KEMENTERIAN SAINS,
TEKNOLOGI DAN INOVASI

I-NATION
GLOBAL SUMMIT 2025

Innovate. Commercialise. Lead

7 - 8 October 2025
World Trade Centre
Kuala Lumpur

POST - EVENT REPORT

Organised by

MRANTI
Malaysian Research Accelerator for Technology & Innovation

In conjunction with

NICE 25

ASEAN MALAYSIA 2025
INCLUSIVITY AND SUSTAINABILITY

MALAYSIA MADANI

Table of Contents

Executive **Summary**

Overview

The I-Nation Global Summit is an annual flagship conference organised by MRANTI that brings together thought leaders, policy makers, multinational corporations, investors and tech entrepreneurs from all around the globe and sectors to showcase how local ingenuity delivers global relevance.

With the theme " Innovate. Commercialise. Lead.", we aim to energise mission-driven conversations that focus on four (4) themes namely:

- Artificial Intelligence
- Health Tech
- Agri Tech
- Going Global

The themes are directly aligned with the current national priorities and integral to our ASEAN chairmanship theme of "inclusive and sustainability". Through the open exchange of new ideas, we seek to gear collaboration across all stakeholders with a focus on innovating solutions to solve national challenges and for enterprises to scale beyond borders.

This year, I-Nation was held at the World Trade Centre, Kuala Lumpur from 7 to 8 October 2025 together with the National Innovation and Commercialisation Expo (NICE) under the Ministry of Science, Technology and Innovation (MOSTI).

The two-day summit brought together global and local leaders to explore how technology, innovation, and collaboration can drive Malaysia's next leap forward — from AI and HealthTech to AgriTech and innovation globalization.

Day One: Artificial Intelligence and HealthTech

The opening day centred on the transformative role of Artificial Intelligence (AI) and HealthTech in shaping Malaysia's future.

Mr. Chee Mun Foong from YTL AI Labs shared insights into Malaysia's AI landscape, showcasing groundbreaking initiatives such as Ryt Bank — the nation's first LLM-integrated banking system — and ILMU, a locally developed large language model. His presentation underscored the importance of *iltizam* (commitment) in strengthening national technological resilience and sovereignty.

From Weill Cornell Medicine, Dr. Ahmed Serag emphasised that while AI breakthroughs hold immense promise, real-world impact depends on addressing key challenges — including data privacy, regulation, and user awareness. His key message resonated throughout the day: achieving harmony between human interaction and automation is a crucial part of the AI learning curve.

HealthTech discussions continued with a keynote by Prof. Dato' Dr. Adeeba, who highlighted how technology is enabling sustainability and resilience in Malaysia's healthcare system. Initiatives such as the Ministry of Health's Electronic Medical Records (EMR), Project ROSE for cervical cancer screening, and TestNow for digital HIV testing demonstrated Malaysia's steady progress in digital health transformation.

Mr. Sivaram Rajagopalan of Shiva Consultants brought lessons from India's Ikure, illustrating how community health workers using digital tools can drive inclusive healthcare access. The day concluded with a compelling takeaway: health begins at the first mile, while healthcare delivery is the last — and the future lies in preventive care, not just treatment.

Day Two: AgriTech and Food Security

The second day shifted focus to AgriTech, exploring how innovation can secure sustainable food systems.

Dr. Jerry Glover of the International Rice Research Institute (IRRI) reflected on IRRI's 65-year journey transforming rice ecosystems. While rice sustains four billion people, it also contributes to emissions and water stress. Dr. Glover showcased sustainable innovations — from laser land levelling and direct-seeded rice to smart water management and climate-resilient varieties — underscoring the need for agriculture that is both productive and environmentally responsible.

A dialogue moderated by Prof. Dr. Rofina Yasmin followed, highlighting the power of collaboration between research institutions, policymakers, and industry players. The session's core message was clear: Malaysia's agricultural growth will depend not on subsidies, but on scalable, innovation-driven solutions.

Going Global: Lessons in Innovation Leadership

The summit concluded with a focus on international innovation ecosystems, featuring lessons from Switzerland, Sweden, and Singapore — all top-ranked nations in the Global Innovation Index.

Insights from Ignite Sweden demonstrated the value of structured corporate–startup collaboration, while Singapore's two-decade journey of nurturing entrepreneurs illustrated the importance of consistency and long-term investment. Switzerland's model of synchronized stakeholder support further reinforced that innovation is a continuous journey, not a shortcut.

Dr. Josep Piqué of the Triple Helix Association shared how innovation districts can turn local ideas into global impact. Complementing this, Datuk Seri Hj. Hasnol Zam Zam, Secretary-General of MOSTI, presented Malaysia's Blueprint for Global Innovation Leadership — signalling the nation's intent to transition from a technology adopter to a technology developer.

The summit featured five (5) Tech Talks including *Keluar Sekejap* with Khairy Jamaluddin and Shahril Hamdan, and innovators such as Mr. Miza (Airoflux), Mr. Jinn An New (Hexa IoT), Ms. Sara Woo (Infineon Technologies), and Mr. Porkkattil (Dell Technologies).

The event also hosted curated business matching sessions, connecting 50 startups with 13 corporations and investors — including IOI Corporation, Infineon Technologies, Antler, Malaysian Debt Venture (MDV), and Kumpulan Modal Perdana (KMP) — resulting in 117 meetings in a single day.

Through these engagements, MRANTI once again demonstrated its core mission: connecting ideas, catalysing innovation, and accelerating collaboration.

I-NATION 2025 at a Glance

Highlights from the Opening Remarks by YB Chang Lih Kang - Minister of Science, Technology and Innovation

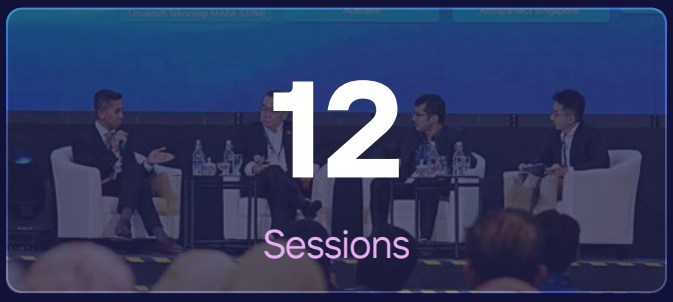
"This year, we come together under the theme "Innovate. Commercialise. Lead." These three words are simple, yet powerful. They remind us that innovation is not enough unless it is translated into tangible solutions, that commercialisation must serve a meaningful purpose, and that leadership is required to bring those solutions forward to make a lasting impact"

Highlights from the Closing Remarks by Khalid Yashaiya - Chief Strategy Officer

"Innovation is a journey and we must stop taking shortcuts. To turn our domestic ingenuity into global success stories, we must invest to build strong fundamentals in our mindset, and processes. At MRANTI, we are committed to leading Malaysia in this transformative journey, but we cannot do it alone. We need partners, pioneers, and dreamers who are not just ready to adapt but to drive change"

Event **Highlights**

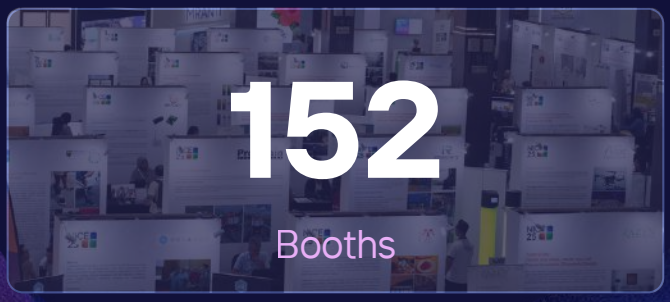
4,228
Participants



12
Sessions

29
Speakers

9
International Speakers



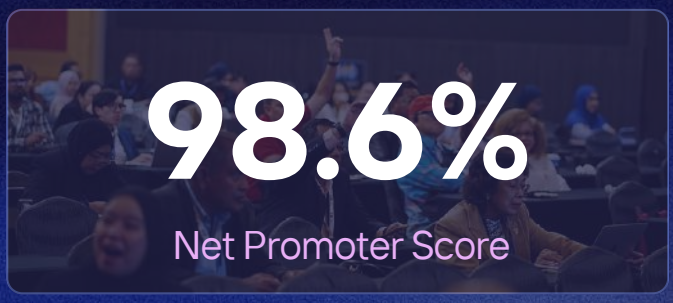
152
Booths

5
Sponsors

13
Corporate Business Matching

10
Podcast and Tech Talks

4.73
Customer Satisfaction Score



98.6%
Net Promoter Score

I-NATION 2025 Activities

Main Conference

Business Matching

Pocket Talk

Podcast

Sponsors and Partners

Silver Sponsor

TENAGA NASIONAL
Better. Brighter.

