

ENABLING BUSINESSES,
EMPOWERING PEOPLE

The final lap

As Malaysia enters the last five years of the MyDigital Blueprint, the focus will be on transforming the digital economy into a high-growth pillar. With 2025 closing a chapter on infrastructure and adoption, 2026 will mark the start of a pivot towards producing technology. **PG12**



The final lap

STORIES BY **VANESSA GOMES**

As 2025 draws to a close, the digital landscape in Malaysia bears little resemblance to the ecosystem that existed when the MyDigital initiative was first unveiled in 2021. Back then, the conversation was dominated by basic connectivity and the urgency induced by the Covid-19 pandemic, but today, as the nation wraps up the second phase of the Malaysia Digital Economy Blueprint (MDEB), the narrative has shifted from infrastructure and adoption to innovation and value creation.

The numbers suggest that the mission is largely on track. The digital economy is expected to exceed its target of contributing 25.5% to the national gross domestic product (GDP) by year's end. 5G coverage in populated areas (CoPA) stands at over 80%, a critical milestone that has successfully laid the foundation for the digital highway. Meanwhile, the start-up ecosystem, bolstered by the KL20 initiative, has swelled to nearly 4,000 active start-ups, closing in on the national target of 5,000.

As we enter Phase 3 — the final and most critical five-year stretch of the MyDigital blueprint (2026-2030) there is no room for complacency. While the first two phases were about laying foundations and driving adoption, the final phase is about pushing Malaysia up the digital value chain.

"We have done a decent job in terms of building this out capacity-wise," says Adrian Marcellus, CEO of MyDigital Corporation, reflecting on the infrastructure boom of the last few years.

"Now, the emphasis is on adoption, but specifically switching from being a consumer to a producer."

As the Asean chair in 2025, Malaysia is actively championing regional artificial intelligence (AI) initiatives while implementing a comprehensive national strategy to become an AI nation by 2030.

"Globally, our country is 24th in terms of government AI readiness, which signals that the country is demonstrating strong intent and momentum in building AI capabilities, moving steadily in the right direction," says KPMG Malaysia head of technology consulting Alvin Gan.

"This is further proven as the nation is broadly progressing towards expanding the digital economy's share of GDP. The country recorded RM163.6 million in approved digital investments last year — an increase of 250% compared with 2023 — reflecting strong

market confidence and growing digital momentum." However, Gan notes that achieving the full ambition of the 2025 MyDigital target may require an extension beyond the current time frame due to uneven adoption across sectors. While progress in Malaysia's digital economy is accelerating, including rapid cloud migration, strong fintech uptake and accelerated digital payments, there are still several factors that contribute to this disparity.

"For instance, SMEs (small and medium enterprises) face digital maturity gaps, especially in talent readiness and the integration of advanced technologies into their day-to-day operations, while high-value tech adoption remains concentrated in large enterprises, creating asymmetry in impact," says Gan.

"Additionally, fragmented data sharing and slow regulatory harmonisation also have not kept pace with the speed of technological change, resulting in slower sector-wide adoption. The challenge ahead is less about intent and more about execution at scale."

"Malaysia's digital foundations are in place, but unlocking the next wave of growth will require deeper public-private collaboration, and a more unified approach to data and digital governance."

The shift for Phase 3 is catalysed by the 13th Malaysia Plan (13MP), where one of the key tenets is for the country to become an AI nation by 2030. Marcellus says five developmental elements were identified: forward-looking policies; infrastructure; digital trust; talent; and investment.

"We are now re-looking at the whole MDEB Phase 3 and [we have] revamped it to align it to achieve those goals. There are very specific goals that have been set in 13MP also, for example, 30% of GDP is to be contributed by the digital economy by 2030 and 500,000 new jobs to be created, specifically high-paying jobs in technology, based on the digital economy," he adds.

The stakes for 2026 are high. In February, Prime Minister Datuk Seri Anwar Ibrahim is expected to officially launch the refreshed MDEB Phase 3 strategy. This will not merely be a continuation of existing policies but a recalibration of national priorities to fit a world rapidly reshaped by AI and geopolitical shifts.

Slightly over a year ago, the National AI Office (NAIO) was set up to be the country's central coordinating office responsible for driving, coordinating and governing the national AI agenda. NAIO is currently racing to finalise the "AI Nation 2030", anchored by the National AI Action Plan (2026-2030).

"AI Nation 2030 outlines a clear national goal: to transform the country from being a global AI consumer into a value-adding AI producer — the 'Made by Malaysia' model," says Sam Majid, head of NAIO, adding that the focus will be on strategic oversight and policy, not direct project implementation.

