Digital Lending Can Turn the Dial on Financial Access for MSMEs

September 2023
By Yulius, Davids Tjhin, Yohanes Lukiman, Verra Wijaya, Yang Yu, Yi Xian Chew, Qi Yang How

BCG + ASEAN INDONESIA 2023 BUSINESS ADVISORY COUNCIL

Boston Consulting Group partners with leaders in business and society to tackle their most important challenges and capture their greatest opportunities. BCG was the pioneer in business strategy when it was founded in 1963. Today, we work closely with clients to embrace a transformational approach aimed at benefiting all stakeholders—empowering organizations to grow, build sustainable competitive advantage, and drive positive societal impact.

Our diverse, global teams bring deep industry and functional expertise and a range of perspectives that question the status quo and spark change. BCG delivers solutions through leading-edge management consulting, technology and design, and corporate and digital ventures. We work in a uniquely collaborative model across the firm and throughout all levels of the client organization, fueled by the goal of helping our clients thrive and enabling them to make the world a better place.

The ASEAN Heads of State and Government (HOSGs) formed the ASEAN Business Advisory Council (ASEAN-BAC) in November 2001 at the 7th ASEAN Summit in Bandar Seri Begawan, Brunei Darussalam. As the leading ASEAN voice headed by the private sector, ASEAN-BAC was established in April 2003 to support the region's efforts to achieve economic integration.

As the lead of ASEAN-BAC 2023, Indonesia Chamber of Commerce and Industry (KADIN Indonesia), has a clear goal: to accelerate the region's transformation via innovation and inclusivity. With the theme "ASEAN Centrality: Innovating towards Greater Inclusivity," KADIN Indonesia focuses on three core values: centrality, innovation, and inclusiveness that are reflected through five key priorities: digital transformation, sustainable development, health resilience, trade facilitation, and food security.

BCG as ASEAN BAC's Knowledge Partner

Boston Consulting Group is the official knowledge partner of the Digital Working Group of the ASEAN Business Advisory Council (BAC) 2023 under the Indonesia Chairmanship. This study forms the foundation of the Digital Working Group's legacy project on MSME Digital Lending. The white paper of the ASEAN BAC legacy project on MSME Digital Lending seeks to shine a spotlight on the pivotal issue of limited MSME access to financing within the ASEAN region, and the massive potential uplift to be unlocked. It intends to elevate the discourse to the relevant stakeholders, highlighting it as a focal point of discussion, evaluation, and action within the ASEAN framework. The relevant ASEAN BAC whitepaper is available on the ASEAN BAC website (https://aseanbacindonesia.id/).

Improving MSME financing gap is the region's priority

Micro, small, and medium-sized enterprises (MSMEs) account for up to 99% of total enterprises across ASEAN, contributing 85% of regional employment, and generating 45% of gross domestic product (GDP).

Despite being the backbone of the regional economy, MSMEs face persistent challenges in access to finance to fund, grow, and sustain their businesses.

Governments across ASEAN have fully recognized the difficulties MSMEs face in accessing financing, and the importance of solving this problem. At the regional level, the ASEAN SME Strategic Action Plan for SME Development 2025 outlines increasing access to finance as one of its five core strategic goals, underscoring the need to scale up access across the region. [Exhibit 1.] At the country level, member states have implemented various policies and initiatives to improve financial access for MSMEs.

Access to finance for MSMEs is crucial for the business ecosystem, as it enables MSMEs to achieve higher productivity, enhanced innovation, improved cash flow, sustainable growth, and new market opportunities.

Exhibit 1 - Improving MSME access to finance is a key priority of ASEAN

Improve access to finance is one of the key strategic goals of ASEAN SME Strategic Goals

5 Strategic goals of ASEAN SME Strategic Action Plan for SME Development 2025

- Promote Productivity, Technology & Innovation
- Increase access to finance
- Enhance market access & internationalization
- Enhance policy & regulatory environment
- Promote entrepreneurship & human capital development

ASEAN countries have implemented initiatives to improve access to finance

Myanmar	Introduced Financial Inclusion Roadmap 2019–2023 that prioritizes MSMEs access to finance
Philippines	Launched the National Strategy for Financial Inclusion 2022 – 2028 with one of the goals to increase access to finance
Indonesia	Implemented new regulation that requires banks to disburse at least 20% of their loans to MSMEs
Singapore	Set up SME Centres to support SMEs' business growth through areas such as financing
Malaysia	Established Development Financial Institutions with specific mandate to support MSME growth and financing needs
Thailand	Established EXIM Thailand[1] that provides MSME services e.g., SME start-up credit, SME border trade