Bronze Sponsor

Infineon

Sponsor

DELL Technologies

In Kind Sponsor

BILLION PRIMA®

Official Venue Partner

WTC® KUALA LUMPUR
CONNECTING THE WORLD

Programme Sessions

DAY 1
7 OCT
TUESDAY

TIME	SESSIONS	SESSION CONTRIBUTORS
10:00 - 10:30 AM	Opening Speech by YBM MOSTI	YB Tuan Chang Lih Kang, *MOSTI*
10:30 - 11:00 AM	Keynote : The Autonomous Revolution: How AI Agents Are Reshaping Everything	Chee Mun Foong, *YTL AI Labs /Ryt Bank*
11:00 - 11:45 AM	Fireside Solo : The Shape of AI to Come: From Perception to Agentic Autonomy	Dr. Ahmed Serag, *Weill Cornell Medicine*
11:45 - 12:30 PM	Dialogue: Malaysia's AI Advantage: Building Southeast Asia's Next Tech Superpower	Ts. Dr. Aznul Qalid Bin Md Sabri, *UM* Moderator Dr. Umi Kalsom Yusof, *MiGHT* Dr. Hairi Zamzuri, *eMooVit* Ir. Mahathir Nor Ismail, *TNB*
12:30 - 2:00 PM	Lunch Break	
02:00 - 02:30 PM	Keynote: Transforming Health System: Technology as the Key to Sustainability and Resilience	Prof. Dato' Dr. Adeeba Kamarulzaman, *Monash University*
02:30 - 03:15 PM	Fireside Solo: Innovation: The Key to Affordable Healthcare, or Just Another Layer of Cost?	Sivaram Rajagopalan, *Shiva Consultant*
03:15 - 04:15 PM	Dialogue: Malaysia's Healthcare Challenges: Can Innovation Save Time, Save Cost and Save Lives?	Dr. Peter Kim, *IQVIA* Moderator Dr. Khoh Soo Beng, *Innovation Management System* Prof. Dr. Sazzli Shahlan Kasim, *UiTM* Ambuj Mudgal, *AstraZeneca*

Programme Sessions

DAY 2
8 OCT
WEDNESDAY

TIME	SESSIONS	SESSION CONTRIBUTORS
10:00 - 10:30 AM	Keynote: Transforming Rice Systems for Climate Resilient Food Security	Dr. Jerry Glover, *IRRI*
10:30 - 11:30 AM	Dialogue: Harnessing Technology to End Food Insecurity	Prof. Dr. Rofina Yasmin Othman, *MRANTI* Moderator Dr. Ahmad Safuan Bujang, *MARDI* Dr. Muhammad Faheem, *CABI* Azizul Julirin, *Aquafarm*
11:30 - 12:15 PM	Fireside: Policies, Practices and Technologies in Building Resilient Food Systems	Dr. Hari Kulaveerasingam, *ALAM* Moderator Dr. Sarena Che Omar, *PNBRI* Dr. Logan Cochrane, *HBKU*
02:00 - 03:00 PM	Dialogue: Going Global by Design: Lessons from Leading Innovation Nations	Mohd Safuan Mohd Zairi, *MRANTI* Moderator Sara Hamlin, *Ignite Sweden* Prof. Dr. Andreas Hinz, *FHNW Switzerland* Patrick Lim, *ACE Singapore*
03:00 - 03:20 PM	Fireside Solo The Future of Innovation Districts: From Local Commercialisation to Global Impact	Muhundhan Kamarapullai, *MRANTI* Moderator Dr. Josep Pique, *Triple Helix Association*
03:20 - 03:40 PM	Keynote: Beyond Borders – Malaysia's Blueprint for Global Innovation Leadership	YBhg. Datuk Seri Hj. Hasnol Zam Zam, *MOSTI*
03:40 - 04:40 PM	Dialogue: Passport Booth – Playbook for Going Borderless	Eric Lee, *Asia Digital Districts* Moderator Nicholas Field, *DataSphere Initiative* Linda Nguyen Schindler, *Start2 Group* Dr. Pranpreya Sriwannawit Lundberg, *NXPO*
04:40 - 05:00 PM	Closing Remarks	Khalid Yashaiya, *MRANTI*

I-NATION 2025 Key Takeaways: Conference

The Autonomous Revolution: How AI Agents Are Reshaping Everything

Malaysia is now gunning to become one of the world's leading AI economies by 2030. The rise of autonomous AI agents is reshaping industries, with YTL AI Labs showcasing how Malaysia can pioneer real-world adoption to drive innovation, competitiveness, and future-ready strategies.

I-Nation began with a keynote speech by Chee Mun Foong, the Chief Product Officer of Ryt Bank. In his speech, he gave a peak on how YTL, through its AI Labs on their journey to become pioneers in Malaysia's AI Scene.

He walked us through the revolution of AI space from the early Von Neumann architecture to today's Large Language Models (LLMs) — and their transformative impact on industries and societies.

Chee Mun emphasised the importance of understanding the fundamentals of AI agents, highlighting three (3) key pillars: intelligent systems, the rapid advancement of autonomous systems, and their widespread impact on the world. These elements form the foundation of AI's evolution toward autonomy, where systems can independently perform tasks that previously demanded sustained human attention.

He also touched on how YTL Labs uses LLMs internally — for prototyping, coding assistance, and advanced system design (System 2) — illustrating how AI is reshaping roles across the software industry. The future, Chee suggested, will belong to those who can combine the strategic vision of a product manager with the technical fluency of a coder — the "unicorns" of the AI-driven era.

YTL AI Labs showcased their pioneering work in this space, most notably through two major initiatives:

I. Ryt Bank – Malaysia's first LLM-integrated banking system, leveraging natural human-computer interaction to enhance user experience and operational intelligence.

II. ILMU – Malaysia's homegrown large language model, developed in partnership with the University of Malaya. ILMU is a multimodal, world-class AI model trained on local data and language, built to understand and reflect Malaysia's culture, context, and daily realities.

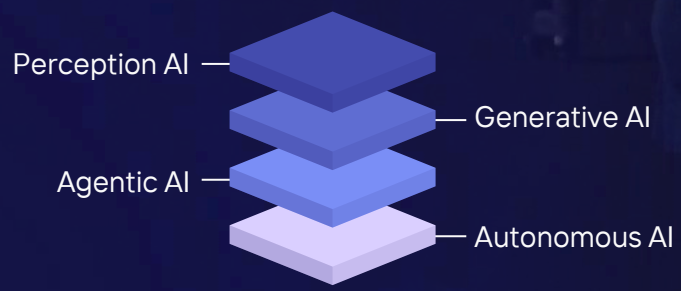
Chee Mun underscored the strategic importance of building and owning local AI systems. He cautioned that if Malaysia fails to develop and control the technologies that guide its progress, it risks being led by systems not designed for its people or values. By cultivating indigenous AI capabilities, Malaysia strengthens its technological resilience and sovereignty — ensuring that, even in a global disruption, "we have our intelligence ready."

