F5 regional CXO roundtable series

Malaysia edition

Architecting the AI-enabled enterprise

Key takeaways | June 26, 2025

Lessons from the Malaysia CXO roundtable

An actionable path for scaling AI for business outcomes

Executive summary

Malaysia's CXOs don't need convincing on the value of AI. The ambition is clear. The priorities are known. What's missing is an execution model that moves AI from slides to systems, from pilots to production, and from innovation labs to enterprise outcomes.

At the F5 regional CXO roundtable in Malaysia, leaders from banking, telecom, digital enterprises, and the public sector acknowledged a shared reality: AI in Malaysia is stuck in the middle. Pilots are everywhere. Scale is rare. And most enterprises are missing the operating muscle to make AI an enterprise capability. This is not a capability problem alone. It's a structural problem of fragmented data ownership, weak production infrastructure, scarce hybrid talent, and siloed governance. As one participant noted, "What works in the pilot is not applicable in production… it's development hell."

Yet the opportunity is immense. Leaders shared emerging use cases in agentic AI, hyper-personalization, and autonomous operations. But to realize this, organizations must shift how they lead, build, and govern AI, moving from tactical wins to architectural readiness.

The roundtable surfaced five core fault lines:

- **Strategy vs ownership:** Many firms have AI strategies. Few have cross-functional owners driving execution.
- **Talent vs adoption:** Lack of embedded AI roles in business units is slowing down experimentation and scale.
- **Data availability vs data readiness:** Raw data is abundant, but usable, well-stewarded data remains scarce.
- **Governance ambition vs maturity:** Regulatory awareness is high. Operationalized AI governance is rare.
- **Vision vs workflow reality:** Most firms retrofit AI into legacy processes instead of designing AI-native workflows.

To help close this execution gap, the roundtable participants outlined a practical and forward-looking framework, balancing ambition with architecture, and strategy with accountability. Five focus areas emerged as critical to accelerating enterprise AI maturity:

1. **Strategic imperatives:** Seven priorities were identified, including evolving beyond pilots, redesigning talent models, embedding explainability, and building AI as a long-term business mandate.
2. **Critical challenges:** Participants flagged recurring scale inhibitors such as fragmented governance, data immaturity, vendor opacity, and unclear production pathways.
3. **Implementation plan:** A blueprint for scaling AI through secure, modular, and observable architectures, backed by centralized governance and federated execution models.
4. **Success metrics:** Leaders emphasized the need to measure business value, functional adoption, and risk mitigation, not just model performance.
5. **Next steps:** Calls to action included elevating AI to the boardroom, embedding explainability into every use case, and enabling AI-first workflows across functions.

This roundtable reaffirmed that the enterprises leading Malaysia's AI transformation will not be the ones running the most pilots, but those who can scale AI with clarity, resilience, and trust.

1. Strategic imperatives for AI adoption

To realize AI's enterprise value, organizations must go beyond experimentation. This section outlines seven imperatives, from strategy and data to governance and culture, each paired with concrete actions derived from the roundtable.

1.1 Evolve from pilots to enterprise AI strategy

Insight: Many organizations are running isolated AI pilots without a cohesive enterprise-wide vision. This fragmented approach, often led solely by IT or innovation teams, limits alignment with strategic priorities and slows down time-to-value.

Recommendation
Position AI as a long-term business transformation agenda. CXOs should define clear strategic objectives, assign cross-functional ownership, and integrate AI into broader business KPIs.

Actions
Establish a formal AI steering group led jointly by business and technology heads. Allocate budget aligned to functional outcomes.

1.2 Treat data readiness as core infrastructure

Insight: Despite intentions to scale AI, poor data quality, fragmented ownership, and lack of stewardship remain core roadblocks.

Recommendation

Make data governance and architecture a board-level priority. Build trusted, interoperable ecosystems with standardized classification, cataloging, and stewardship models.

Actions

Appoint data product owners, standardize metadata, and implement enterprise-wide data quality KPIs.

1.3 Redesign talent models to drive embedded innovation

Insight: Talent shortages remain a critical constraint in Malaysia, particularly for AI engineering, data science, and strategic roles. In many cases, functional teams lack the confidence and skills to initiate or scale AI projects independently.

Recommendation

Build a dual-track model upskill internal teams and embed AI specialists within functions (e.g., HR + AI strategist) to drive use-case ownership.