1. Export-Import Bank of Thailand

Source: ASEAN Strategic Action Plan for SME Development 2016-2025; Press Search

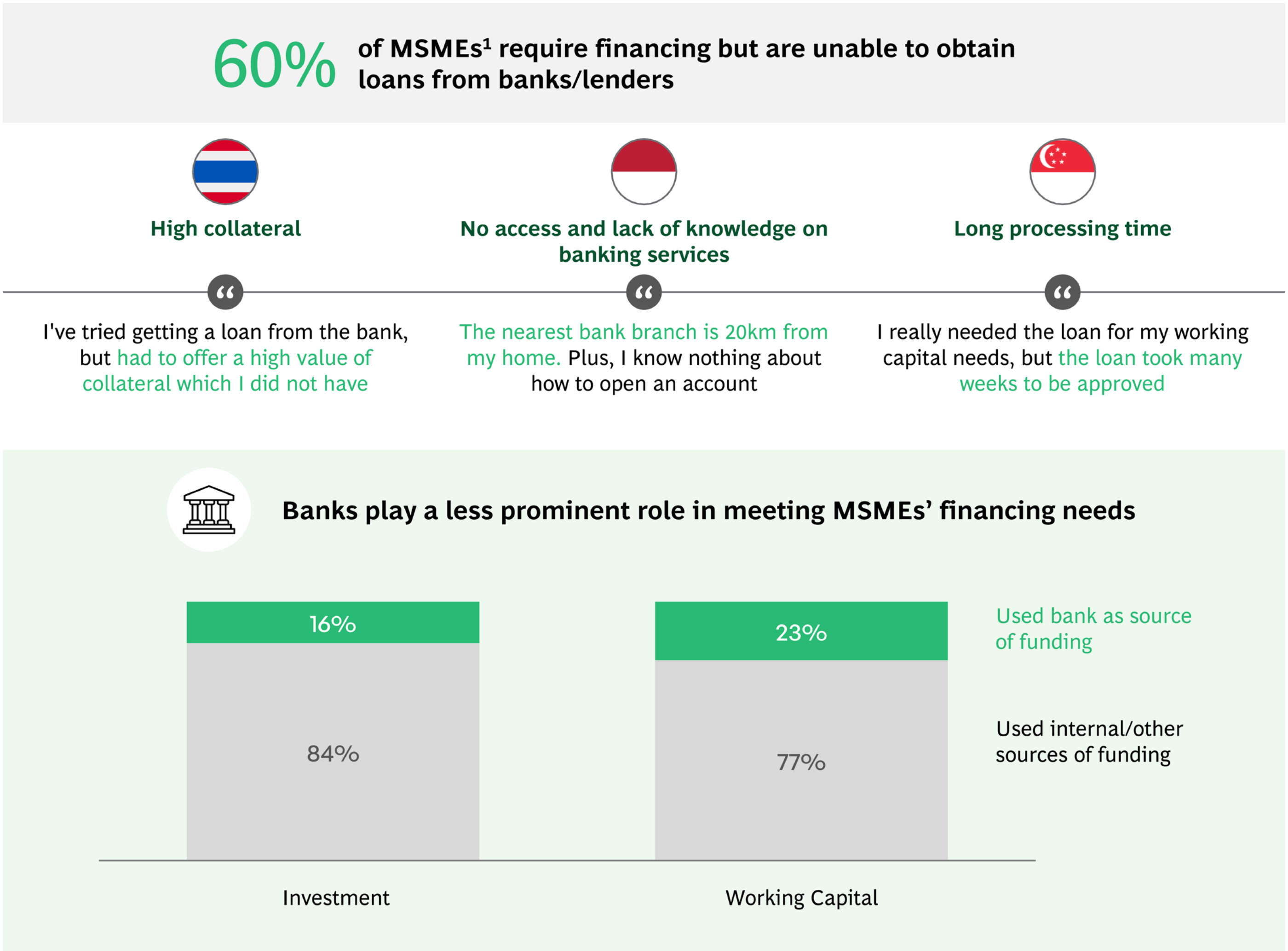
Solving the financing problem for MSMEs is also crucial to regional economic development. According to an analysis by the International Finance Corporation, every additional million dollars invested in financing MSMEs in developing countries creates an average of 16.3 additional jobs per enterprise. The International Monetary Fund (IMF) reports that improved access to formal financing can deliver a 2.5% growth in labor productivity. Closing the gap in financial inclusion between emerging and developed economies could increase GDP growth by up to 1% annually.