The Shape of AI to Come: From Perception to Agentic Autonomy

In this fireside solo, the session highlighted the trajectory of AI innovation from perception-based models to the emerging frontier of autonomous, agentic systems underscoring how AI is evolving from understanding the world to actively shaping outcomes.

With a background as a distinguished AI expert with nearly 20 years of experience, Dr. Ahmed Serag walked the audience through how AI is revolutionalising the way the world works, especially in the health sector. He emphasised AI is not a replacer, but an enabler. Its purpose is not to take over the role of doctors, but to assist them by allowing medical professionals to focus instead on the complex and human-centred care.

He outlined the four (4) phases of AI implementation in medicine - a roadmap that reflects how technology evolves alongside human expertise:



Despite its promise, Dr. Serag acknowledged that the challenges we face in implementing AI in the medical field such as privacy, biases in data sets and regulatory challenges may derive from the lack of awareness in the field. Thus, finding a balance between human interaction and automation is a natural learning curve that we must all embrace.

Currently, most AI tools remain research-focused, while clinical applications are driven by industry players who can bear the high cost of regulatory compliance and validation. To truly accelerate adoption, collaboration and policy alignment are key.

Looking ahead, Dr. Serag painted a picture of an AI-powered healthcare future — one where:

I. Real-time clinical decision support helps doctors make faster, more accurate calls at the bedside.

II. Self-improving models learn continuously from new data, enhancing performance over time.

III. Digital twins - virtual representations of patients - allow for personalised healthcare planning and preventive care.

He emphasised that the future of AI in medicine cannot be built in silos. *"Academia provides the depth behind the science; startups drive agility and innovation; healthcare systems ensure responsible implementation. Each is a complementary force — together, they define the ecosystem."*

To strengthen this collaborative ecosystem, Dr. Serag called for strategic partnerships among academia, startups, healthcare institutions, and regulators — potentially anchored under Malaysia's National Healthtech Hub programme. Such collaboration can accelerate trustworthy AI innovation, testing, and clinical adoption.

He also urged policymakers to leverage existing frameworks, such as Malaysia's National Guidelines on AI Governance and Ethics (AIGE), and operationalise them through sector-specific regulatory frameworks — beginning with high-impact areas like healthcare and agriculture.

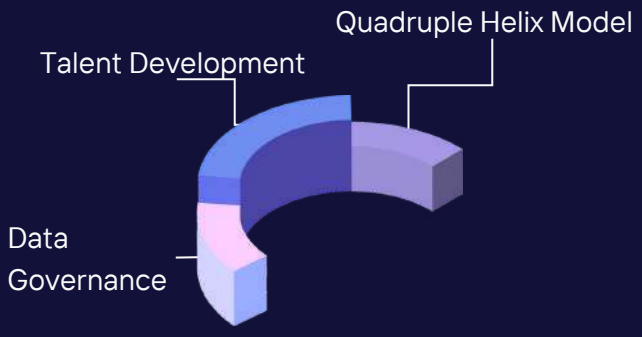
Dr. Serag concluded with a resonant message:

> *"AI should make healthcare not only smarter, but also more human. Because at its core, medicine is about empathy — and technology should never take that away."*

Malaysia's AI Advantage: Building Southeast Asia's Next Tech Superpower

The dialogue explored Malaysia's potential to transition from an AI adopter into a global AI leader by building an integrated innovation ecosystem that unites Academia, Industry, and government. Speakers emphasised that Malaysia's multilingual talent pool and strategic ASEAN position present natural advantages for strengthening the nation's competitiveness in global AI markets.

Featuring a diverse panelist representing the government, industry and academia, it underscored Malaysia's aspiration to become Southeast Asia's next tech superpower through strategic AI adoption and leadership. Achieving this vision requires more than technological readiness — it calls for a robust ecosystem that harmonises:



Malaysia's AI Vision

Dr. Umi Kalsom emphasise that Malaysia's true competitive edge lies in its AI talent pool and its ecosystem advantage — where policy, innovation, and research can align seamlessly to drive AI adoption and leadership. Realising this potential requires taking into account "A to Z in localising the solution," as noted by Dr. Hairi Zamzuri, to ensure AI systems are built around Malaysia's social, cultural, and economic realities.

The panelists are in consensus that Malaysia can position itself as Southeast Asia's next tech superpower, but success will depend on more than just technology. It will require a strong, interconnected ecosystem that harmonises data governance, talent development, and the quadruple helix collaboration model (government–industry–academia–society).

Homegrown AI Solutions & Data Sovereignty

In putting spotlight on the opportunities for us to seize, the speakers highlight that we should be focusing on developing homegrown AI solutions

designed to address local challenges — such as traffic management, demographics, and industrial needs. We also need to invest in localising our data resources to safeguard our data sovereignty. This is crucial to ensure that our country has a self-sustaining system that can protect herself from any unwarranted harm.

In building confidence amongst the people to embrace digitalisation, trust and transparency are ultimately the cornerstone of successful AI deployments. As one panellist noted, *"If the rakyat can see the benefit of AI, it would be easier for people to accept it. But if we are not aware of the ethical adoption of AI, it's better not to adopt it at all."*

Sectoral AI Applications

Speakers outlined the opportunities for AI across Malaysia's key economic sectors:

I. **Healthcare** — Malaysia's diverse demographic profiles and multilingual data offer strong foundations for AI in predictive analytics, disease management, and local drug discovery.

II. **Agriculture** — Leveraging Malaysia's strengths in palm oil and commodities, AI can enhance yield prediction, quality control, and sustainable farming practices.

III. **Manufacturing** — AI can enhance predictive maintenance, supply chain efficiency, and automation to boost industrial competitiveness.

Each sector presents distinct potential, and as Dr. Umi Kalsom noted:

> *"Every sector has its own potentials — we just need to align the innovation with our context."*

AI in Energy Infrastructure

A key highlight was the discussion led by Ir. Mahathir Nor Ismail on how TNB is preparing the national grid for AI-driven transformation.

I. **Energy Demand & Capacity:** There are currently over 70 applications for data centres requiring 11,000 MW, with TNB forecasting an additional 6,000 MW by 2030. For context, the average demand for Peninsular Malaysia stands at around 20,000 MW.

II. **Capacity Expansion:** Genco, TNB's generation subsidiary, is already planning to expand capacity by 8,000 MW to meet this growing demand.

III. **Green Energy Transition:** TNB faces the dual challenge of not only providing energy but ensuring green and renewable options to support sustainability commitments.

IV. **Bidirectional Power Flow:** As Malaysia shifts from a traditional single-direction grid to a bidirectional power flow, the system becomes more complex. AI will play a central role in managing this complexity through advanced distribution systems capable of digesting real-time data to optimize grid performance.

This integration of AI into the grid will enhance predictive maintenance, energy reliability, and operational efficiency through real-time data insights and automation, aligning with Malaysia's long-term sustainability and digital transformation goals.

Autonomous Technology Development

Malaysia is making strides in autonomous vehicle (AV) development under the Ministry of Transport's regulatory sandbox. The Speakers noted that public trust, safety validation, and regulatory compliance remain critical success factors. Broader public acceptance, as highlighted, can also influence regulatory change, paving the way for more progressive policies in AI and automation.

AI Talent Development

Talent emerged as a recurring theme throughout the session. The panel agreed that Malaysia must accelerate curriculum reform and foster stronger partnerships between academia and industry to produce demand-driven, job-ready talent.