MYDIGITAL CORPORATION

"We want to make sure that digital trust is defined not just by cybersecurity, but by how we roll out technology safely, responsibly and ensure benefits for all segments of society."

Marcellus, MyDigital Corporation



Solving the SME puzzle

The digitalisation of micro, small and medium enterprises (MSMEs) remains the toughest nut to crack. The narrative has moved from basic digitalisation to artificial intelligence (AI) enablement, but for many small businesses, cost remains a prohibitive barrier.

"The feedback from MSMEs is always about affordability. We are trying to find ways to reduce the cost for them so it becomes competitive," concedes Adrian Marcellus, CEO of MyDigital Corporation.

The urgency to digitise MSMEs is compounded by the impending conclusion of the Asean Digital Economy Framework Agreement (DEFA), which Digital Minister Gobind Singh Deo says is set to be finalised by Asean member states next year.

The world's first region-wide digital economy agreement, DEFA is a new strategic road map for the region to address the complexities and opportunities of the digital economy. It is set to also harmonise digital trade rules and unlock the potential of Asean's digital economy.

While DEFA opens up a market of 700 million people across Asean, it also exposes local businesses to regional competition.

"If our MSMEs are not AI-enabled, other countries' SMEs will be. If we don't have something similar or better, the impact of DEFA could be negative for us," Marcellus warns.

This ambition is not merely rhetorical, but anchored in a comprehensive policy architecture designed to solve the problem facing local innovation: the lack of access to high-quality data and compute power.

"Addressing the biggest non-monetary barrier — access to high-quality, large-scale data — is a core policy focus," Sam explains.

Catalysing this is the Data Sharing Act 2025, which establishes a secure, standardised and regulated framework for data sharing across federal public sector agencies. The act aims to enable the integration and interoperability of government datasets, a foundation for building an AI-ready data ecosystem that supports innovation, model development and evidence-based policymaking across Malaysia.

MDEB PHASE 3: THE PRODUCER PIVOT

Now the challenge is no longer just about getting people online. It is about leveraging data, governing AI and ensuring that the digital dividend pays out to every corner of the nation, preventing a digital divide of affordability and capability.

The central focus of Phase 3 is economic sovereignty through innovation. For years, Malaysia has been a user of imported technologies and the government now argues that to escape the middle-income trap and reach the target of 30% digital economy contribution to GDP by 2030, the country must own the intellectual property (IP) and solutions it deploys.

This pivot requires identifying national imperative sectors, says Marcellus, specifically sectors where Malaysia has a competitive advantage or urgent domestic need.

Marcellus points to the semiconductor industry — a long-standing Malaysian stronghold — as the obvious starting point, but highlights healthcare and food security as the new frontiers for homegrown tech production.

"We acknowledge that we will be an ageing society in the next couple of years. Healthcare is definitely one of those areas we want to focus on," he explains. "If we can identify use cases to solve in this country, we can show real benefits to the people. And if the solutions work in Malaysia, they can be exported."

The engine for this transition is data. With the Data Sharing Act 2025 now in place, the vision is for local firms to use this data to build solutions, such as for traffic management, patient care or crop yields, which can then be commercialised regionally.

"The whole point of becoming a producer is not just for businesses to make money, but so that people benefit," says Marcellus. "If we can find a way to use data to improve the quality of life, we open up a whole new space for the industry to solve these problems."

Sustainable infrastructure pertinent to digital longevity

Looking at the hardware of the digital economy, the focus in Phase 3 of the MyDigital blueprint (2026–2030) shifts from general population coverage to industrial empowerment. With 5G coverage largely achieved, the next priority is ensuring industrial zones have access to 5G private networks to facilitate automation and the deployment of the Internet of Things (IoT).

KPMG Malaysia head of technology consulting Alvin Gan says Malaysia's rapid 5G rollout has significantly strengthened baseline connectivity, enabling early high-value use cases in manufacturing, logistics and financial services. Fibre penetration in urban areas is similarly strong, supporting the growth of artificial intelligence (AI), IoT and data-intensive applications.

However, enterprise monetisation of 5G remains limited. Many organisations struggle to quantify the financial or operational impact, making it difficult to justify investments or prioritise projects.

"Last-mile gaps, including inconsistent

coverage in rural and industrial zones and varying infrastructure standards across states, continue to limit digital competitiveness. Closing these gaps and enhancing enterprise readiness will be key to unlocking advanced use cases nationwide," says Gan.

