development Bank Official Website. "Project portfolio by currency". https://www.ndb.int/projects/

Nevertheless, even such issues may still not be a hindrance to the political will of establishing diversified financial channels in the long term. While challenging, ultimately, current narratives among BRICS nations suggest that they are seeking creative solutions to such obstacles. It is likely that BRICS could form workarounds from US-sanctioned sectors and prioritise more trade and investment in neutral sectors like food, medical devices, and pharmaceuticals. Likewise, more serious balance of payments issues could find a common solution through the expansion of the BRICS Contingent Reserve Agreement (CRA) in stabilising and managing currency volatility and risk. In this regard, the potential for alternate settlement options offers promising advantages to Malaysia's trade-centric economy and foreign policy, catering to a multipolar world order where US sanctions are increasingly weaponised amid a more scrutinous global trade landscape.

Strategic Considerations for Malaysia's Entry into BRICS

BRICS's strategic positioning as a cooperation group of Global South nations has caught the attention of middle-income aspirants like Malaysia, which have for decades been closely integrated with both US and Chinese markets. Being situated in the heart of Southeast Asia, its trade flows are highly influenced by the vast economic gravity of China. Meanwhile, Malaysia's vibrant position and aspirations as a key intermediate supply chain player for US semiconductor companies is indisputable.

While it may seem that Malaysia's economy compared with the rest of BRICS is starkly different, with the latter being countries that command significant land mass and population size, Malaysia is keen on taking a long-term approach to trade. Forecasts by PricewaterhouseCoopers (PwC) in 2017 indicate that by 2050, China is set to overtake the US economy, with India overtaking the US in second place3. Indonesia, Russia, and Brazil will also rise to take the fourth, fifth and sixth places. Both the US and the EU will see their shares of global GDP decline, and by 250, the seven largest emerging economy nations could potentially be double the size of the G7. Malaysia is undertaking a pragmatic long-term and forward-looking gamble managing its economic and trade relations with the Global South.



Malaysia is closely integrated with both US and Chinese markets.

PricewaterhouseCoopers (PwC) in 2017 indicated that by 2050, China would overtake the US economy, India overtake the US in second place, and Indonesia, Russia, and Brazil rise to take the fourth, fifth and sixth places.

[3] *PriceWaterhouse Coopers (PWC). February 2017. The Long View: How will the global economic order change by 2050? https://www.pwc.com/gx/en/world-2050/assets/pwc-the-world-in-2050-full-report-feb-2017.pdf*

In the medium term, as Malaysia sees rising US-Sino tensions in the region gradually becoming more hostile, BRICS might be best seen as complementary to its multilateral engagement strategy and an opportunity to leverage on its trade openness to expand trade with both China and peer-emerging economies while maintaining neutrality with developed economies. Thus, the entry of Malaysia into BRICS, it is hoped, will enhance its mediating role as a connector economy in an increasingly multipolar world. Indeed, Foreign Minister Mohamad Hasan has stated that Malaysia's desire to join BRICS is to "ensure the country does not contribute to a unipolar world" but rather, as a platform to amplify the voice of emerging economies across many international platforms and promote the economic rights of the developing world[4]."

From a geoeconomic standpoint, Malaysia's interest in BRICS could also extend to the international use of the US dollar in its balance of payments. As a small but significant trading nation (with total trade more than 140% of GDP), the relative strength of the US dollar vis-à-vis the ringgit has created balance of payments issues as import costs increase. A point which Prime Minister Datuk Seri Anwar Ibrahim has repeated several times, calling for an Asian Monetary Fund to "de-dollarise" the international trading system[5]. Critics have likewise claimed that Washington has been misusing its "exorbitant privilege" as the world's reserve currency to strangle non-friendly economies through unilateral sanctions[6].