Ir. Mahathir shared that attracting and retaining AI talent remains a challenge, citing that the company tends to focus more on business outcomes than on nurturing people — resulting in what was described as a shift from a "sharp edges problem to a rough edges problem," reflecting the need for a more human-centred approach.

Ethics, Trust & Transparency

The session concluded with a strong reminder that ethical AI practices are foundational to public confidence.

I. **Transparency and explainability** must be built into every stage of AI deployment.

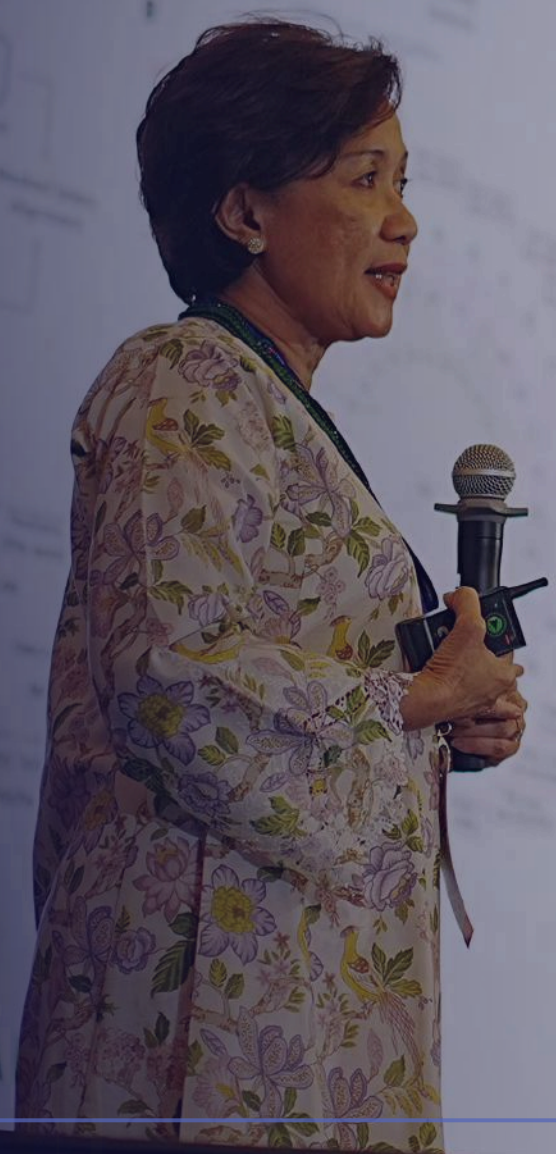
II. **Human oversight** should remain central — AI should augment, not replace, human intelligence.

Transforming Health System: Technology as the Key to Sustainability and Resilience

In this keynote, Prof. Dato' Dr. Adeeba Kamarulzaman, Chief Executive and President of Monash University Malaysia, unveils how technology holds the key to building healthcare that is not only sustainable but truly resilient.

With her distinguished expertise in global health leadership, Prof. Dato' Dr. Adeeba shared how digital innovations, smarter data, and transformative reforms can reshape service delivery, maximise efficiency, and close gaps in accessibility.

She opened her keynote by addressing the urgent pressures facing Malaysia's healthcare system — from escalating healthcare costs and medical inflation to the rising prevalence of non-communicable diseases and an aging population that continues to stretch national resources. She noted that climate change and the persistent risk of infectious disease outbreaks further compound the strain, creating a perfect storm that demands systemic transformation.



Technology, she asserted, presents a critical pathway forward. While not a panacea, it offers the tools to enhance sustainability, resilience, and equity in healthcare delivery. Telemedicine served as a key example: despite being legislated since 1997, widespread adoption only surged during the pandemic. Prof. Dato' Dr. Adeeba highlighted how restrictive regulations, such as the requirement for an initial face-to-face consultation, limited its potential impact — though revisions to these outdated laws are now underway to enable digital-first care models.

A cornerstone of digital transformation, she emphasised, is the implementation of Electronic Medical Records (EMR). The Ministry of Health's renewed push to deploy EMRs nationwide represents a decisive move to reduce duplication, improve care continuity, and enable data-driven decision-making.

Prof. Dato' Dr. Adeeba showcased several successful Malaysian digital health initiatives that illustrate how innovation can improve access and outcomes. Project ROSE, a self-sampling cervical cancer screening programme, allows women to test themselves privately and receive results digitally via SMS or call center. To date, the programme has reached more than 25,000 women, screened over 20,000, and has made significant progress toward ensuring follow-up care, though specific linkage-to-care rates are not available.

Likewise, TestNow, a digital HIV testing and counseling platform developed by the Malaysian AIDS Foundation and Council, enables confidential self-testing for key populations often marginalised by stigma — such as men who have sex with men, transgender people, and sex workers. The platform has processed a significant number of test requests, reaching key populations, with many first-time testers, highlighting technology's role in bridging the gap between underserved communities and essential care.

She then shifted to how AI is beginning to revolutionise medical practice and operational systems alike. Citing research from Nature Medicine, she highlighted how an AI-assisted dermatology model improved melanoma detection accuracy by 11% when used alongside human expertise. Beyond diagnostics, she argued, AI holds immense promise in improving operational efficiency — from staff scheduling and billing to patient flow and compliance — areas where Malaysia's healthcare institutions remain heavily manual.

Prof. Dato' Dr. Adeeba expanded this vision to include AI's broader role in drug discovery, medical education, and clinical decision support, advocating for the integration of digital learning platforms and online communities of practice to extend continuing medical education to doctors in remote regions such as Sabah and Sarawak. However, she cautioned that without diverse and representative data, AI risks perpetuating bias — especially against women and non-white populations. She urged Malaysia and its partners to build inclusive, locally grounded medical datasets to ensure fairness and reliability in AI healthcare applications.

Acknowledging the challenges of digital transformation, Prof. Dato' Dr. Adeeba highlighted systemic barriers including legacy systems, financial constraints, and a workforce still adapting to new digital demands.

