*Financial Digitalization for MSMEs and Its Economic Effects*

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# Proposed Actions for Policymakers and Regulators

## INTRODUCTION

For the past 15 years, the Asia-Pacific Financial Inclusion Forum (APFIF) has served as a premier platform for advancing regional dialogue on inclusive finance across APEC member economies. It has brought together policymakers, regulators, industry leaders, and development partners to build consensus around strategies that foster inclusive economic growth. As part of the broader APEC Finance Ministers' Process, the Forum has delivered a series of actionable proposed actions on a range of themes such as digital financial services, credit infrastructure, financial literacy, consumer protection, remittances, and green financing for micro, small and medium-sized enterprises (MSMEs). These efforts directly support the APEC Putrajaya Vision 2040, particularly its emphasis on innovation, digitalization, and inclusive growth.

The 2025 Forum, held in Jeju, Republic of Korea, continued this tradition with the theme "Financial Digitalization for MSMEs and Its Economic Effects." The theme reflects both the opportunities and challenges arising from the rapid digital transformation of financial services in the Asia-Pacific region. Digital technologies are reshaping how MSMEs access finance, through innovations such as AI-enabled credit scoring, embedded finance, e-commerce platforms, and peer-to-peer lending. These advances have the potential to significantly reduce transaction costs, increase outreach, and better tailor financial products to the needs of small businesses.

However, while the digitalization of finance brings new opportunities, it also introduces new risks. Concerns around data privacy, cybersecurity, consumer protection, and the digital divide must be addressed to ensure that the benefits of innovation are equitably distributed. Building secure, inclusive digital ecosystems, and aligning regulatory frameworks across economies, requires coordinated action. APFIF provides a dedicated platform for APEC economies to collectively explore how to foster such ecosystems, ensuring digital finance works for all, especially the underserved MSMEs.

Supporting MSME access to finance is of critical importance. MSMEs account for more than 97% of businesses in the Asia-Pacific region and employ as much as half of the private sector workforce.[1] They are essential engines of economic resilience, job creation, innovation, and economic inclusion. Yet MSMEs face persistent barriers to accessing finance. Currently, nearly half of MSMEs in the region are unserved or underserved by the financial sector, and the estimated credit gap stands at a staggering USD 2.5 trillion. Addressing this gap is vital for inclusive development and long-term economic stability.

Encouragingly, APEC economies have made tangible progress in advancing MSME finance. Reforms in secured transactions frameworks, improvements in credit information systems, and the formulation of national financial inclusion strategies are just a few examples of how economies are working to close the gap. These achievements are often the result of sustained regional knowledge-sharing and collaboration fostered through APFIF and related APEC initiatives.

In 2025, APFIF brought together a diverse group of stakeholders representing financial institutions, government agencies, multilateral development organizations, fintech companies, research institutions, and the private sector. This diversity of expertise enabled a rich, multi-dimensional dialogue on the ways forward. Participants shared insights on how digital tools are reshaping the MSME finance landscape, and what policies and innovations are needed to ensure these changes promote equity, resilience, and growth.[2]

This year's proposed actions are grounded in those discussions and reflect the shared commitment of APEC economies to leverage digitalization as a key driver for inclusive economic development.

This year's Forum was made possible through the collaboration of key partners. The Asian Development Bank, the Asian Development Bank Institute, and the APEC Business Advisory Council provided essential support in shaping the agenda and facilitating knowledge exchange. The Forum was graciously hosted by the Ministry of Economy and Finance of the Republic of Korea, whose leadership and hospitality were instrumental to the event's success.

[1] See APEC article on Small and Medium Enterprises: https://www.apec.org/groups/som-steering-committee-on-economic-and-technical-cooperation/working-groups/small-and-medium-enterprises

[2] Participants included Korea's Ministry of Economy and Finance, the Asian Development Bank, the Asian Development Bank Institute, Cantilan Bank, CashNote, Accion Advisory, Ant International, the Consultative Group to Assist the Poor (CGAP), the Global Legal Entity Identifier Foundation (GLEIF), the Industrial Bank of Korea, the APEC Policy Support Unit, and Sumitono Mitsui Banking Corporation.

## PROPOSED ACTIONS FOR POLICYMAKERS AND REGULATORS

To realize the full potential of digital finance for MSMEs, policymakers and regulators must take proactive steps to shape an enabling environment. This includes strengthening core infrastructure, addressing emerging risks, and ensuring the benefits of digital innovation reach all types of MSMEs, including those operating informally or in rural areas. The following proposed actions draw on the insights and experiences shared during APFIF 2025 and outline specific policy tools and approaches that can support inclusive, responsible, and innovation-friendly financial ecosystems across the region.