Although access to financing is extremely important for MSMEs, and even the broader economy, MSMEs often encounter challenges when accessing finance from traditional banks.

According to a World Bank survey, 60% of MSMEs require financing but are unable to access it from banks or lenders. [Exhibit 2.] This is shown in the share of MSME financing needs addressed by traditional financial institutions, with banks used for just 16% of investment needs, and 23% of working capital requirements. The remaining financing needs are addressed by internal funds or alternative, often informal forms of funding.

Many MSMEs are underserved by incumbent banks, with several major hurdles hampering appropriate financial access. One core challenge, for example, is that MSMEs may lack credit history or appropriate collateral. As a result, banks see them as too risky or costly to lend to.

Exhibit 2 - Access to financing remains a major challenge for MSMEs



1. N=666 MSMEs polled across ASEAN-6 (ID, MY, SG, PH, TH & VN)

Source: World Bank Enterprise Survey 2021; SEA-6 O2O Platforms MSME 2021 Survey

Digital solutions expand financing access to MSMEs

Digital lending has increased significantly over the past decade, as financial technology (fintech) and technology forms unlock innovative pathways to meet the financial needs of MSMEs that are otherwise underserved by traditional institutions. This new wave of digital products and services provides alternative solutions to bridge this key financing gap.

Digital technology solutions have been used to improve consumer engagement points throughout the lending journey. [Exhibit 3.]

Exhibit 3 -
Digital solutions could improve the overall customer lending journey

Lending process		Solutions
Customer Acquisition	• Bank reaches customer through available distribution channels • Customer is made aware of the available financing options	Adopt **hybrid model & embedded finance** to expand customer reach
Loan Origination	• Customer learns about the documentation requirements and submit necessary documents e.g., company financials to the bank • Bank and customer discuss financing requirements i.e., loan amount, loan tenor • Bank performs customer verification and background checks	Foster **customer education** and ensure **easy & seamless** application process
Credit Underwriting	• Bank assesses customer credit worthiness and prepares the credit proposal for approval. Information collected from multiple sources–credit bureau, financial statements, etc	Enhance **data availability, quality & integrity** Strengthen **credit risk models** to incorporate a wide variety / alternative data sources
Loan Agreement	• Bank approves or rejects the loan proposal and prepares the letter of offer to be signed by customer if agreeable	Provide **customized solutions for MSME** financing needs
Monitoring & Collection	• Bank monitors business performance of borrowers & repayments and loan servicing by customer	Leverage technology for **loan monitoring and risk management processes**

Digital lending is an attractive proposition, driven by one core benefit—**reaching more customers with lower operating costs.** It allows loan providers to access rural areas without having to establish physical branches, which can be often impractical and financially infeasible for traditional banks. Digital access to loans also reduces the need for customers to undertake a potentially time-consuming in-person visit.

Embedded finance, which integrates financing tools or services into non-financial providers, is another beneficial approach which enhances customer reach. For instance, an electronics and home appliances store can partner with loan providers to offer installment payments. This simplifies the financial process for customers and gives them more options to access financing when they need it.

Case study: Digital bank collaborates with village managers to help rural MSMEs gain financial access

A Chinese digital bank, and affiliate company of a major fintech group, provides unsecured loans for MSMEs. It leverages a hybrid approach to risk management and assessment, utilizing online and offline data to provide financing services to rural MSMEs.

The digital bank works with over 2,000 county and village managers to help rural MSMEs gain financial access, collecting data from both financial documents as well as local stakeholders. Applicants visit a local village center to discuss financing options and provide business and identity documents, with the village manager then recommending a personalized loan based on the business needs. Credit is disbursed, with the village manager who recommended the borrower having responsibility for ongoing monitoring and management.