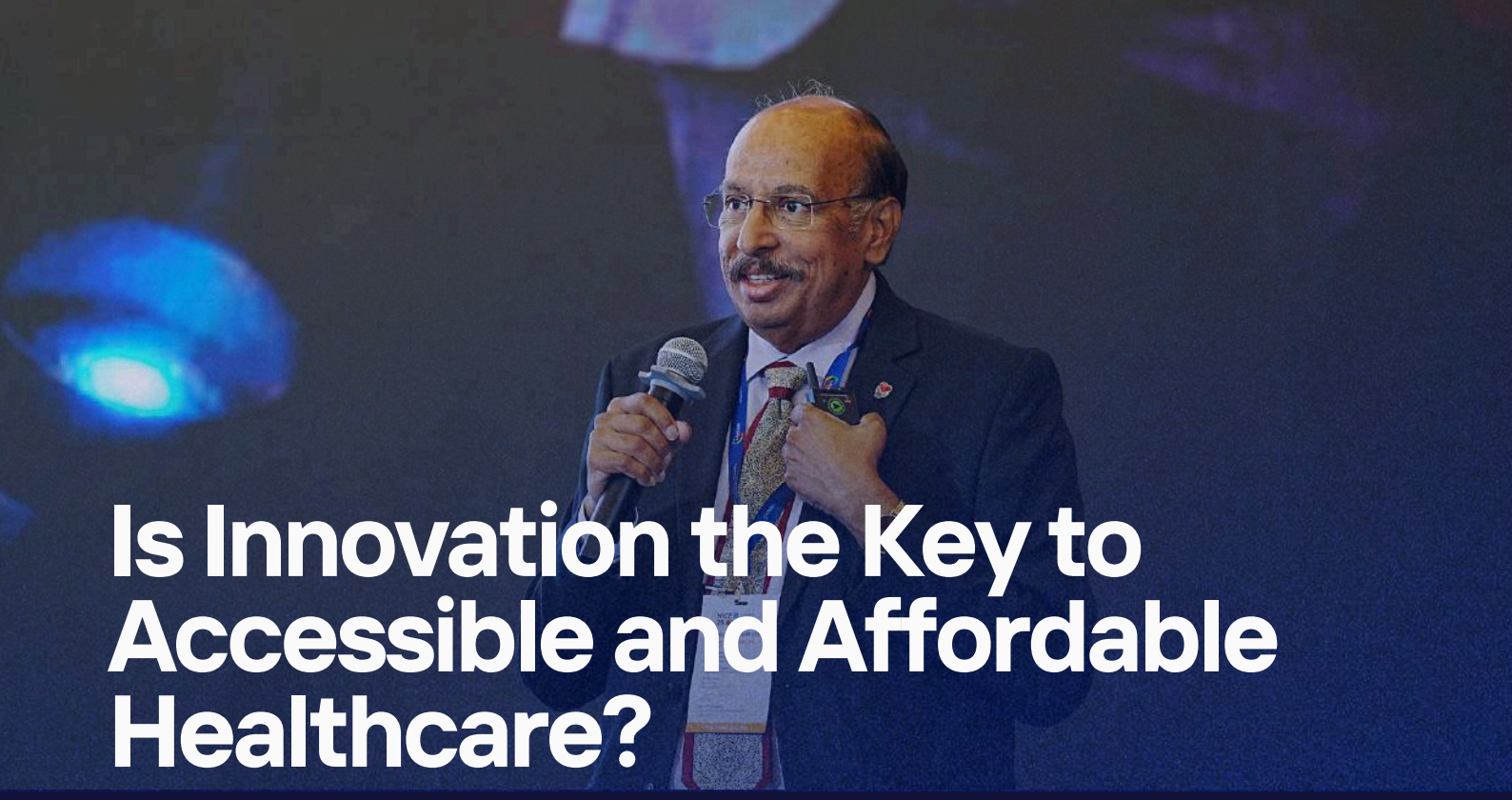
She emphasised the importance of co-designing technology with end users to ensure practicality and acceptance — lessons learned from early, cumbersome electronic systems. She also recognised the creativity of Malaysian innovators developing AI tools with limited resources, citing examples such as an AI-based cardiac failure support tool now progressing toward clinical trials.

In closing, Prof. Dato' Dr. Adeeba urged the healthcare sector to learn from other industries that have successfully embraced digital transformation, such as banking and aviation, where automation and customer-centric design have redefined service delivery. To fully realise the promise of technology, she argued, healthcare must evolve not only its systems but also its mindset — rethinking organisational structures, cultivating digital talent, and embracing new ways of working.

Her final message was clear:

> *"As Malaysia advances its digital health agenda, equity must remain the guiding principle."*

Technology should narrow, not widen, the divide between rich and poor, urban and rural, young and old. Success will depend on governance, ethical safeguards, and investment not just in machines but in people — ensuring that digital transformation strengthens, rather than fragments, the nation's healthcare future.



Is Innovation the Key to Accessible and Affordable Healthcare?

As healthcare systems worldwide grapple with rising costs, ageing populations, and increasing demand, innovation is often heralded as the answer. Yet, the central question remains — is innovation truly making healthcare more affordable and accessible, or is it introducing new layers of complexity and cost?

The Paradox of Progress in Healthcare

This fireside session by Mr. Sivaram Rajagopalan from Shiva Consultants explored the dual-edged nature of innovation in the health sector. Advances in areas such as AI diagnostics, telemedicine, gene editing, and robotics hold immense potential for improving efficiency and patient outcomes. However, they also risk widening the gap between those who can afford cutting-edge treatments and those who cannot. The session examined how Malaysia and other emerging nations can balance technological advancement with inclusivity, ensuring that healthcare transformation benefits the many — not just the privileged few.

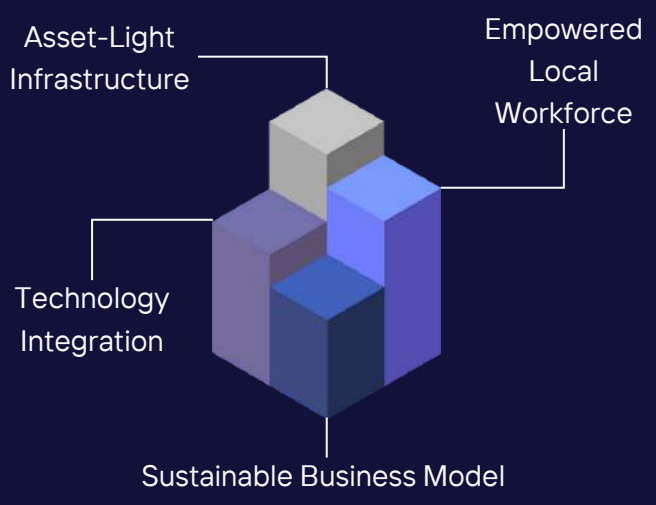
Reframing the Health Journey: From 'Illness Care' to 'Self Care'

One of the key takeaways from the discussion was the need to redefine the healthcare system. Today's system primarily operates as "illness care" — reactive rather than proactive. True health, as highlighted during the session, should begin with self-care, empowering individuals to take charge of their well-being before illness strikes. The transformation must therefore extend beyond hospitals and clinics to include communities and individuals as the first mile of health. As echoed by the Speaker *"Health should be seen as your first mile and healthcare is your last mile"*

Innovation Beyond Technology

The discussion emphasised that innovation is not limited to technological breakthroughs. Sometimes, it can be the simplest thing. Sustainable impact lies in business model innovation, process innovation, and people innovation. The effectiveness of healthcare solutions depends on the ecosystem that enables them — the models of delivery, the community

engagement, and the sustainability of their operations. Mr. Sivaram presented an inspiring example of how innovation can drive inclusivity through the work of iKure, a for-profit social enterprise based in India. Operating on a well-defined "Theory of Change", iKure's model is anchored on four pillars:



I. **Asset-Light Infrastructure** — establishing hub clinics that serve multiple rural villages.

II. **Empowered Local Workforce** — training women as Community Health Activists (CHAs), equipping them with portable medical kits and digital tools for basic healthcare delivery.

III. **Technology Integration** — leveraging a digital health platform, WHIMS, that enables data capture, remote consultation, and continuity of care, reducing reliance on episodic data collection.

IV. **Sustainable Business Model** — operating as a for-profit social enterprise, with 70% of revenue generated directly from community members (B2C). This approach helps avoid the fragility of grant-dependent models — often described as "sand castles" — ensuring long-term impact and self-sufficiency.

iKure's model demonstrates that innovation, when designed around local needs and sustained through viable business models, can create lasting change and empower underserved communities.

Bridging the Data Gap in Asia

The session also underscored a critical challenge — the lack of locally relevant health data across Asia. Many AI models and clinical algorithms are trained using data from Western populations, making them less effective for Asian contexts. To ensure accuracy and fairness in AI-driven healthcare, the region must shift from episodic data collection to longitudinal health data models that reflect local diversity and health profiles.

Local Innovation, Global Relevance

Examples highlighted during the session demonstrated the potential of combining technology with contextual understanding:

I. **Recornea (Italy)** — developing solutions for keratoconus, a condition prevalent in Asia and the Middle East, revealing how global innovation often arises where local R&D is absent.

II. **BioGenes (Malaysia)** — advancing the use of aptamers, synthetic molecules designed to detect specific biological markers, with potential applications in cervical cancer and pre-eclampsia screening.

A Call to Action for Stakeholders

The discussion concluded with actionable insights tailored to different stakeholder groups:

I. **For Innovators & Organisations:** Develop solutions that are both technologically sound and backed by sustainable business models, not reliant on perpetual grant funding.