Crucially, this infrastructure build-up is tied to Malaysia's National Energy Transition Roadmap (NETR). As data centres proliferate across Johor and the Klang Valley, concerns about energy consumption have mounted.

MyDigital Corporation is working to enforce sustainability standards, ensuring that Malaysia's rise as a data centre hub does not compromise its net zero targets, says its CEO, Adrian Marcellus.

"We want to challenge ourselves to develop as many data centres as we want, but within the sustainability goals we set."

INSTITUTIONALISING TRUST

With AI being a large part of the national agenda today, the upcoming phase introduces a significant evolution in the blueprint's architecture. To the original six strategic pillars — digital government, digital economy, digital infrastructure, digital talent, digital society and emerging tech — a seventh is being added: digital trust.

"Today, it is about AI. Tomorrow, it will be something else. We want to make sure that digital trust is defined not just by cybersecurity, but by how we roll out technology safely, responsibly and ensure benefits for all segments of society," says Marcellus.

The introduction of digital trust as a standalone pillar reflects the complexity of the post-2025 landscape. The rapid proliferation of deepfakes, misinformation and cyberthreats has made trust a prerequisite for economic activity.

Under this new pillar, 2026 will see a flurry of legislative and policy frameworks. A policy on blockchain is

ZAHRID IZZANI/THE EDGE

KPMG

"AI Nation 2030 outlines a clear national goal: to transform the country from being a global AI consumer into a value-adding AI producer — the 'Made by Malaysia' model."

Sam, NAIQ

"Globally, our country is 24th in terms of government AI readiness, which signals that the country is demonstrating strong intent and momentum in building AI capabilities, moving steadily in the right direction."

Gan, KPMG



expected to be launched by February, followed by a policy on quantum computing in the middle of the year. The government is treading a fine line between innovation and regulation.

On blockchain, Marcellus says the government is exploring non-financial use cases like smart contracts for land transfers and subsidies, while maintaining strict guardrails around digital assets.

"We want to make sure that whatever we do is beneficial for the country," he says, adding that Malaysia is unlikely to follow countries that have adopted cryptocurrency as legal tender.

Quantum computing is being approached primarily through a defensive lens. With "Q-day" — the theoretical point when quantum computers can crack current encryption — looming on the horizon, the initial policy focus will be on strengthening national encryption standards.

The Ministry of Digital's proposed National Data Bank and Data Commission is also underway to strengthen national data governance. The National Data Bank will serve as a central repository for key government datasets.

Sam says these proposed entities aim to consolidate,

CONTINUES NEXT PAGE

The AI Nation 2030

Since the establishment of the National AI Office (NAIO) in December 2024, the government has been racing to operationalise its artificial intelligence (AI) ambitions. The drafting of Malaysia's first AI Governance Bill, a legislative framework to address AI risks, is nearly complete, Digital Minister Gobind Singh Deo told the Dewan Rakyat on Nov 24.

The proposed law is set to adopt a risk-based regulatory model, covering areas such as AI-related harm, incident reporting and ethical principles to guide safe deployment across all sectors.

Malaysia's ambition to position itself as an AI nation is encouraging, but the maturity of its regulatory frameworks remains at an early to intermediate stage. The introduction of the AI Governance and Ethics Guidelines (AIGE), aligned with the principles of the Organisation for Economic Co-operation and Development (OECD), is a strong first step in promoting responsible AI, transparency and accountability, but these guidelines are still voluntary and lack enforceable compliance requirements, says KPMG Malaysia head of technology consulting Alvin Gan.

"While Malaysia has established data protection legislation, businesses continue to require clearer direction on AI accountability, model transparency and cross-border data governance. Public agencies have begun working on sector-based frameworks, but implementation remains uneven," he adds.

"At present, generative AI adoption is scaling faster than regulatory readiness. To support safe and trustworthy deployment, Malaysia will need to evolve from principle-based guidelines to enforceable compliance for generative AI adoption and risk-based, use case-driven framework — one that provides clarity for both public and private sector organisations while enabling innovation to continue at pace."

NAIO head Sam Majid says while contribution to the digital economy is the main method to measure the success of the AI Nation 2030, the plan indirectly measures success in the way the digital divide is bridged.

One of the aims is to equip every Malaysian with foundational AI fluency (such as effective prompting and agentic-AI use) to ensure all citizens can benefit from the technology.

"Success is measured by the full coverage of AI upskilling efforts across all groups impacted by AI, including those facing career transitions, thereby reducing skill-based exclusion."

The plan also measures inclusiveness by targeting significant national economic outcomes, specifically the creation of new jobs and notable annual gross domestic product (GDP) growth. Sam says the goal is for the people to benefit from an inclusive AI dividend, ensuring economic advantages are broadly shared.