The digital bank leverages rich data resources of a major sister-company ecosystem to enable robust credit assessment using a big data approach. This incorporates sophisticated satellite monitoring of agricultural land to assess and monitor crop performance. Analysis is backed by strong risk management through algorithmic assessment leveraging over 3,000 data points.

To date, the operator has delivered loans valued at over US$290 billion across 750 counties in China, serving over 21 million MSMEs and boasting a non-performing loan (NPL) rate less than half the national average.

Digital services provide a **convenient, simple, and accessible customer experience** that empowers customers to engage with relevant services themselves. Customers have direct access to manage their banking needs, usually accessible through mobile phones, instead of relying on a teller in traditional bank branches.

Case study: WeBank offers tech-based digital banking products, ensuring secure, fast, and exceptional customer experience for MSMEs

WeBank, a digital-only bank based in China, offers online and unsecured loans to MSMEs via digital products such as Weiyedai ('small-business loan'). Weiyedai debuted in 2017, and was intended to boost entrepreneurship in China. The product is designed to meet the short-term, small-amount, frequent, and urgent financing needs of MSMEs.

The tech-based solution leverages an end-to-end approach from loan application to disbursement, all done exclusively through mobile phones. There is no paperwork or collateral required, with loans credited in as little as one minute, with a significant US$700,000 loan ceiling. This innovative approach lowered the average cost per customer to just US$0.50, compared to up to US$15 for some traditional banks.

The solution leverages the Openhive technology—WeBank's cloud-based, fully-distributed architecture solution. It guarantees a truly digital, seamless customer experience that is always available. The technology is highly flexible and scalable, with record time from new product ideation to live launch in 10 days. The annual IT ops and maintenance cost per account is less than US$0.30, which enables WeBank to continuously serve the underserved segment in market. Leading regional banks in Southeast Asia have used the Openhive technology to build their own banking systems.

This tech-focused approach has seen the bank extend into 30 provinces in China, serving over 4.1 million MSMEs applications, and disbursing more than US$140 billion in loans.

The availability of digital data helps lenders assess borrowers' credit risk more accurately by leveraging alternative consumer data such as telco data, utility payments, or even business performance, to provide deeper insights into the creditworthiness of a customer. This is particularly beneficial for unserved and underserved populations, including MSMEs, who often struggle to provide the data that traditional banks need to assess their creditworthiness.

Case study: Commercializing propriety credit scoring tool as API to lenders

An Indian digital lending platform commercialized its propriety credit-scoring tool as an API to lenders, providing a cash-flow-based approach to assess creditworthiness. This approach leverages alternative financial data such as transaction values, transaction counts, business vintage, and other data points to evaluate MSMEs, enhancing data availability and quality to strengthen credit risk models.

The lending platform takes a lending-as-a-service approach, partnering with enterprises that deal with MSMEs, with cash-flow and transactional data shared via APIs. Creditworthiness can then be assessed using the propriety credit scoring technology, with the model continuously under development to evolve and produce better results. Partner lenders can leverage the platform to assess whether to disburse a loan to an applicant, providing an innovative and lucrative opportunity to access the substantial MSME market.

The lending platform has gained more than 20 partners across enterprises and lenders, serving over 350,000 MSMEs and generating over 600,000 credit assessments via its credit scoring platform.

Digital lenders have the flexibility to **tailor their offerings to meet MSME-specific needs**, not limited to traditional banking products.

Case study: Investree - Providing a one-stop platform solution for MSMEs

Investree, an Indonesian fintech firm, provides accessible and customized solutions for individuals and MSMEs via its one-stop platform.

It has created an ecosystem supported by multiple industry partners, extending beyond lending to offer more comprehensive business solutions—including e-invoicing and lending-as-a-service, payments, e-procurement, and MSME credit scores. Within the wider ecosystem, MSMEs are able to build their own credit profiles through multiple touchpoints and, simultaneously, Investree gains access to MSME transactional data which facilitates their credit assessment. The credit assessment process is also supported by its AI-based alternative credit rating platform that utilizes data such as user behavior and business relationships.

These innovative approaches have seen fintech lend to over 25,000 unique borrowers, partnering with 60,000 unique lenders to disburse over US$1 billion in business loans.

On monitoring and collection, the last step of the loan journey, digital could be leveraged to **lower the loan default rate**. For example, data analysis can be performed to provide early detection of vulnerable borrowers which allow lenders to move quickly to mitigate risk.