II. **For Researchers & Academics:** Focus on collecting high-quality, long-term health data from local populations to support accurate, contextually relevant medical innovations.

III. **For Policymakers & Governments:** Foster local health tech ecosystems that encourage cross-sector collaboration between startups, research institutions, healthcare providers, and communities.

IV. **For Investors & Philanthropists:** Transition from short-term grant funding towards supporting social enterprises with clear paths to financial sustainability and measurable social impact.

V. **For Communities & Individuals:** Take an active role in one's own health journey — from participating in health initiatives to exploring opportunities as community health workers or digital health ambassadors.

The session reaffirmed that the future of healthcare innovation lies not only in technological advancement but in human-centred design, sustainable systems, and data integrity. For Malaysia and the wider region, achieving equitable healthcare transformation will require shifting mindsets — from illness treatment to wellness empowerment, from dependency to ownership, and from innovation for profit to innovation for people.

Malaysia's Healthcare Challenges: Can Innovation Save Time, Save Cost and Save Lives?

Malaysia's healthcare system is evolving to meet the challenges of rising costs, an ageing population, and growing health demands. Innovation is at the heart of this transformation—driving efficiency, improving care, and expanding access through digital health, AI, and data-driven solutions. The panel explored how technology, policy, and collaboration are coming together to build a more inclusive, responsive, and sustainable healthcare ecosystem for all Malaysians.

The Alarming Malaysia's Healthcare Reality

Dr. Peter Kim set the stage by outlining Malaysia's healthcare reality: national health expenditure currently stands at 4.% of GDP, still below the World Health Organisation's recommended 6%, while medical inflation continues to rise faster than government spending, hovering around 15%. He warned that the system is under pressure from non-communicable diseases (NCDs), an ageing population, and productivity losses as practitioners spend significant time on administrative tasks.

"*The system is under pressure — both in cost and capacity,*" he said, calling for innovation to close critical gaps and strengthen system efficiency.

From a global healthcare perspective, Ambuj Mudgal of AstraZeneca reflected on Malaysia's proven creative capacity, citing MySejahtera, the country's digital backbone during the COVID-19 pandemic, and ongoing amendments to the Telemedicine Act as clear evidence that Malaysia has the innovative DNA to lead. While Malaysia is inherently creative, this creativity often manifests as isolated pockets of innovation rather than a cohesive, system-wide approach. This fragmentation results in inefficiencies such as long waiting times for billing, even when diagnostic processes are efficient. As Dr. Khoh Soo Beng pointed out, "*Our issue isn't a lack of inventiveness — it's fragmentation.*"

Prof. Dr. Sazzli Shahlan Kasim added that Malaysia's dual healthcare model — balancing public and private hospitals — has long been a strength, but bottlenecks remain. He proposed automating patient registration and triage processes, as well as, expanding the use of wearables and remote monitoring to reduce unnecessary clinic visits.

Invention vs Innovation

The panel distinguished between invention and innovation — a key conceptual point. Dr. Khoh explained that invention is the creation of a new idea or product, while innovation is the systematic process of implementing that idea to achieve scalable, tangible impact. "*True innovation delivers a tenfold return — whether in productivity, cost savings, or outcomes,*" he said, adding that frameworks like ISO 56001 (Innovation Management Systems) can guide healthcare organisations toward structured, repeatable, and scalable innovation.

Globally, digital health is revolutionising care delivery by reducing hospital visits and enabling co-managed patient journeys, especially for chronic diseases such as diabetes. Data-driven innovation, Dr. Khoh emphasised, must involve all stakeholders — clinicians, caregivers, and payers — to build trust and ensure adoption. Yet, data fragmentation remains a persistent challenge in Malaysia. Although the country holds abundant healthcare data, much of it is trapped within non-standardised electronic medical record (EMR) systems, limiting interoperability and insight generation. Ambuj underscored the need for stronger data governance and local talent capable of extracting value from health data.

Equality and equity in access to healthcare

Addressing the urban–rural healthcare divide, the panel highlighted that while urban populations enjoy good access to care, rural communities face barriers such as distance, limited resources, and poor infrastructure. Ambuj shared AstraZeneca's AI-enabled chest X-ray solution, which detects early signs of lung cancer in community healthcare. "*Early detection improves survival twelvefold,*" he said, noting that the programme — implemented in partnership with the Ministry of Health — has expanded to 150 clinics nationwide. Similarly, AI-powered cardiac ultrasounds at local clinics reduce the need for rural patients to travel long distances for diagnosis. These examples demonstrate how simple, low-cost innovations can create outsized impact when applied thoughtfully.

Prof. Dr. Sazzli expanded on the concept of cost, emphasising that healthcare expenses extend beyond monetary terms to include time, productivity, and human cost. Prevention and early detection, particularly for NCDs and cancers, remain the most effective long-term strategies. However, he cautioned that consumer health devices can produce unintended consequences such as anxiety and false positives. Dr. Khoh added that Malaysia must invest in comprehensive hospital cost data to conduct

accurate cost-benefit analyses and guide innovation investments.

Technology as enabler and multiplier

The discussion also explored how technology can act not just as an enabler but a multiplier. Dr. Khoh illustrated this with examples like AI stethoscopes and rapid lipid tests, which can shorten diagnostic cycles tenfold. "*We can provide affordable, attainable, quality care without building more hospitals — through the Internet of Medical Things, point-of-care testing, and remote diagnostics,*" he said. Malaysia's semiconductor and electrical & electronics (E&E) industry, he noted, is a unique national strength that can accelerate such affordable, accessible healthcare solutions.

However, the panelists agreed that the real challenge lies in collaboration. A lack of interdisciplinary cooperation among doctors, engineers, data scientists, and policymakers continues to slow progress. Clinicians, for example, may reject new technologies that add even minor friction to their workflow. Prof. Dr. Sazzli emphasised that success will depend on trust, teamwork, and co-creation — ensuring that healthcare technologies are designed with, not just for, end users.

Malaysia must integrate diagnostics, treatment, and billing into a seamless, connected ecosystem rather than innovating in silos. This includes:

I. Prioritising **preventive care and early diagnosis** to reduce overall costs and disease burden.

II. Creating an **environment of co-creation** among all stakeholders to ensure practical, scalable adoption.

III. Leveraging Malaysia's **E&E strengths** for agile, "sidewinder" innovation in telemedicine and remote diagnostics, particularly through rural digital infrastructure.

IV. Aligning local frameworks with **global standards** like ISO 56001 and FDA models to ensure scalability and quality.

Ultimately, the session underscored a single message: Malaysia's healthcare transformation will depend not only on adopting new technologies but on integrating innovation into every layer of the ecosystem. From hospitals and startups to policymakers and patients, collaboration, trust, and systematic innovation will determine whether Malaysia can truly deliver better access, lower costs, and healthier lives for all.

Transforming Rice Systems for Climate Resilient Food Security

In a compelling keynote session, Dr. Jerry Glover, Chief of Staff at the International Rice Research Institute (IRRI), underscored the urgent need to transform rice-based systems to strengthen climate resilience and secure long-term food security. With rice serving as a staple for over 4 billion people and providing livelihoods for 150 million smallholder farmers globally, the transformation of this sector is central to ensuring both environmental and economic sustainability.

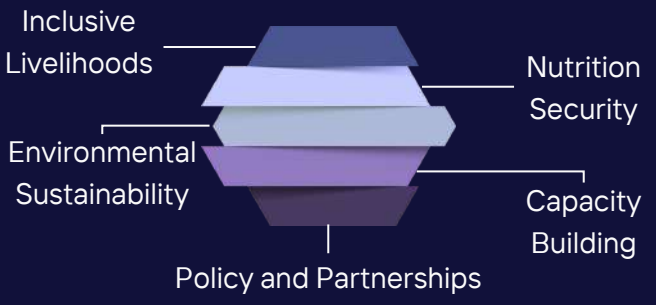
Despite occupying only 10% of the world's cropland, rice cultivation accounts for nearly 50% of cropland greenhouse gas emissions and 30% of freshwater use—making innovation in rice production a global priority. For Malaysia, where rice forms the foundation of local cuisine and national food security, these insights are particularly relevant.

