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The New World of Data:

Challenges and Opportunities for the Payments Ecosystem and FinTechs

July 2025

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We're not only empowering our members through tailored events, impactful industry projects, and proactive advocacy efforts, but we're also curating, hosting, and leading the most important discussions in the payments industry.

By collaborating with regulators and official bodies regionally and globally, such as the Financial Stability Board and the Asia Business Council, we contribute to shaping policies and practices.

For more information, visit https://emergingpaymentsasia.org

The Global Finance & Technology Network (GFTN) is a Singapore-headquartered organisation that leverages technology and innovation to create more efficient, resilient, and inclusive financial systems through global collaboration. GFTN hosts a worldwide network of forums (including its flagship event, the Singapore FinTech Festival); advises governments and companies on policies and the development of digital ecosystems and innovation within the financial sector; offers digital infrastructure solutions; and plans to invest in financial technology startups through its upcoming venture fund, with a focus on inclusion and sustainability.

For more information, visit www.gftn.co

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Executive Summary

In a data-driven era, enabling interoperability, safeguarding privacy, and harmonising regulation are no longer aspirations; they are imperatives. The roundtable at GFTN Forum, Japan 2025 convened leaders from across public and private sectors to address persistent frictions in the payments ecosystem and illuminate how three critical themes, namely open data frameworks, standards harmonisation and privacy-enhancing technologies (PETs), can create more inclusive and efficient financial systems.

This roundtable built directly on the highlighted actions and insights from the March 2025 report, "The New World of Data", published by GFTN and EPAA. That earlier report called for deeper examination of four priorities: elevating MSME voices in policy, addressing regulatory mismatches, promoting API-driven interoperability, and raising awareness of PETs. These themes provided the scaffolding for this follow-up session, which focused on implementation pathways and cross-sector collaboration to close those identified gaps.

Key themes emerged around the barriers MSMEs face in accessing cross-border financial services, the urgent need for standards alignment, and the role of emerging technologies, including decentralised data protocols and PETs, in fostering both innovation and trust. The session concluded with a call for more industry-led education, public-private collaboration, and testable real-world pilot initiatives to demonstrate the viability of these innovations at scale.

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A

Open Data Frameworks

1. Elevating MSME Voice in Policy Design

Participants emphasised that MSMEs are still often treated as beneficiaries of open data frameworks, rather than as stakeholders in their design. The discussion pointed to the need for new mechanisms that go beyond surface-level consultation. One compelling proposal involved creating "live SME personas", real businesses that are tracked over time to document how policy frameworks translate into everyday operational realities. These personas could be used within regulatory sandboxes, impact assessments, or pilot programmes to ensure that policy assumptions are tested against lived experience. This idea was echoed by several participants, who saw it as a way to ground policymaking in evidence, empathy, and economic context.

There was also a call to move beyond industry roundtables and surveys and instead embed MSME voices directly into governance structures. This might include standing MSME advisory boards, co-authored policy drafts, or regional feedback loops facilitated by trade networks and fintech hubs. The goal is not simply to include MSMEs, but to centre them in the next phase of open data

2. Applying Proportionality and Measuring What Matters

Across markets, MSMEs remain disproportionately burdened by compliance requirements designed for larger players. The Ghana–Singapore corridor pilot, for instance, highlighted the pain of redundant KYB processes. One small exporter faced three separate KYBs, by the platform, the bank, and the FX intermediary, with no data reuse. Even with central bank backing, the pilot struggled with liquidity constraints and procedural friction.

Korea, by contrast, has demonstrated how a supportive regulatory posture can shift the needle. Through its sandbox initiative, Korean MSMEs launched digital lending services without needing full licensing. This dramatically accelerates the time-to-market while maintaining consumer protection. The government also backed digital loan-switching tools, giving MSMEs mobile-first access to better rates. This model exemplifies how policy proportionality, paired with digital infrastructure, can unlock participation.

Speakers also called for a shift in measurement. Often, success is measured by infrastructure deployment or API traffic. Participants urged regulators to track metrics that matter to MSMEs: how long onboarding takes, whether compliance costs drop, and whether access to credit improves.

3. Enabling Access Through Intermediaries and Digital Readiness

Despite the spread of open data infrastructure, MSMEs often lack the confidence, capacity, or tools to engage with it. The Bank of Thailand's efforts to build QR payment linkages with Cambodia, Japan, and Singapore showed that even where rails are available, awareness and trust at the last mile remain fragile.

Participants strongly supported a model where SME chambers, fintech hubs, and trade platforms serve as "data governance nodes", entities trusted by both MSMEs and regulators to interpret, mediate, and manage onboarding. One speaker suggested that we need "Open Data officers" embedded within these organisations: meaning people who can translate policy into practice on the ground.