Case study: OakNorth - Developing credit intelligence platform for loan monitoring

OakNorth, a fintech that operates a bank in the UK, has white-labeled its credit intelligence platform to other financial institutions. This allowed the bank, on a group level, to reach profitability after its first year of operation.

The company's credit intelligence platform provides a granular, forward-looking view of risk for each borrower, enabling commercial banks to identify early warnings of distress or loan risks and opportunities to support borrowers' growth. It also licenses its AI-driven credit platform technology to partner with and assist other lenders.

The fintech has three core components of its credit intelligence platform. First, it includes scenario analysis which enables commercial banks to identify vulnerable borrowers, prioritize high-risk borrowers, and react quickly to mitigate risk. Second, loan monitoring is enhanced through increased efficiencies and dynamically prioritized reviews. Third, it enables banks to develop climate mitigation strategies for their loan portfolio by calculating financed emissions and analyzing credit risk.

This approach enabled OakNorth to establish successful partnerships with a wide base of lenders and drove an impressive loan performance which saw a default rate of just 0.07%—far below the 0.32% sector average.

Digital lenders have made it easier and faster for MSMEs to access loans, filling a gap in the market. However, they still face some challenges in scaling out digital lending in ASEAN—regulations, data availability, and digital and financial literacy are some of the hurdles.

Regulation remains a key challenge highlighted by industry players, noting the imperative to balance risk and access and the need for a level playing field. "*Fintech players are supportive of the government agenda to support MSME growth. We are trying to lend more to MSMEs, but on the other hand, regulators also have strong concerns on high NPL. Regulators need to strike a balance between managing the risk and promote financing for MSMEs,*" said the Senior Vice President and Head of Business Development of a platform business in Indonesia.

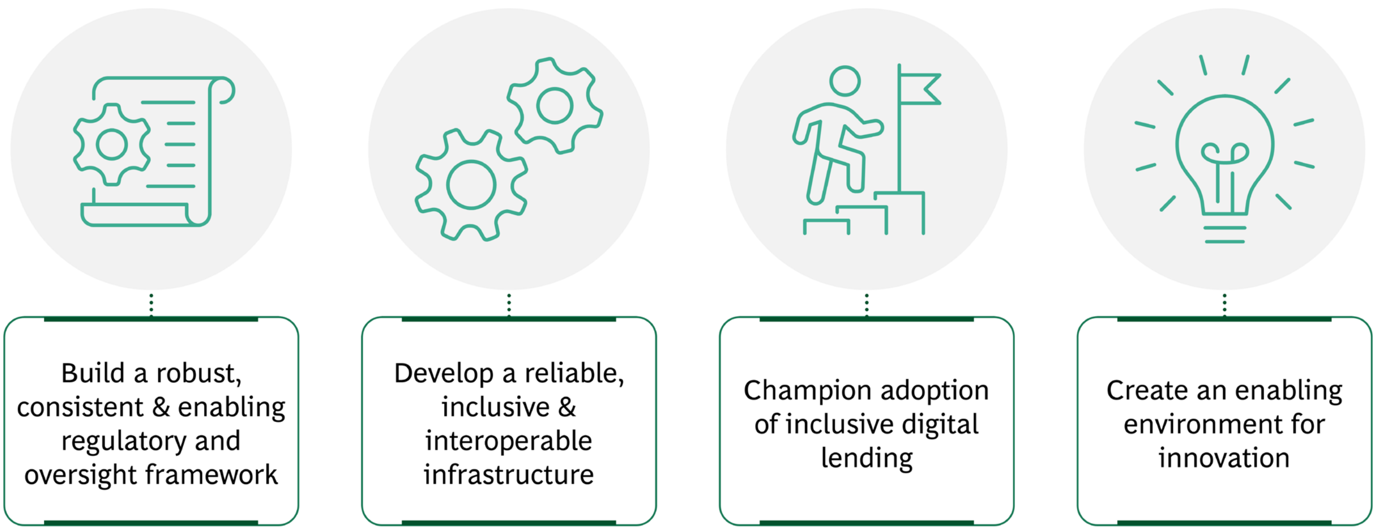
Data availability is another persistent challenge, as MSMEs may not have the right financial credentials to access lending products, or lenders themselves do not have access or capability to utilize non-traditional data to appropriately assess MSME creditworthiness and enable their financial access. "*Some financials provided by MSMEs are incomplete, or don't comply with accounting standards, and this just makes our credit assessment more challenging as we cannot fully rely on the data,*" said the Head of Project and Business Planning for an Indonesian P2P lending platform.