IRRI at 65: Advancing a Future-Proofed Food System

Marking its 65th anniversary, IRRI reflected on its evolution from combating hunger and poverty to enabling inclusive livelihoods, improved nutrition, and a sustainable planet.

As part of the the Consultative Group on International Agricultural Research (CGIAR) network, IRRI now works with over 600 partners in 17 countries, toward a shared vision of "Future-Proofed Food Systems."

Dr. Glover highlighted IRRI's cross-cutting themes that define this vision:



I. **Inclusive Livelihoods:** Supporting smallholders, women, and youth in adopting modern technologies.

II. **Nutrition Security:** Shifting focus from calories to protein quality, micronutrients, and glycaemic balance.

III. **Environmental Sustainability:** Promoting low-emission, water-efficient, and resource-smart farming.

IV. **Capacity Building:** Developing the next generation of scientists and extension officers.

V. **Policy and Partnerships:** Strengthening collaboration across public, private, and civil society sectors to scale impact.

Dual Focus: Systems Innovation & Crop Improvement

IRRI's strategic approach integrates systems innovation with genetic improvement, addressing challenges across the entire rice value chain.

Systems Innovation: Key technologies and tools are driving efficiency, sustainability, and resilience:

I. **GloMIP (Global Market Intelligence Platform):** Linking research, policy, and market data for informed decision-making.

II. **Laser Land Levelling:** Enhancing water and fertiliser efficiency while reducing methane emissions.

III. **SeedCast App:** Connecting farmers with region-specific, climate-ready seed varieties.

IV. **Direct-Seeded Rice:** Reducing labour intensity and water consumption.

V. **AutoMon:** Automating water management to cut water use by 40% and methane emissions by up to 70%.

VI. **Rice Straw Management:** Converting agricultural waste into biochar and sustainable materials to reduce burning.

Crop Improvement & Breeding Innovation = Under the OneRice Breeding Framework, IRRI is accelerating the development of rice varieties that meet both market and nutritional needs.

I. **The International Rice Genebank** — the world's largest, with over 132,000 varieties — uses AI to identify traits for heat tolerance, flood resistance, and nutrition.

II. **Low-glycaemic index and high-protein rice varieties** are being developed to address rising rates of Type-2 diabetes and malnutrition.

III. **Accelerated breeding** has shortened the development cycle from 10–12 years to just 3–5 years, speeding access to improved varieties.

Key Takeaways for Malaysia

Notwithstanding policy and political issues behind our rice economy, there are ways where Malaysia can still work on to increase its sustainability of its rice economy. The first is the promotion of the adoption of climate-smart rice technologies. This includes digital tools, precision water management, and low-emission cultivation. Second, is the acceleration of breeding and deployment of climate-resilient, nutrient-dense rice varieties to strengthen national food security and nutritional outcomes.

Dr. Glover concluded that the transformation of rice systems is not only a scientific or technological pursuit — it is a global imperative for climate adaptation, sustainable livelihoods, and the long-term resilience of food systems.

Harnessing Technology to End Food Insecurity

This session, "Harnessing Technology to End Food Insecurity," brought together insights from Prof. Dr. Rofina Yasmin, Chairman of MRANTI, Dr. Muhammad Faheem of the Centre for Agriculture and Bioscience International (CABI), and Azizul Julirin, Founder of Aquafarm, to examine how technology, policy, and mindset shifts can collectively tackle one of Malaysia's most pressing challenges — food insecurity.

The Malaysian Food Security Challenge

Malaysia ranks 57th on the Global Food Security Index, reflecting its heavy dependence on food imports and vulnerability to climate-related disruptions. As Prof. Rofina noted, food security is defined by four (4) essential dimensions — availability, accessibility, utilisation (nutritional value), and sustainability. The nation's biggest challenge lies in limited domestic production capacity: while food demand is expected to rise by 60–70%, local agriculture output is not keeping pace.

Technology as a Key Enabler

The panel agreed that technology is pivotal in strengthening resilience and productivity — from weather and pest forecasting to yield prediction. However, as Dr. Faheem highlighted, preparedness remains the biggest barrier to technology adoption. While advanced solutions exist, they often fail to reach farmers who lack the training, resources, or infrastructure to use them effectively.

He emphasised that mid-level technologies, such as fertigation, hydroponics, and aquaponics, offer a more practical balance between cost and adaptability. CABI's work in plant health systems, including training "plant doctors" who connect local farmers with government experts and laboratories, was cited as a successful model of building capacity and knowledge transfer.

From a grassroots perspective, Azizul shared how Aquafarm emerged after the Ranau earthquake in 2015 to empower affected farmers through aquaponic techniques — a solution he first learned during his undergraduate studies. He noted that many farmers remain hesitant to adopt new methods due to cost, tradition, and limited exposure to technology.

Human Capital and Youth in Agriculture

All speakers agreed that engaging youth is crucial for the sector's future. Prof Rofina posed the question on why young Malaysians continue to view agriculture as a labour-intensive field rather than a tech-driven industry. Azizul argued that the issue begins at home and within the national narrative, where farming is often perceived as a fallback option rather than a viable career path.

To change this, the panellists proposed the establishment of agri-entrepreneurship incubators and mentorship programmes to cultivate capable agri-preneurs, alongside government intervention in developing "incubator farms" — ready-made facilities that reduce entry barriers for new farmers.

Data, R&D, and Market Access

Post-pandemic, Malaysia has seen a surge in agricultural data, but integration and utilisation remain limited. The speakers highlighted the need for digital platforms to capture real-time, farm-level information — enabling better decision-making, resource allocation, and market linkages.

Dr. Faheem and Azizul both pointed to market access challenges, particularly in Sabah, where farmers struggle to connect with buyers or export opportunities. Strengthening local supply chains and promoting the consumption of homegrown produce were identified as essential steps to reduce import dependency.

Building a Supportive Ecosystem

Beyond production, investment in post-harvest infrastructure — such as storage, cold chains, and food preservation facilities — was deemed vital to reducing wastage. Collaboration among academia, government, and industry is necessary to enhance technology transfer, commercialisation, and the sustainability of AgriTech business models.

The session concluded with a shared conviction: **ending food insecurity requires more than innovation — it requires inclusivity, preparedness, and coordinated action across all levels of the agricultural ecosystem.**

How Technology-Friendly Policies Can Feed the World

In a time of unprecedented global disruption, this session brought together Dr. Sarena Che Omar, Chief Executive Officer of PNB Research Institute and Dr. Logan Cochrane, Associate Professor at Hamad bin Khalifa University together with Dr. Hari Kulaveerasingam, former Special Advisor at SD Guthrie Bhd to discuss how right policy environment can drive the adoption of transformative agricultural technologies

Setting the Global Context

Opening the discussion, Dr. Hari Kulaveerasingam highlighted how geopolitical tensions, new trade barriers, and the impacts of climate change are reshaping global food supply chains. "*Resilience has become more important than ever,*" he said, framing the urgency for policies that not only respond to crises but also foster innovation and long-term sustainability.

Beyond Production: Redefining Food Security

Dr. Sarena Che Omar reminded the audience that food security extends beyond production. *"It's also about nutrition, affordability, safety, and sustainability,"* she said. She challenged the perception that policies are ineffective, asserting that "good policies create the environment for adoption." Her call was for risk-reducing measures such as crop insurance and accessible credit, rather than rigid mandates like blanket mechanisation targets.