### *Proposed Action 1: Embrace digital infrastructure as a public good*

Expanding inclusive digital financial services for MSMEs, especially in rural and underserved areas, requires treating foundational digital infrastructure as a public good. This includes reliable and fast internet connectivity, real-time payment systems, robust Cash-In/Cash-Out (CICO) networks, and data utilities that support inclusive onboarding, identity verification, and credit assessment. When deployed together, these components create a digital public infrastructure "stack" that enables access, reduces costs, and fosters innovation. In this context, policymakers and regulators should consider:

- Bundling investments in inclusive CICO networks, real-time payment switches, and interoperable data rails, such as offline e-KYC or account lookup, as part of a coordinated national digital public infrastructure strategy. While rural CICO access remains a critical barrier to reaching last-mile users, urban CICO networks are equally vital to ensuring widespread adoption and use of digital financial services. Strengthening CICO infrastructure across both rural and urban settings supports a seamless transition toward full digitalization, particularly for low-income users who continue to rely on cash even in urban environments.[3]
- Linking rural CICO expansion to smart, time-bound, and performance-based rural agent subsidies. Consider allowing shared "agent of last resort" models to reduce costs and increase viability in sparsely populated areas.
- Mandating open, risk-tiered access to core national payment switches to allow nonbanks, including rural microfinance institutions (MFIs) and credit unions, to connect directly. This avoids high intermediary costs and promotes innovation on top of the rails.
- Encouraging the development of standardized, open application programming interfaces (APIs) and shared data protocols for MSME digital footprints, such as point-of-sale (POS) activity, tax filings, e-commerce sales, or remote sensing data (i.e. satellite imagery used in agricultural credit scoring) so that such data can support cash flow-based lending without requiring traditional collateral. Governments can support this by making geospatial and other public datasets more accessible as part of their national digital infrastructure strategies.
- Taking steps to harmonize data standards across platforms, tax authorities, and banks to ensure data is accessible and interpretable across the financial ecosystem.
- Embedding user trust in infrastructure design through strong data governance, ownership and consent frameworks, and mechanisms to inform and redress data breaches or phishing incidents that disproportionately affect smaller or less digitally literate users.
- Fostering a trusted and competitive new data ecosystem for financial services by supporting new data infrastructure operators, promoting regulatory or industry-led governance frameworks, and ensuring financial institutions and consumers have the confidence, guidance, and safeguards to engage with third-party data and analytics providers beyond traditional credit reporting systems.

### *Proposed Action 2: Support responsible use of AI for MSME credit*

As financial service providers increasingly adopt artificial intelligence (AI) to enable faster, and more cost affordable MSME credit decisions, regulators must ensure these models are used responsibly. While AI can expand reach, it also carries risks, including lack of transparency in AI models, embedded bias, and challenges in auditing, that can unintentionally exclude vulnerable segments or reinforce existing disparities. To ensure AI serves the goals of inclusion, transparency, and fairness, policymakers and regulators should consider:

- Anchoring rules for AI use in existing data protection laws rather than standalone AI legislation. While this principle applies broadly across all digital finance users, it is particularly beneficial for MSMEs, who

[3] More information about inclusive CICO networks can be found in the CGAP article 'The Role of Cash In/Cash Out in Digital Financial Inclusion' available at: https://www.cgap.org/blog/role-of-cash-incash-out-in-digital-financial-inclusion

often lack the resources to understand or dispute potentially unfair decisions made by algorithms. Open-finance regimes grounded in data protection laws can help ensure all users, especially MSMEs, have the right to contest algorithmic decisions and port their data to competing lenders.

- Requiring simplified "model nutrition labels" to enhance supervisory oversight. These disclosures should include the variables used, recency of training data, and observed error rates disaggregated by gender or firm size. This can help ensure that AI systems do not inadvertently reward one group over another.
- Establishing clear audit and accountability mechanisms to assess model fairness. While AI systems are becoming more sophisticated, and can even adjust behavior during audits, regulators can consider adaptive audit protocols and industry-wide fairness benchmarks.
- Guarding against reverse engineering of datasets or privacy breaches that may occur in the absence of strong regulatory protections. Embedding transparency, proportionality, and explainability into AI credit decision systems is essential.
- Referring to global best practices such as Singapore's Principles to Promote Fairness, Ethics, Accountability and Transparency (FEAT Principles)[4] or the UK's Financial Conduct Authority (FCA) guidance[5] to design local regulatory frameworks tailored to emerging markets.