Digital and financial literacy must also be enhanced, ensuring MSMEs understand financial products and topics, and are aware of how and where they can best access and navigate financing options. "*Most MSMEs lack education on financial and debt management, and lack understanding on interest rates and repayment plans,*" said the Head of SME Banking for a lending player in Myanmar.

Unlocking the value of digital lending

The ASEAN region has seen a positive trend in digital lending, but there are many opportunities to further improve the lending landscape. Nations across the region are already exploring routes to unlock the opportunities, with an encouraging array of initiatives already in place. This report identified four effective strategies that have been adopted by ASEAN member states. [Exhibit 4.]

Exhibit 4 - Four key factors to accelerate Digital MSME lending



1. Build a robust, consistent and enabling regulatory and oversight framework

A strong regulatory framework is needed to empower and enable digital banks to operate. ASEAN member states have already launched digital frameworks for licensing and operating these emerging financial players. In May 2016, Malaysia launched a regulatory framework for peer-to-peer (P2P) lending, allowing businesses to borrow and investors to lend through a registered platform. Five digital banking licenses were also granted in 2022 as the nation took the next step toward digital banking.

Singapore also established a digital banking framework in 2019, setting out the eligibility criteria and safeguards for full and wholesale digital banks. Meanwhile, Indonesia introduced its own digital banking regulation in 2021, outlining licensing and operational requirements.

Frameworks should also promote the responsible use of technology and financial consumer protection to ensure a robust and trusted ecosystem. In 2018, the Monetary Authority of Singapore (MAS) introduced the Principles to Promote Fairness, Ethics, Accountability, and Transparency (FEAT) in the use of Artificial Intelligence and Data Analytics for the financial sector. This serves as a guideline to ensure consumer interests are safeguarded while pursuing innovative ventures, backed by a consortium of over 25 industry financial players, insurers, and AI firms working to implement and refine these principles.

It is equally important to establish a framework to support partnerships between fintech and financial institutions to enable a collaborative and innovative ecosystem. Singapore Fintech Association launched a digital self-assessment framework that acts as a guideline to facilitate partnerships and address compliance gaps. It helps increase efficiency, enabling fintech players to align with traditional financial institutions' minimum compliance requirements while maintaining a baseline of governance, rigor, and consistency, as well as boosting financial institutions' confidence in fintech players.

Introducing initiatives that support access to capital for fintech players will also help accelerate growth. Malaysia's government-owned investment firm, Cradle Fund, provides grants, investments, and tax incentives to fintech startups. In Indonesia, BRI Ventures, a venture capital firm owned by Bank Indonesia, invests in startups to empower the ecosystem.

It is vital to ensure a level playing field for both fintech and financial institutions, with clear participation rules that promote healthy collaboration. Coordinated dialogues across key industry stakeholders, as well as robust monitoring and sector evaluation, can help effectively inform this engagement.

2. Develop a reliable, inclusive, and interoperable infrastructure

Credit bureaus or centralized databases should be established as the foundation to an interoperable and integrated financial ecosystem. Experian Singapore collects and aggregates credit information from various sources such as financial institutions, trade suppliers, and public records. It also developed the SME Network Score, which is a credit risk scorecard that predicts the ability of MSMEs to repay loans.

Efforts should also be taken to support MSMEs' disclosure of financial credit information. In 2018, Bank of Indonesia launched its Financial Information Record Keeping (SI-APK) system for MSMEs, enabling them to record and generate financial reports in a timely manner according to best-practice financial standards. This helps build out appropriate financial data while easing the administrative burden on MSMEs, providing a stronger basis for access to financing.

Establishing data-sharing infrastructure to facilitate fair credit assessment of MSMEs is also essential. In one example from outside of the Southeast Asia region, Reserve Bank of India launched its Account Aggregator Network in 2021 to help unlock this opportunity. The system enables sharing of financial data via open APIs, allowing data to be shared from financial information providers to financial information users. It triggered a shift from asset-backed lending to cashflow-based lending by leveraging data from multiple sources such as invoices, receipts, and tax returns to support credit assessment.

