

By CF ONG

MALAYSIA stands at a critical inflection point in the global artificial intelligence (AI) race.

After the surge of generative AI, a new wave is emerging in the form of agentic AI.

Agentic AI are AI execution models involving autonomous agents that coordinate across workflows, tools and systems with minimal human input.

While it stops short of true autonomous decision-making, agentic AI's ability to make actionable decisions within pre-defined parameters is a game changer.

Malaysia has a solid foundation to build on.

According to Boston Consultant Group's AI Maturity Matrix, which benchmarks 73 economies globally on AI exposure and AI readiness, Malaysia is classified as a "steady contender".

It places the nation just one tier behind AI pioneers such as the United States, the United Kingdom and China.

This position reflects Malaysia's significant exposure to AI, particularly in large sectors like retail and wholesale, telecommunication and financial services.

At the same time, it indicates a solid level of AI readiness, supported by forward-looking ambitions, policies and regulatory frameworks on AI.

An evolving AI landscape

AI is rapidly becoming a critical national infrastructure that empowers wider opportunities.

As a result, geopolitical shifts, compute access and sovereign capability increasingly determine economic outcomes and geopolitical influence.

The US and China lead the global AI race.

Tech companies from these two superpowers created 59% and 26%, respectively, of top-performing large language models (LLM).

This presents a conundrum for competing nations.

Relying solely on external technology providers poses challenges for corporate leaders and governments, especially since local regulations, data requirements and model availability are subject to shifting policies.

Against this backdrop, a small group of "GenAI middle powers" is emerging across Europe, Asia and the Middle East.

Each has distinct strengths that might allow it to compete as a regional or global technology supplier.

This race now expands beyond software to encompass hardware, infrastructure and technology adoption.

Malaysia must actively build its domestic AI capabilities to avoid high technology sovereignty risks as it looks to the future of agentic AI.

Execution speed and scale will dictate whether Malaysia leads in Asean or falls behind.

Encouragingly, the Digital Ministry, through the establishment of the National AI Office (NAIO), is driving a coordinated national AI agenda – spanning governance frameworks, cross-sector adoption and ecosystem development.

These efforts lay the critical foundations for more advanced applications, including the next wave of agentic AI.



Leading companies are moving beyond experimentation as a third of "AI future-built" firms have deployed agentic solutions and are demonstrating measurable value.

SEIZING AGENTIC AI OPPORTUNITY IN M'SIA

Productivity multiplier

Globally, the shift is already underway and early signs indicate that the rise of agentic AI will be rapid.

BCG's *Build for the Future 2025* study shows that agentic AI's share of AI-driven value is expected to nearly double from 17% in 2025 to 29% by 2028.

Leading companies are moving beyond experimentation – one-third of "AI future-built" firms have deployed agentic solutions and are demonstrating measurable value.

Early adopters are already unlocking tangible benefits. BCG's study shows that while companies are exploring agentic AI across operations, support functions and innovation, customer experience is emerging as the top priority.

Leading use cases include deploying intelligent agents to autonomously handle Level 1 and Level 2 customer support, as well as optimising digital marketing campaigns – continuously adjusting bids to maximise returns, reallocating spend to high-performing channels and testing creatives in real time.

AI undoubtedly represents a powerful productivity multiplier for Malaysia.

It can strengthen key economic sectors such as manufacturing, financial services and many other industries. For SMEs, agentic AI can lower the cost of sophistication, providing access to capabilities once reserved for large enterprises.

Beyond the private sector, agentic AI can modernise public services and improve policy-making decisions and delivery in healthcare, education and justice.

It can help bridge urban-rural divides by expanding access to

digital services and decision support.

In a nation balancing growth ambitions with demographic and fiscal constraints, agentic AI is not merely a technology upgrade – it is a lever for sustainable and inclusive growth.

Four strategic priorities

To compete effectively in this next phase of AI, Malaysia must act with clarity and intent across four priorities.

> **Build sovereign AI capabilities.** Malaysia could strategically build sovereign AI capabilities in areas where it has natural strengths and where risk mitigation matters most.

This includes expanding reliable access to compute, leveraging its growing data centre ecosystem.

A pragmatic and technology-neutral approach that combines global technology partnerships with targeted domestic capability-building will be more effective than pursuing full-stack independence.

Technology partnerships could focus on leveraging leading AI innovations from both Western and Eastern ecosystems in a neutral manner.

Open-source AI models offer a practical pathway to reduce dependency risks, accelerate adoption and support local customisation.

At the same time, efforts could focus on enabling responsible use of high-quality local datasets.

> **Invest aggressively in talent.** Malaysia must pair global talent attraction with sustained local capability development to build the AI workforce needed to compete at scale.

It could aggressively attract top global AI talent through competi-

tive incentives, strong research ecosystems and vibrant innovation hubs, while simultaneously building a deep domestic pipeline of AI talent.

This requires strengthening STEM education, expanding university-industry collaboration, embedding AI in technical and vocational training and accelerating workforce upskilling across sectors.

> **Scale national platforms.** Malaysia must move from fragmented pilots to scaled national platforms, anchored on high-impact use cases – such as a unified government interface linked to MyDigitalID.

This platform provides a common foundation to embed AI agents that deliver personalised public services.

Scaling up such platforms will catalyse greater private-sector participation and ensure sustainable adoption of agentic AI.

In addition, Malaysia could strengthen exchange platforms that bring together the government, industry and academia to accelerate collaboration, capability-building and use case development.

Associations such as AI Malaysia (AIM), Malaysian Autonomous Intelligence & Robotics Association (MyAIRA), along with other industry associations, can play a critical role in sharing best practices, mobilising talent and aligning stakeholders to drive ecosystem-wide adoption of agentic AI.

> **Implement pro-innovation regulation.** Malaysia needs regulations that protect users but also preserve competition.

Policymakers could favour a flexible model over rigid frameworks, particularly in a fast-evolving technological landscape.

Malaysia could pursue a balanced approach – combining principle-based guidelines, regulatory sandboxes and sector-specific standards that can evolve alongside the technology.

Priming Malaysia for growth is critical, but it is essential that this is done through a forward-looking and ethical approach.

Malaysia has the opportunity to differentiate itself by championing ethical, inclusive AI.

This is a core foundation of effective AI adoption, and should align with national values, ensuring that trust and confidence underpin the next wave of innovation in agentic AI.

Defining the future

The stakes are clear. AI investment compounds rapidly. Early movers attract capital, talent and vibrant ecosystems.

The choice is not whether AI will reshape the Malaysian economy.

The choice is whether Malaysia will shape that transformation with speed, clarity and ambition while remaining anchored to core Malaysian values.



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