"Success is measured by the meaningful transformation of citizens' quality of life through more effective and accessible AI-enabled public services," he adds.

Scepticism remains rife among the public regarding AI's impact on jobs. While the government has yet to see large-scale disruption — unemployment rates remain stable — Adrian Marcellus, CEO of MyDigital Corporation, admits that the wait-and-see approach adopted by many Malaysian corporations may be masking future shifts.

"We don't want to create undue fear, but we must ensure people understand this is going to disrupt them," he says.

The government has aggressively pushed its Rakyat Digital (formerly AI for Rakyat) programme, which has already amassed nearly 1.5 million users. Next year will see

the launch of Rakyat Digital 2.0, which will introduce gamification to attract the younger demographic.

Simultaneously, NAIO has partnered with TalentCorp to form the National AI Impact Committee (NAICI), tasked with working sector by sector to identify at-risk jobs and coordinate proactive upskilling.

"We don't want companies to take off with AI and leave all these people behind [without a job]. We want to ensure we are doing it in tandem," Marcellus says.

One of the key foundations of this plan is the development of globally competitive human capital, says Sam, which is aimed at securing a robust and future-ready AI talent pipeline for Malaysia.

Five strategic talent pillars form the foundation, one of which is the Global Talent Network. The aim is to attract and retain Malaysian diaspora and international AI experts to strengthen the local ecosystem. Other programmes include the Talent Pipeline @ Scale, which enables nationwide reskilling and upskilling to support workforce transformation and economic mobility.

Work is being done to enable AI-centric higher education and students, as well as in the civil service.

"We are embedding techno-functional AI skills in universities to produce industry-ready graduates, as well as integrating AI literacy, ethics and safety into K-12 learning to build a responsible and informed future generation," says Sam. "We are also upskilling civil servants for efficient, data-driven and AI-augmented public service delivery."

NAIO has identified three domains — healthcare, public services and AI Cities — for deeper AI integration, chosen for their high visibility and direct impact on citizens. NAIO's Sam says with healthcare, the focus will be on improving medical services, particularly for preventive health and diagnostics.

"AI will be used to create personalised interventions utilising health data to detect major diseases like cancer and diabetes much earlier," he says.

"As for diagnostics, key initiatives involve launching AI-powered diagnostics, such as analysing X-rays and pathology, to achieve faster, more accurate diagnoses and improve efficiency for medical professionals."

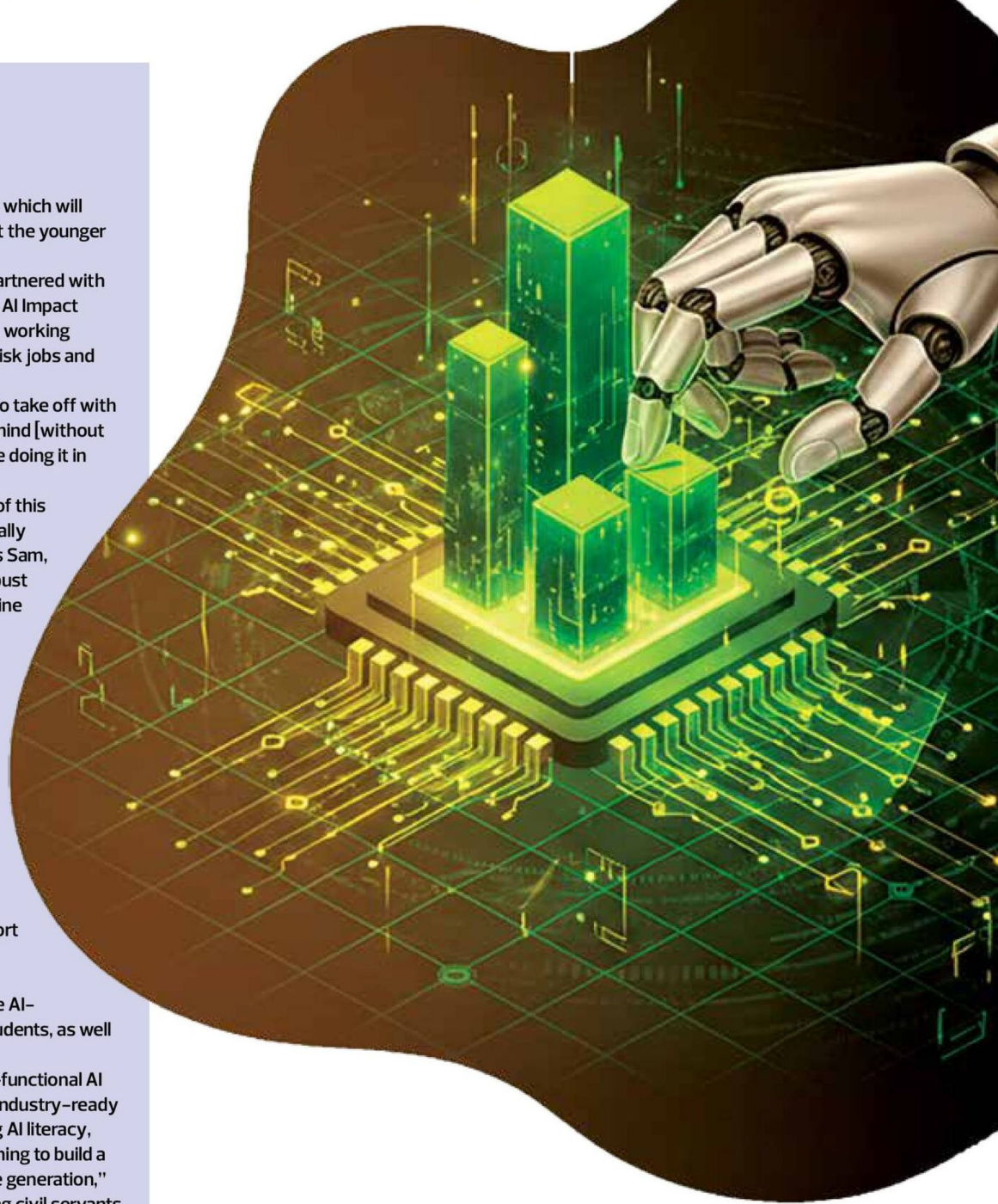
As for public services, the goal is to reimagine services and create an AI-augmented government, focusing on providing seamless interaction.