Nevertheless, the diversification of global settlements is still unlikely to be an immediate national security priority as Malaysia sits highly integrated within the prevailing US-centric system. Indeed, with more than 80% of Malaysia's trade conducted in dollar-backed transactions, the status quo still dominates[7]. Similarly, reading too much into Malaysia's "China factor" is deceptive. For instance, Malaysia joined the US-led Indo-Pacific Economic Framework (IPEF) far earlier before expressing any intention for BRICS. Moreover, Anwar continues to pitch Malaysia as a "neutral and non-aligned" host for lucrative US semiconductor investments and that his government would continue to attract US$100 billion in investments amid the US-China tech rivalry.

However, Malaysia's own anxieties of possible US sanctions are not unfounded. For instance, Anwar's vocal response to not recognising unilateral US sanctions on Iranian oil, and his refusal to sanction Palestinian groups like Hamas[8] have invited the threat of secondary retaliation from the US. Already, the US Treasury has slapped sanctions on four Malaysian entities in December 2023 on accusations that they violated sanctions in exporting components to Iran to produce drones for militant proxy groups in the Middle East[9].

Malaysia is reading the writing on the wall as a signal that more intense global geoeconomic decoupling is underway. It is likely then that Malaysia may intend to leverage on a nascent BRICS settlement mechanism, especially if such decoupling intensifies or if the outcome of the 2024 US elections places more nations and their supply chains under the ire of Washington. Ultimately however, the consensus within Malaysia remains cautiously optimistic with a view to the upside on preparing for a future of greater geoeconomic flexibility.

[4] *Bernama News. 26 June 2024. "Malaysia has to be cautious in positioning itself in relations with other countries, Dewan Rakyat told". https://www.bernama.com/en/news.php?id=2311817*

[5] *Reuters. 10 October 2023. "Malaysia pursuing more de-dollarisation, increasing trading in local currency – PM". https://www.reuters.com/article/markets/currencies/malaysia-pursuing-more-de-dollarisation-increasing-trading-in-local-currency--idUSP8N34V028/*

[6] *A. Panetta. 13 March 2022. CBC News. "The U.S. has unleashed weapons of financial destruction, and economists are watching for long-term fallout" https://www.cbc.ca/news/world/us-reserve-currency-1.6382567*

[7] *Promoting Monetary Stability. 2023. Bank Negara Annual Report 2023. "Promoting Cross-border Local Currency Settlement (LCS)." Bank Negara Malaysia.*

[8] *Z. Saieed. 9 May 2024. "Malaysia rebuffs US on Iran oil sales, says it recognises only UN sanctions". The Straits Times. https://www.straitstimes.com/asia/se-asia/malaysia-rebuffs-us-on-iran-oil-sales-says-it-recognises-only-un-sanctions*

[9] *R. Rahim. 9 May 2024. "Sanctions imposed on four Malaysian-based companies accused of helping Iran have been impactful, says US Treasury official". The Star. https://www.the star.com.my/news/nation/2024/05/09/sanctions-imposed-on-four-malaysian-based-companies-accused-of-helping-iran-have-been-impactful-says-us-treasury-officia*

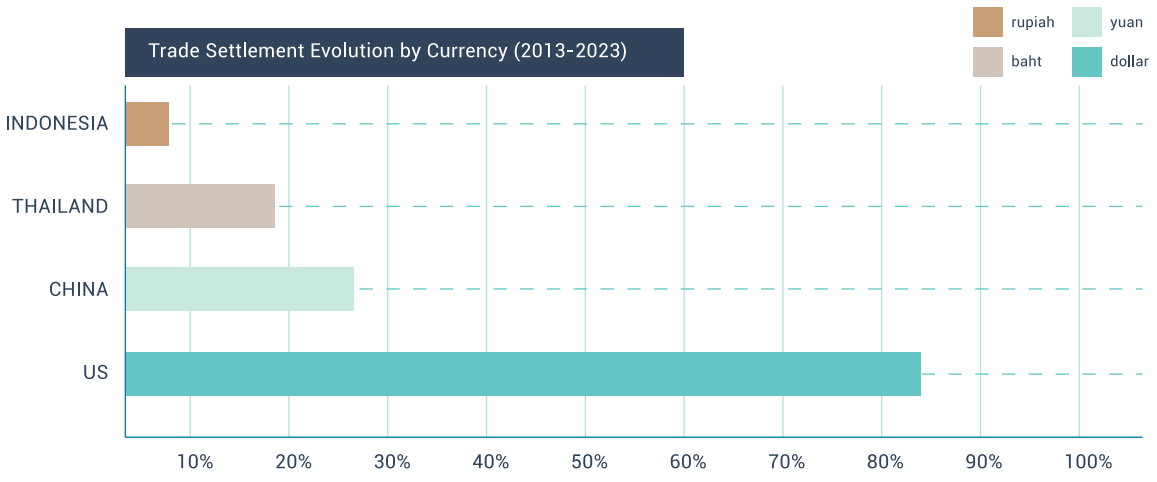
Future of Malaysia's Financial Architecture