### *Proposed Action 3: Strengthen consumer protection frameworks*

As MSMEs increasingly transact on digital platforms and rely on digital financial services, new types of risks are emerging, especially for micro and informal enterprises. Fraud, unclear fee structures, and inadequate consent mechanisms can erode trust and participation. While disclosure remains important, it is not sufficient. Emerging behavioral research shows that users often do not comprehend standard disclosures, especially when faced with "consent fatigue." To enhance trust in digital finance and ensure sustained usage among MSMEs, regulators and policymakers should consider:

- Testing simplified, behaviorally-informed consent prompts (i.e. single-screen formats) in sandbox environments to reduce consent fatigue, improve understanding and reduce the burden of decision-making.
- Developing real-time risk monitoring dashboards using low-cost tools such as survey microsimulations or mystery shopping, as successfully piloted in the West African Economic and Monetary Union (WAEMU). These tools help detect early signs of fraud or abusive practices before trust is eroded.
- Requiring digital finance providers to publish sex-disaggregated complaint and fraud statistics. Evidence shows that women, especially in rural areas, face disproportionate digital risks[6], and transparency can prompt corrective actions.
- Introducing structured frameworks for fraud prevention, protection, and recovery. These could include:
    - Mechanisms for users to report and receive resolution for fraudulent activity;
    - Strong authentication and identity verification protocols (e.g., e-KYC, 2FA);
    - "Positive friction" features such as fraud alerts before transfers or verification steps for high-value transactions;
    - Clear accountability guidelines for providers, particularly for service disruptions or losses due to system delays or input errors, which disproportionately impact micro-merchants.
- Supporting user education campaigns focused on common digital threats (e.g., phishing), and design user interfaces with both ease-of-use and security in mind.

### *Proposed Action 4: Ensure flexible and adaptive financial inclusion policies*

MSMEs are highly diverse in size, sector, formality, and financial needs. "One-size-fits-all" approaches can lead to exclusion, especially for informal or women-led businesses. As digital financial ecosystems evolve, MSMEs increasingly find value in bundled offerings, such as embedded finance that combines credit, payments, and business services on digital platforms. In light of these developments, policymakers and regulators should

[4] Singapore's FEAT Principles are available here: https://www.mas.gov.sg/~/media/MAS/News%20and%20Publications/Monographs%20and%20Information%20Papers/FEAT%20Principles%20Final.pdf
[5] The UK's FCA Handbook is available here: https://www.handbook.fca.org.uk/
[6] Refer to research undertaken by CGAP available here: https://www.cgap.org/research/reading-deck/evolution-of-nature-and-scale-of-dfs-consumer-risks-review-of-evidence?utm_source=chatgpt.com

consider:

- Segmenting MSMEs based on firm size, sector, and formality level to better understand their needs and design flexible, tiered policy responses.
- Creating space for experimentation in embedded finance models that combine financial and non-financial services. These models often involve partnerships between financial service providers (FSPs), e-commerce platforms, retailers, or farmer producer organizations.
- Ensuring that innovation environments (e.g., sandboxes or pilot zones) allow providers to test and refine contextual solutions without over-regulation.
- Incentivizing FSPs and their partners to dedicate resources to the MSME segment. This could include:
    - Mandated lending quotas or targets (e.g., India's Priority Sector Lending framework or Indonesia's bank corporate social responsibility (CSR) requirements);
    - Credit guarantee schemes or co-lending models to de-risk MSME lending;
    - Tax incentives or regulatory flexibility for providers testing inclusive credit models.
- Promoting fair competition among platforms. While rapid customer acquisition through deep discounts is common, such practices can harm MSMEs in the long term and distort market incentives. Policymakers should enforce competition law principles to prevent abuse of dominance and ensure MSMEs retain pricing choice and provider flexibility. Examples such as India's increased regulatory scrutiny of large e-commerce platforms or the European Union's Digital Markets Act illustrate government efforts to reduce platform dominance which can disadvantage smaller enterprises.
- Encouraging pricing transparency across platforms and assess the long-term sustainability of platform-driven financing models to avoid "lock-in" effects for MSMEs.

### *Proposed Action 5: Promote interoperable, standardized digital ID and KYC systems*

While digital ID systems are essential to formalizing MSMEs and enabling access to financial services, identity alone is not enough. Onboarding MSMEs also requires verification of address, business activity, or tax records. A more comprehensive approach, linking ID systems with verified registries and embedding privacy safeguards, is needed to ensure that ID systems are both inclusive and trusted. To build robust and inclusive ID-enabled ecosystems, policymakers and regulators should consider:

- Adopting an "ID-plus" approach that links national ID APIs with relevant databases (e.g., tax, business registration) to facilitate seamless and secure onboarding of MSMEs.
- Mandating open, low-cost ID and e-KYC verification APIs. India's Aadhaar-enabled e-KYC system demonstrates how pricing verification at cost-recovery levels can reduce onboarding costs by over 90%.
- Embedding privacy-by-design principles in ID systems. For example, allow only necessary data to be shared through tokenized queries (e.g., age yes/no instead of full date of birth) to limit data misuse.
- Adopting Financial Action Task Force (FATF)-aligned, tiered KYC frameworks. These frameworks allow informal and nano enterprises to access entry-level financial services while creating pathways to higher tiers of formal financial participation as they grow.
- Encouraging interoperability between ID and financial systems so that MSMEs can use a single set of credentials across multiple providers. This reduces friction, supports competition, and enhances user control.
- Engaging with the private sector and civil society to monitor adoption, address risks of exclusion, and continually refine the system to reflect user needs and trust concerns.