Actions

Launch tailored AI learning programs across functions and establish embedded roles such as 'AI business partners' to accelerate adoption and enable agile execution.

1.4 Unlock new business models beyond operational AI

Insight: While AI is currently used to drive cost and process efficiency, forward-looking organizations are beginning to explore how it can fundamentally reshape their value propositions. Examples include hyper-personalized services, autonomous operations, and new AI-powered product lines.

Recommendation

Encourage ambitious thinking around AI-native models. Move beyond cost savings to new revenue, personalization, and intelligent services.

Actions

Incubate one "AI-reimagined" use case per function and track ROI impact against traditional models.

1.5 Cybersecurity must evolve with AI adoption

Insight: While threats are growing, most organizations rely on embedded AI in third-party tools, lacking in-house AI security capabilities.

Recommendation
Invest in AI-powered cyber resilience. Focus on intelligent threat detection, automated mitigation, and anomaly recognition.

Actions
Build internal AI capabilities in security teams or partner with vendors providing transparent, explainable AI tooling.

1.6 Operationalize multi-dimensional AI governance

Insight: Regulatory compliance, ethical standards, and localization laws are top concerns, especially in BFSI.

Recommendation
Build governance frameworks early in the AI lifecycle. Address privacy, explainability, and compliance from the outset.

Actions
Form governance councils with legal, risk, and tech leaders. Monitor AI usage and maintain audit trails.

1.7 Build for production, not just pilots

Insight: Many organizations are able to demonstrate strong results in sandbox environments but face repeated failures when transitioning AI models into live operations. This is often due to immature tech stacks, lack of production-grade infrastructure, and insufficient integration with CI/CD practices.

Recommendation
Design AI systems with production-readiness in mind from day one. Prioritize infrastructure scalability, system resilience, and real-time performance monitoring.

Actions
Embed AI workflows into DevSecOps pipelines. Enable continuous deployment with real-time drift detection, usage monitoring, and explainability audits.

2. Critical challenges

Despite strong intent, organizations face structural barriers that stall momentum. Based on firsthand experiences, these challenges reflect the cultural, operational, and leadership gaps limiting scale and impact.

2.1 Short-term thinking limits long-term AI value

Mitigation: AI is often viewed as a series of projects or experiments, rather than a long-term enterprise capability. This limits strategic alignment and leadership conviction.

Action: Elevate AI in enterprise strategy documents and planning cycles. Treat AI as a core organizational priority, on par with finance or compliance.

2.2 Underestimation of data complexity

Mitigation: Prioritize enterprise-wide data audits and standardization initiatives before model development.

Action: Appoint a chief data steward and invest in metadata management tools to map, clean, and classify data assets.

2.3 Concerns around cross-border AI deployment

Mitigation: Design architectures with compliance-by-design using techniques such as federated learning and synthetic data.

Action: Map jurisdictional data policies and implement a governance layer that supports regional deployment while meeting local compliance.

2.4 Innovation gets trapped in sandboxes

Mitigation: Create repeatable frameworks for transitioning from pilot to production with defined ownership and success criteria.

Action: Establish a production readiness checklist and assign technical program managers to scale successful pilots' enterprise-wide.

3. Implementation plan: scalable AI architecture

Addressing these challenges requires a structured, enterprise-wide implementation plan anchored in shared principles, layered architecture, and phased execution.

3.1 Design principles

Business-aligned: AI should be aligned to functional outcomes, not just driven by IT. Leaders emphasized embedding AI into business KPIs, not isolated pilots.

Compliance-by-design: Especially in BFSI and public-sector contexts, AI systems must be explainable, compliant, and resilient from the outset.

Modularity: Systems must be designed to accommodate evolving use cases without rebuilding from scratch.

Interoperability: Participants emphasized seamless integration of AI systems across legacy and new tech stacks.

Security and Observability: Security must be proactive, and model drift or anomalies must be detected and remediated in real time.

3.2 Key Architecture components

Data layer
Trusted, well-classified data remains the biggest gap. Metadata, stewardship, and lineage must be improved before scale.

AI layer
Models must support versioning, monitoring, and continuous retraining. MLOps capabilities are essential.

Governance layer
Governance must shift left embedding explainability, audit trails, and risk mitigation from day one.

Integration layer
AI needs to integrate into operational workflows and legacy systems. This is still a major bottleneck for production.