BRICS, which started primarily as a geoeconomic initiative to facilitate the diversification of economic clout towards the Global South, has grown into a multilateral platform representing the common interests of emerging powers. However, with US-Sino trade tensions likely to escalate in the near and medium term, the strong trade relations ASEAN states have developed with China over the past decade conflict with their dependence on the US-based international financial system for trade. This leaves ASEAN feeling vulnerable and, as such, it continues to promote cross-currency settlement mechanisms as a workaround in response to possible hostile scenarios. It makes geostrategic sense, therefore, that the 42nd ASEAN Summit would promote the use of local currency transactions.

There exists a substantial gap between such geoeconomic concerns and reality. Peering into Malaysian trends reveals interesting details on the extent of cross-border local currency settlements. Over the past decade, Malaysia's relative trade share with China and ASEAN increased collectively by 6 percentage points to 44%, while trade with the US declined by 2 percentage points to 10%. Despite this, the bulk of Malaysian trade (82%) in 2023 continued to be settled in US dollars. The overriding preference for the greenback among local exporters is largely to ensure that dollar incomes match their external debt exposure, while also ensuring the ease of cross-border settlements among large corporations. This phenomenon is not unique to Malaysia, as the dominance of the dollar is structural to global settlements[10].

However, the expansion of the yuan and ASEAN currencies in bilateral trade is a noteworthy emergence. A decade ago, cross-border yuan settlements were virtually non-existent but in 2023, 27% of Malaysia's trade settlements with China used local currencies. Similar observations can be made about inter-ASEAN trade where now 16% of settlements in 2023 were done through local currencies, constituting 19% of trade with Thailand and Indonesia (8%) compared with 6% and 5% a decade ago.

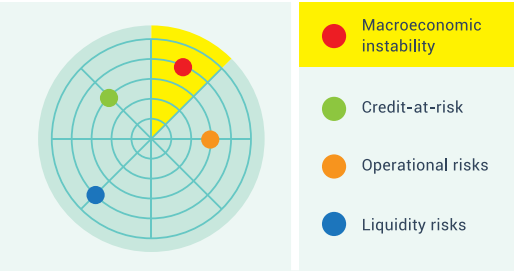
In this there appears to be, at least on the surface, synergic opportunities between the ASEAN and BRICS bloc. It is likely that the push for cross-currency settlement mechanisms will remain a key policy agenda.