"The target is to ensure citizens have easy, high-quality access to essential public services, including healthcare and education. The focus is on using AI to improve the overall interaction between the government and the people, establishing the state as a reliable anchor of the AI nation," says Sam.

On the AI Cities front, Sam says the government wants to improve mobility and urban life, positioning Malaysia as a regional AI city leader.

"The most visible impact is addressing traffic congestion through AI-driven management to significantly shorten commute times for citizens," he says.

"On top of that, the initiatives focus on expanding smart city pilots in major urban centres to use integrated mobility data for smarter decision-making, ultimately improving the overall quality of urban living."



Gaps remain in advanced innovation capabilities, specialised tech talent

FROM PREVIOUS PAGE

standardise and manage national data as a strategic asset, enabling more coordinated data access under strict governance, privacy and security controls.

"By organising and pooling priority datasets in a structured manner, the National Data Bank is expected to support downstream innovation — including enabling SMEs, researchers and public agencies to develop AI solutions using high-quality, accessible and well-governed data," he adds.

THE NEXT BLUEPRINT

Malaysia's digital blueprint rightly prioritises connectivity and data governance, which remain essential foundations for emerging technologies such as AI, Web3 and quantum computing. Gan says Web3 and decentralised identity will become critical for cross-border digital trade.

Quantum readiness must be embedded early into national cybersecurity planning to prepare for future cryptographic risks. At the same time, digital sustainability — driven by energy-efficient cloud infrastructure and transparent carbon reporting — will be a key determinant of competitiveness.

"In line with these trends, three central strategic pillars will be for Malaysia's next digital blueprint: responsible technology adoption, green digital transformation

through energy-efficient infrastructure, and innovation ecosystems powered by deep-tech talent and R&D (research and development)," says Gan.

"These pillars reflect global best practices for resilience and competitiveness in the digital era. By leveraging policy clarity and infrastructure momentum, Malaysia can position itself as a regional leader in sustainable digital innovation."

Malaysia's current progress places the country in a leading position within Asean, ahead of Indonesia and Vietnam in terms of infrastructure and governance, but still trailing behind Singapore in innovation depth and talent.

"The differentiator moving forward will be consistency in policy execution and the ability to drive high-impact digital adoption among SMEs and traditional industries, where the productivity gains are most significant," says Gan.

"While Malaysia has strong foundations, gaps remain in advanced innovation capabilities and specialised tech talent relative to its peers. Malaysia should cultivate an advantage anchored in infrastructure development momentum and policy clarity to accelerate R&D and build a skilled, innovation-ready workforce. By doing so, Malaysia can position itself as a competitive hub for advanced digital services in Southeast Asia."