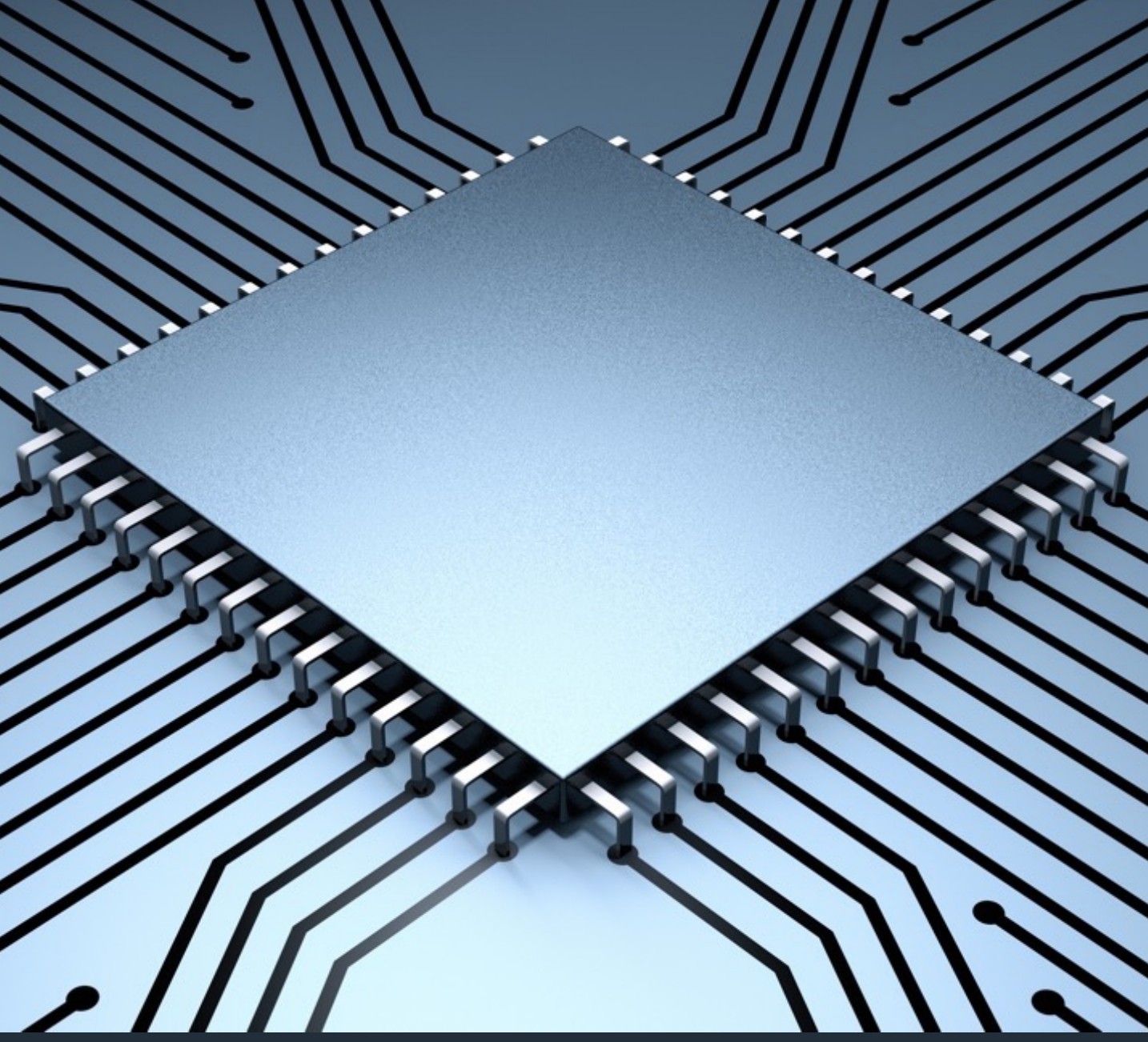

RESEARCH INSIGHTS

Resilient by Design:

Charting the Future of AI, Infrastructure, and Digital Trust in ASEAN

ASEAN FINTECH FORUM

ASEAN ECONOMIC FORUM

Sabio

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Key Trends

1 AI Is Only as Good as Your Infrastructure

AI ambitions are skyrocketing, but many institutions are running before building. Real-time analytics, LLMs, and personalized services require massive bandwidth, edge compute, and resilient connectivity. Too often, infrastructure planning is an afterthought.

2 Compliance-First Architecture Is Now a Competitive Edge

Cross-border operations are colliding with rising data localization mandates across ASEAN. The future demands sovereign-ready infrastructure: in-country data centres, local model hosting, and governance baked in from day one.

3 ESG and AI Are on a Collision Course

Power-hungry AI models are clashing with sustainability goals. Leaders are rethinking the rush to scale by focusing on smaller, efficient models and use-case-driven deployments that balance ambition with accountability.

4 Standardization and Security Are the New Innovation Drivers

Fragmented systems are slowing transformation. Banks must declutter legacy environments and shift to identity-first, Zero Trust architectures. Security now starts with who, not where.

5 Strategic Partnerships Over DIY Builds

Banks don't need to reinvent the wheel. From subsea routing to edge AI deployment, tech partners bring scale, expertise, and infrastructure banks shouldn't have to build themselves.