Others stressed the importance of digital interfaces that speak MSMEs' language literally and figuratively. These include vernacular-language dashboards, mobile-first onboarding flows, and explainer content that demystifies terms like 'data portability' or 'privacy-enhancing technologies.'

Conclusion

Open data has the potential to serve as a foundational infrastructure for inclusive economic growth but only if it is implemented in a way that reflects the lived experience of MSMEs. The roundtable made clear that open data strategies must be built on more than technical pipes. It requires trust infrastructure, outcome-oriented incentives, and a governance model that actively incorporates MSME voices. Countries like Korea and initiatives like Proxtera demonstrate what's possible when experimentation is supported by regulatory flexibility, built on digital infrastructure, and aligned with inclusion-centred governance that empowers MSMEs rather than imposing one-size-fits-all rules.

> "We need to reach them where they are—even if that means creating a TikTok about what open data means for lending rates."

"SMEs don't join GFTN every year. They don't understand the policy language of open data or open finance. What matters to them is whether the product works, whether it's affordable, and whether it makes their life easier."

"Sometimes SMEs don't have enough resources to navigate the licensing maze. The sandbox lets them move quickly without compromising security or compliance."

B

Standards and Ecosystem Interoperability – Aligning Regulation, Technology, and Trust

1. Translating Technical Standards into Practical Alignment

Participants agreed that technical progress in standards, such as ISO 20022 and open finance APIs, has been meaningful. But the lived experience for MSMEs is still one of fragmentation. Even when countries adopt the same standard, differences in implementation, interpretation, and compliance layering make seamless connectivity impossible in practice.

The problem, as one participant noted, is not the lack of APIs. Rather, it is that every institution and jurisdiction speaks its own dialect of the same protocol. This creates mismatches in how data is handled, what obligations are triggered, and how responsibility is shared. MSMEs face these inconsistencies at the sharpest end, where they are often forced to repeat verification processes, reformat documentation, or navigate opaque onboarding flows simply to participate in cross-border trade.

Speakers called for regulators to move beyond technical standard-setting and invest in the hard work of interpretive alignment. These include mutual recognition frameworks, pre-approved compliance tiers for verified MSMEs, and formal mechanisms to bridge semantic and legal gaps in how data is treated across systems.

2. Trust Anchors and the Missing Legal Layer

Beyond infrastructure, the discussion turned to the foundational issue of trust. While pipes and protocols are essential, they are not sufficient to build cross-border confidence. Participants introduced the concept of "data trust anchors", regulated, neutral entities that can validate credentials, permissions, or risk assessments across jurisdictions without transferring underlying data. These trust anchors could take the form of clean rooms, certified platforms, or compliance intermediaries embedded in regulated ecosystems. Their role would be to create verifiable trust, acting as bridges where regulatory, legal, and commercial contexts diverge.

Examples from the region highlighted how this concept is already taking shape. Thailand's cross-border QR payment network required coordinated regulatory sandboxing to align liability, AML thresholds, and dispute resolution processes. Meanwhile, in Korea, trust-enabling infrastructure has allowed MSMEs to offer financial products through sandbox exemptions, showing how trust can be operationalised through clear governance models.

3. Designing for MSME Inclusion at the Edge

As previously illustrated, in one pilot, a small exporter in the Ghana–Singapore trade corridor was required to complete three separate KYB processes, by the platform, the local bank, and the correspondent institution. Each had its own format, timeline, and validation criteria. Despite central bank support, there was no shared trust layer to carry the compliance credential across systems.

To change this, participants called for digital trade infrastructure that is not only technically sound, but MSME-friendly by design. This means enabling fast-track onboarding for low-risk users, investing in digital interfaces that are localised and intuitive, and defining liability frameworks that don't leave MSMEs exposed when things go wrong.

Speakers also underscored the importance of multi-lateral coordination frameworks like the BIS Project Nexus (now evolved into Nexus Global Payments) and APEC Pathfinder initiatives as vehicles to support shared implementation and drive consistency across legal and operational domains.

Conclusion

Standards are necessary, but without shared interpretation, they are insufficient. Interoperability is no longer a technical problem. It is a trust challenge, a governance challenge, and a coordination challenge. What MSMEs need is not just infrastructure that connects, but rules that align, incentives that scale, and trust anchors that can translate across borders.

As one speaker put it, "interoperability without trust is fragile - and trust without governance is blind." For open data systems to support the smallest firms as effectively as the largest, we must design for more than connection. We must design for confidence.

> "The pipes are there. What's missing is a shared understanding of how to use them—and who's accountable when things go wrong."

> "Interoperability should feel invisible to an MSME. But right now, it feels like trying to plug a square peg into three slightly different round holes."