Ecosystem players and decision-makers should look to facilitate ease of data interoperability using consent-based data exchanges, as well as federated learning, protecting data ownership while unlocking access to valid use cases. Any such systems must ensure they respect national data guidance and standards, and at the same time encourage and enable cross-border data utilization with appropriate regulated mechanisms.

3. Champion the adoption of inclusive digital lending

Improving MSME digital lending literacy is pivotal to improving their financial access. ASEAN countries have introduced a variety of initiatives to deliver on this need. Singapore introduced the SME Financial Empowerment program to build foundational digital literacy and enhance knowledge of topics such as alternative financing options and personal financial management. Vietnam introduced a similar initiative with its SME Support Centre, offering training and consultancy services for MSMEs.

Lenders also need to accelerate their digital transformation to enhance digital lending capabilities. Indonesia's Financial Services Authority (OJK) issued a digital transformation blueprint for banking in 2021, outlining a roadmap to transform the sector. It focuses on five core elements of data governance, technology, risk management, collaboration, and institutional arrangements to encourage banks to create innovative and consumer-oriented financial products. Additionally, it introduced the Digital Maturity Assessment for Banks tool which helps banks identify necessary areas of improvement and develop plans to achieve their digital goals.

Opportunities for connection between players and partners are also essential in enabling collaborative practices that unlock inclusive lending opportunities. The Singapore Fintech Festival is a clear example, establishing itself as a premier platform for engagement and collaboration in the global fintech community. The event provides opportunities for networking, knowledge sharing, and matchmaking fintech firms with interested investors.

4. Create an enabling environment for innovation

Regulatory sandboxes play a crucial role in fostering an evolving ecosystem that can respond to the changing needs of MSMEs, by providing a safe environment to test innovation.

Various ASEAN countries have already set up regulatory sandboxes, creating an environment where fintech firms can innovate without exposing customers, businesses, or the wider financial ecosystem to significant stress. These live environments ensure financial stability and integrity while promoting innovation, with the right safeguards in place. Indonesia introduced two sandbox regimes for fintech companies facilitated by OJK and Bank of Indonesia, with a total of 88 participants engaged with the OJK sandbox as of 2023.

Grants should also be introduced to support and encourage innovation and spur development of new products and services. MAS has introduced three rounds of funding in Singapore under its Financial Sector Technology and Innovation (FSTI) Proof of Concept Scheme since 2015. Funding is used to drive experimentation, development, and dissemination of nascent innovative technologies in the financial services sector, with the third run expected to release SGD150 million over three years from 2022.

> Digital lending provides a valuable pathway to enhance financial access for MSMEs. These innovative products and services offer a powerful platform to address the key barriers limiting access to finance. With the right ecosystem in place, digital lending could uplift MSMEs, creating more value for businesses and communities across the region, and help embed an era of renewed and inclusive economic growth through more equitable financial access in ASEAN.

About the Authors

Yulius is a Managing Director and Senior Partner at BCG's Jakarta Office. You may contact him by email at Yulius.Yulius@bcg.com

Davids Tjhin is a Managing Director and Partner at BCG's Jakarta Office. You may contact him by email at Tjhin.Davids@BCG.com

Verra Wijaya is a Knowledge Expert and Team Manager, Public Sector at BCG's Singapore Office. You may contact her by email at Wijaya.Verra@bcg.com

Yang Yu is a Knowledge Expert, Fintech and Digital in Financial Institutions at BCG's Singapore Office. You may contact him by email at Yu.Yang@bcg.com

Qi Yang How is a Lead Knowledge Analyst and Team Lead, Financial Institutions at BCG's Singapore Office. You may contact him by email at How.QiYang@bcg.com

Yi Xian Chew is a Knowledge Analyst, Financial Institutions at BCG's Singapore Office. You may contact her by email at Chew.YiXian@bcg.com

Yohanes Lukiman is a Board Member at ASEAN Business Advisory Council Indonesia and Digital Transformation Policy Manager (Indonesia ABAC Chairmanship 2023)

Acknowledgments

The authors would like to thank WeBank, Investree, and OakNorth for their valuable input, which has enriched the case studies featured in this report.


BCG
ASEAN INDONESIA 2023
Business Advisory Council