Introduction

The ASEAN Fintech Forum, ASEAN Economic Forum and Sabio Research gathered a curated group of 20 senior leaders from regional and global banks, sovereign wealth funds, and insurance groups gathered to tackle one of the most urgent imperatives of 2025:

How can ASEAN's Financial Services sector scale AI and digital transformation in a secure, compliant, and sustainable way, without losing agility or customer trust?

This invite-only session, delivered a frank and future-facing dialogue that transcended tech buzzwords. This report covers the key insights that emerged.

The Infrastructure-AI Paradox: Scaling Responsibly in an Age of Limitations

The financial services sector is aggressively experimenting with generative AI, but many deployments are running into a fundamental roadblock, underprepared digital infrastructure. AI workloads, from large language models to real-time risk simulations, demand exponentially more network bandwidth, power, and latency assurance than previous systems.

Infrastructure providers have been noticing a leap from 10Gbps needs to 800Gbps+ for financial clients. These aren't incremental upgrades, they're quantum shifts in demand for data movement, compute availability, and edge processing. Banks looking to personalize services in real-time, route traffic away from geopolitical hotspots, or train proprietary models must start planning for that scale today.

AI is no longer an application problem; it's an infrastructure design problem.

From DIY to Strategic Partnership: Banks Are Not Tech Companies

A recurring theme was the inefficiency of over-customization. Many banks attempt to build or overly customize their digital infrastructure, believing this creates a competitive edge. In reality, it slows innovation and burdens teams with managing problems already solved by tech partners.

Participants urged a shift toward selective outsourcing and co-creation with R&D-heavy partners. This frees up financial resources to focus on customer-centric innovation rather than wrestling with infrastructure complexity.

AI Without Borders Meets Regulation Without Compromise

The promise of borderless AI, cloud-native, infinitely scalable, meets a hard wall when confronted with ASEAN's data residency regulations. Countries like Indonesia, Vietnam, and India have strict rules on where financial data can be stored, processed, and analysed. This makes it nearly impossible to train or deploy centralized AI models across jurisdictions without violating compliance.

Participants discussed the urgent need for "sovereign-ready" architecture, with localized cloud zones, open-source or in-country hosted models, and resilient connectivity that respects national boundaries while still enabling regional collaboration.

In short, AI must be both global in intelligence and local in footprint.

ESG and AI Are on a Collision Course

With AI comes compute, and with compute comes carbon. Institutions championing ESG pledges are increasingly challenged by the sheer energy demand of training and running AI models. The group acknowledged that power-hungry AI and carbon neutrality cannot easily co-exist unless banks rethink their approach.

One strategy discussed was focusing on lightweight, domain-specific models that perform targeted tasks without draining resources, such as vectorized internal search or streamlined fraud detection.

Standardization as a Strategic Enabler, Not an Afterthought

Standardizing data platforms and APIs isn't glamorous, but it is essential. Several institutions admitted that fragmented data architectures and legacy silos are slowing down AI rollouts, compliance audits, and network optimization.

The participants agreed that before you run AI, make sure your data is organized, accessible, and secured with standardized protocols.

Without this foundation, AI remains a disconnected proof of concept.

Resilience is Not a Feature—It's a Full Stack Design

Institutions often think of resilience only in terms of network uptime. But true digital resilience is stack-deep, requiring aligned planning across the application layer, data layer, compute layer, and connectivity infrastructure.

Case in point: contact centres must retrieve client data within milliseconds to maintain quality service. If the application is sluggish, even if the network is flawless, the experience still breaks.

The call to action echoed by the participants was for institutions to embed resilience into the architecture from day one, not as a retrofitted afterthought.

Data Gravity and the Rise of the Edge

Instead of centralizing all analytics in core data centres, many financial services firms are moving toward edge-first AI processing. This shift is being driven by the explosion of unstructured data—from audio and video streams to PDFs and sensor data.

Edge AI reduces cost, latency, and energy consumption by bringing computation to the data, rather than the other way around. Use cases ranged from satellite image processing for risk modelling to live voice translation for contact centres.

Zero Trust and the Identity Imperative

In a multi-cloud, remote-work world, the traditional "perimeter" no longer exists. Identity and access control have become the most critical points of vulnerability.

The room acknowledged that zero trust isn't just a policy—it's an architectural philosophy. Every connection, every credential, every session must be continuously verified. This is especially vital for AI models ingesting sensitive financial data or interfacing with customer service environments.

Security now begins at the point of identity—and extends across every layer of digital interaction.

Insular Infrastructure: A New Normal for Super Regional Banks

With growing geopolitical tensions, data nationalism, and supply chain scrutiny, banks must prepare for a more insular and self-reliant future. That means designing infrastructure that can operate independently in each market while still being interoperable across the region.

Participants agreed that future readiness means designing for sovereignty, not just performance, with local hosting, compliance-ready deployments, and secure-by-design frameworks.

The emerging reality is clear, digital globalization is being redefined by political and regulatory borders.

Conclusion

A Future-Ready Financial Services Industry is Resilient, Ethical, and Embedded

A resounding message remained clear among the participants; leaders in financial services are not just building platforms, they are building trust. And that trust depends on intentional design of infrastructure, identity, ethics, and resilience.

The future of ASEAN banking belongs to those who can integrate AI capability with digital maturity, without compromising on compliance, customer protection, or carbon commitments.