[10] *Ibid.*

Diversifying Global Financial System Remains a Complex Task

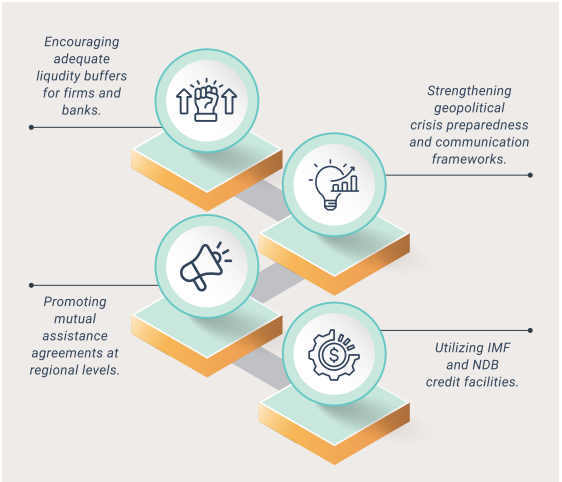
The spectre of more intense financial decoupling poses multiple risks and challenges to future macroeconomic stability of the global financial order. In a "real economy" sense, disruptive bifurcation policies that concentrate supply chains among geostrategic allies impacts macro-level growth and inflation, and creates adverse credit exposures, ultimately reducing both risk diversification and asset price stability. From a firm-level perspective, this primarily means increased risk premiums and funding costs, lower profitability and eventually, less liquidity in the macro economy. Ergo, banks with lower capitalisation ratios are likely to be more adversely impacted than banks with greater capital buffers against geopolitical risks.



Indeed, a 2023 panel data analysis by the IMF confirms that an increase in "geopolitical distance" with foreign creditors has significant adverse impacts on banking performance indicators. On average, emerging markets experienced a 0.6% increase in banks' funding costs, resulting in total loan disbursements falling by over 6% (with a 13% drop recorded in extreme cases). Moreover, when controlling for banks with high (more than the 75th percentile) versus low capitalisation ratios, profitability for the latter group declined 15% more than their highly capitalised bank counterparts[11].

Therefore, Malaysian policymakers should be aware of the macro-financial risks associated with a sudden global rise in geopolitical tensions, especially if this spills over into more heated conflict. Firms and financial institutions reliant on external financing should, in response to such risks, ensure adequate liquidity buffers and safety nets. The transmission of geopolitical shocks should consider the quantification of credit-at-risk, liquidity, and operational risks in the supply chain, calibrated and stress-tested to protect against the losses of tail risks.

Policymakers should also encourage and strengthen geopolitical crisis preparedness, communication, and management frameworks to deal with potential financial and non-financial instability arising from escalations in geopolitical tensions, not only at the national but also regional level. Moreover, mutual assistance agreements could help smaller nations manage such shocks. In particular, the International Monetary Fund (IMF) and the NDB could play an important role in the mitigation of risks through credit facilities and policy advice.



[11] *Global Financial Stability Report. April 2023. Chapter 3. "Geopolitics and financial fragmentation: Implications for macro-financial stability." International Monetary Fund (IMF)*

Geopolitically, Malaysia's interest in BRICS also seems to mirror the ambitions of other non-aligned, trade-oriented members like the United Arab Emirates (UAE), where the nation remains staunchly non-aligned. Like Malaysia, the nation considers its BRICS membership as a strategic opportunity to enhance its trade access to new markets in the Global South while maintaining neutrality with Western markets. The UAE is also a shareholder in the NDB, providing loans for development financing projects in emerging markets while leveraging on diversified financing options for its consumers. This leaves open the possibility for deeper bilateral partnerships and synergies between both Malaysia and the UAE, such as creating new innovative financial tools in Islamic financing, leveraging on global business opportunities in other emerging markets and providing technical support.

While the impact of BRICS is unlikely to usurp the global financial architecture's status quo any time soon, in the new global landscape of shifting geoeconomic groupings and the possible election victories of populist candidates in advanced economies, it is best to err on the side of caution, keeping in mind that the needle of global trade could move in more rapid and unpredictable directions should trade tensions worsen.

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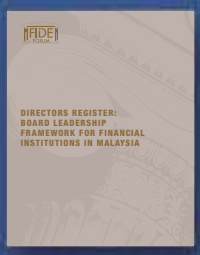

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FIDE FORUM
11, Jalan Dato' Onn
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50480, Kuala Lumpur, Malaysia.

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45, Jalan PBS 14/2,
Taman Perindustrian Bukit Serdang,
43300 Seri Kembangan, Selangor.
Tel.: 03-8948 8333
Email: pmeijiartwork@gmail.com

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