C

Privacy-Enhancing Technologies (PETs)

1. Shifting the Focus: From Data Movement to Verifiable Access

The session opened with a shared admission: many in the ecosystem, regulators, platforms, even technologists, remain unsure what PETs actually do, let alone how to implement them. Yet the potential is substantial. PETs were reframed not as niche cryptographic solutions, but as the trust infrastructure that allows safe collaboration between systems without moving or exposing sensitive data. Recognising both the novelty and complexity of this topic,

participants offered not only reflections but also practical suggestions. The following section combines core insights with recommended actions for regulators, platforms, and ecosystem builders who want to make PETs work, especially for MSMEs.

One speaker challenged the dominant mindset: instead of trying to standardise APIs to move data around, what if we designed systems that did not require movement at all? Technologies like zero-knowledge proofs and secure multiparty computation allow for identity, compliance, and eligibility checks without showing the underlying data. This shift, from data transfer to verifiable access, could reshape how MSMEs onboard, transact, and prove trustworthiness across borders.

For MSMEs, this model removes a critical friction. They often fear misuse of data, do not fully understand who can see what, or are priced out of building complex compliance systems. PETs offer a path where they can access services without giving away sensitive information, and do so securely, transparently, and on their terms. Participants proposed encouraging regulators to recognise PET-based compliance as a legitimate path to due diligence; developing standardised formats for verifiable credentials and consent structures; and launching pilot programmes focused on MSME onboarding or lending via PET-enabled protocols.

2. Bridging the Knowledge Gap: From Technical Jargon to Business Value

Participants noted that PETs are not new, but they remain misunderstood. Techniques like federated learning, homomorphic encryption, and differential privacy are already being used in fields like fraud detection and medical research. In Thailand, one bank is trialing federated learning to build shared risk models with a retail partner, without ever exchanging customer data. Yet despite their maturity, PETs are still seen as academic or inaccessible. Their practical relevance to payments, credit, and trade has not been clearly communicated, especially to regulators or SME enablers. The problem is not technological - it's translational. Policymakers and business leads need to see what PETs can do, not just what they are. To address this, speakers recommended tailored PET literacy campaigns, use-case framing in terms of business value ("secure lending without disclosing statements"), and safe regulatory environments to test implementations.

3. Trust Needs Governance: Building the Conditions for Safe Collaboration

The discussion then turned to the governance gap. Technology alone does not create trust. PETs can provide

the plumbing, but we still need guardrails. Questions like "Who certifies the outcomes?" or "What happens when something goes wrong?" remain largely unanswered. The idea of "digital clean rooms" emerged as a promising model, secure, regulator-approved environments where data can be analysed or validated without exposure. These could serve as bridges between entities that do not yet share full legal or commercial trust. MSMEs could benefit from clean rooms acting as compliance validators, allowing them to access services without undergoing duplicative or intrusive checks. Participants proposed establishing clean rooms with regulatory support, investing in open-source PET modules that SMEs can use off the shelf, and developing model legal frameworks to manage risk and clarify responsibilities.

Above all, PETs must be invisible to MSMEs. These businesses are not asking for zero-knowledge proofs; they are asking for faster credit, affordable tools, and trust that their data will not be misused. PETs will only deliver impact if they are seamlessly embedded in the platforms that MSMEs already use, offering clear value without adding complexity. This means building PETs into backend infrastructure, piloting SME-centric use cases that prove direct value, and ensuring PET functions are explained in clear, localised terms.

The roundtable revealed both the promise and the perception gap of Privacy-Enhancing Technologies (PETs). For too long, PETs have been talked about in abstract or elite technical terms. But their time has come, not as a future-proofing curiosity, but as a present-day tool for solving some of the most entrenched barriers to MSME inclusion, data sovereignty, and trusted interoperability. To realise this potential, the ecosystem must pivot. PETs must be repositioned, from technical jargon to trusted infrastructure. Regulation must catch up with clear rules for recognition and certification. And platforms must act with pilots that prove outcomes and partnerships that scale what works. PETs are not just about protecting privacy. They are about creating digital environments where trust is not assumed but built in.

"We're trying to standardise APIs to move data around—but maybe the future isn't about data movement at all."

"MSMEs don't need to know how federated learning works. They just need to know their data is safe, and their onboarding is faster."

"PETs are only powerful if they're invisible—part of the service, not another layer of friction."

D

Designing for Impact

Open data is only powerful if it delivers measurable impact, especially for those at the margins. This means designing systems that reduce compliance burdens, accelerate time to credit, and embed trust by default. The shift from infrastructure to outcomes must now define how we fund, regulate, and measure success. Implementation partners must work from a shared blueprint and localise based on what MSMEs truly need, not what systems find easiest to deliver.

This is not simply the end of a discussion; it is a call to embed trust, inclusion, and purpose into the architecture of open data itself. What comes next will determine whether we build digital systems that merely connect, or systems that truly empower.

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