3.3 Implementation steps

Operationalize AI governance
Stand up a formal governance council with cross-functional representation (legal, risk, business, tech). Define approval processes, usage guidelines, and guardrails for responsible AI.

Build scalable and modular MLOps infrastructure
Ensure teams have access to pipelines for data ingestion, model training, deployment, monitoring, and retraining. Avoid lock-in and siloed stacks.

Launch Enterprise Data Readiness program
Initiate data lineage mapping, cataloguing, and classification across departments. Establish roles like data owners and stewards with accountability for quality.

Enable continuous model monitoring and risk auditing
Set up observability tooling to track drift, performance, and bias. Connect monitoring to compliance workflows to ensure transparency and trust.

4. Success metrics

Participants were unanimous in stressing that AI programs must demonstrate clear and measurable outcomes to gain continued executive support. Several leaders shared that early experiments failed to sustain momentum due to a lack of agreed success indicators. This section captures the six most relevant metrics highlighted during the roundtable.

- **AI-driven productivity gains:** Measure improvements in process speed, decision accuracy, and operational efficiency enabled by AI.
- **Cost savings from intelligent automation:** Track reductions in resource usage and manual workloads through automation of repeatable processes.
- **Uplift in Customer Experience (CX):** Evaluate gains in customer satisfaction, personalization accuracy, and self-service adoption driven by AI.
- **Increase in AI literacy across functions:** Quantify progress in upskilling non-technical teams through AI education, embedded roles, and function-led initiatives.
- **Reduction in model failures and drift incidents:** Monitor the performance health of deployed models through real-time alerts, remediation metrics, and MLOps dashboards.
- **Pilot-to-production conversion rate:** Assess the percentage of AI pilots successfully transitioned to enterprise-grade deployments—an indicator of organizational maturity.

5. Next steps

Participants emphasized the need for sharper execution and focused leadership to scale AI beyond isolated pilots. As enterprises look ahead, these next steps represent actionable priorities identified during the discussion to accelerate momentum, build confidence, and operationalize impact.

- **Elevate AI to a board-level priority:** Embed AI in strategic planning and governance conversations at the highest levels.
- **Align cloud and data strategies with local regulations:** Ensure AI infrastructure respects data sovereignty, especially for cross-border use cases in regulated industries.
- **Re-architect for AI-native workflows:** Move away from retrofitting AI into legacy systems. Instead, design workflows where AI is integrated by default.
- **Upskill business and technology functions equally:** Extend AI training beyond data teams to include operations, finance, HR, and frontline business units.
- **Lead cross-sector collaboration for National AI maturity:** Engage with regulators, academia, and industry bodies to shape a forward-looking AI ecosystem in Malaysia.

The Malaysia CXO roundtable reinforced a simple truth: AI success is no longer about vision; it is about execution. As organizations move from isolated pilots to enterprise-grade deployments, the need for integrated leadership, production-ready infrastructure, and measurable outcomes becomes critical.

Those who scale with discipline and purpose will shape not only their own digital futures but also Malaysia's standing in an AI-powered global economy. The path forward calls for clarity, cross-functional alignment, and a long-term commitment to embedding AI at the core of how businesses operate, compete, and grow.

Attendees

Name	Company	Designation
Aaron Soon	CelcomDigi	Head of Advanced Analytics
Anand Srivatsa	MetLife	Assistant Vice President of Asia IT | Strategic Transformation | Platforms and Digital Ecosystem
Dominic Yew	OCBC	Chief Information Security Officer & Head IS & DRM
Dhoorban Gunaseelan	Bursa Malaysia	Assistant Vice President, Derivatives Clearance System
Eskandar Hardy	Bank Pembangunan Malaysia Berhad	Chief Digital Technology Officer
Harris Ong	MBSB Bank	Deputy Director
Haseeb Qureshi	Maybank	Head of Data Management & Architecture - Strategic Data Management
Kai Loong Ang	Touch 'n Go	Head of Data Engineering
Mohamed Diab	TIME dotCom Berhad	Chief Data Officer
Mohd Norfaizi Mihsany	Khazanah Nasional Bhd	AVP of AI & Data Management
Neelabh Singh	Petronas	Head of Risk Technology
Samuel Lee	AmBank Group	Head of CX & Innovation
Shashikanth Ramakrishnan	Astro Malaysia Holdings	Head of Decision Science and Data Monetization
Tej Singh	Ericsson	Chief Operating Officer MS