Drawing from Malaysia's realities, Dr. Sarena warned that over-reliance on flood-prone northern rice belts and the glamorisation of imported crops have made the nation vulnerable. "*We glamorise lettuce and rocket salad but neglect pegaga and daun selom — native, nutritious crops that can be mechanised,*" she cautioned.

She also highlighted the long-standing issue of price controls in the paddy sector, describing them as politically sensitive yet economically counterproductive. "*Removing controls is politically difficult, but gradual reform is necessary,*" she noted, suggesting periodic price reviews as a pragmatic approach.

Learning from Global Best Fits

From an international perspective, Dr. Logan Cochrane described food security as "*a hard problem — that's why we're still discussing golden rice after 20 years.*" He stressed the need for

countries to adapt global best practices into "best fits" that align with local contexts.

He cited Ethiopia's policy reforms as an example where both top-down strategies and community-driven initiatives succeeded through clear, aligned objectives. Sharing insights from Qatar, Dr. Logan illustrated how crisis-driven policies can spur rapid transformation: "*We went from zero dairy production to 100% — even 104% — in four (4) years,*" referencing Qatar's swift response to the 2017 blockade.

He also pointed to the growing imbalance in global nutrition, observing, "*For the first time in history, we have more obese children than undernourished ones.*" This, he argued, reflects a systemic failure of the global food system that must be addressed through better regulation and food quality standards.

Policy Coherence and Market Incentives

Returning to Malaysia's context, Dr. Sarena emphasised that subsidy-dependent technologies are unsustainable, urging for an enabling environment where innovation is profitable on its own merits. She added that public-private partnerships (PPP) "*only work when they're profitable,*" and recommended developing niche markets, such as Borneo's specialty rice varieties, to attract investment and strengthen technology transfer.

While cooperative models have struggled locally, she suggested that contract farming, similar to Thailand's model, could offer price assurance for farmers while improving quality and traceability across the supply chain.

The Way Forward

The discussion concluded with consensus that technology alone cannot solve global food security challenges. It must be supported by coherent, innovation-friendly policies that foster investment, incentivise adoption, and ensure equitable access.

Closing the session, Dr. Hari reminded the audience that "*technology is only as strong as the policy that enables it.*" True resilience, he said, lies in aligning governance, empowering farmers, and creating inclusive markets that make sustainable agriculture both achievable and profitable.

Going Global by Design: Lessons from Leading Innovation Nations

In an increasingly interconnected world, innovation-driven nations are proving that "going global" is not an end goal — it's a design principle. At this dialogue, moderated by MRANTI's Chief Ecosystem Officer, Mohd Safuan Mohd Zairi was joined by Ms Sara Hamlin of Ignite Sweden, Prof. Dr. Andreas Hinz from University of Applied Sciences and Arts Northwestern Switzerland and Patrick Lim of ACE Singapore to unpack how successful innovation ecosystems intentionally nurture startups to think, build, and scale globally from day one.

Global Readiness Starts at Home

From Stockholm to Singapore, the message was clear: global ambition must be built into a startup's DNA. Sweden's approach centres around the idea of "*Start in Sweden, think global from day one*," says Sara Hamlin, embedding international scalability from the earliest stages.

For Switzerland, "going global" extends beyond exporting products — it's about innovating across the entire value chain. "*It's in the DNA of Swiss companies to think globally, from how they source materials to how they manage R&D*," said Prof. Dr. Andreas Hinz.

Singapore, on the other hand, has made entrepreneurship a national mission. *"Going global should never be an afterthought,"* said Patrick Lim of ACE Singapore. Founders must prove their value proposition beyond their home market — and that takes grit, clarity, and validation.

Innovation Beyond the Product

True innovation, the panellists agreed, happens across the organisation — from logistics to HR to customer engagement. Sara Hamlin shared that Ignite Sweden works closely with corporates to identify where innovation fits best within their business. "*Sometimes, the innovation isn't just in R&D. It could be in HR, logistics, or how teams interface with startups,*" she explained.

The Swedish Lesson: Activate, Don't Just Connect

Sweden's ecosystem is known for its structured approach to collaboration. Ignite Sweden ensures corporates are "activated" before introducing them to startups — identifying who has the problem, the budget, and the mandate to solve it. "*We don't do startup safaris,*" Sara quipped. "*The activation stage is critical — we make sure corporates know what they're looking for and how to engage meaningfully."*

The Swiss Advantage: Necessity Breeds Ingenuity

Switzerland's innovation edge, according to Dr. Hinz, comes from its limitations. "*Our challenges are blessings in disguise,*" he said. "Limited resources and high costs force us to innovate efficiently." He cautioned founders, however, to avoid falling in love with their ideas: "*Ask the uncomfortable questions — especially from people who don't care about you. That's where the truth lies.*"

The Singapore Playbook: Alignment and Ambition

Singapore's entrepreneurial journey began more than two (2) decades ago when the government made entrepreneurship a national priority. With a dedicated minister, pro-enterprise policies, and a focus on attracting global talent, Singapore designed its ecosystem to help startups scale quickly and sustainably.

Patrick Lim noted that while progress has been strong, alignment remains key. "*When government agencies and ministries aren't synchronised, it leads to resource leakages. Alignment ensures clarity and accountability,*" he said.

What Makes a Global Founder?

The panellists agreed that the most successful global founders share a common mindset — hunger, resilience, ambition, and speed. "Don't get too comfortable," Patrick reminded. "Stay ambitious and stay hungry." Sara echoed this with a nod to the Swedish spirit of boldness: "There's no one-size-fits-all formula. The unicorns don't follow the rules — that's why they're unicorns."

The Ideal Ecosystem: Flexible, Aligned, and Bold

When asked what makes an ideal innovation ecosystem, all three (3) nations emphasised flexibility and alignment. Sweden advocates for adaptable frameworks to support different startup models, especially in deep tech. Switzerland stressed synchronisation among stakeholders to help startups cross the "valley of death." Singapore, meanwhile, continues to fine-tune its alignment mechanisms to maintain momentum and resilience.

Malaysia's Takeaway: Design Global from the Start

For Malaysia, the dialogue offered valuable lessons:

I. Embed global scalability into startup programmes from inception.

II. Activate key corporate decision-makers before startup engagement.

III. Build flexible ecosystems that support non-linear growth.

IV. Align stakeholders and resources to bridge the "valley of death."

V. Foster continuous innovation across every layer of business and governance.

Ultimately, "Going Global by Design" is not just about ambition — it's about structure, alignment, and mindset. As MRANTI continues to strengthen Malaysia's innovation ecosystem, these insights from global leaders offer a roadmap for designing startups — and nations — ready to scale beyond borders.

The Future of Innovation Districts: From Local Commercialisation to Global Impact

In his Live from Barcelona session, Dr Josep Pique discusses the concept of an innovation district, defining it as a place that combines working, living, and recreation within a city, not just a technology park outside it. Innovation districts are crucial for transforming economies into knowledge-based economies by attracting and developing talent within cities. They involve face-to-face interaction between companies, universities, and government, with a focus on clustering specific sectors important to cities, regions, or nations. These districts also feature a mix of activities including startups, incubation, acceleration, and established companies working together to create new prosperity and competitive advantages through economic and social development.

He elaborates on the case of 22@Barcelona, an innovation district that transformed 200 hectares of an old industrial area into a knowledge-based economy. This transformation involved not only urban development into a smart city but also economic and social development through a holistic approach. Key aspects of 22@Barcelona include investing in smart city infrastructure (mobility, energy, waste, heating/cooling systems), serving as an "urban lab" or "living lab" for developing and scaling global innovations, and implementing a clear strategy of clustering specific sectors. The district focused on media, IT, energy, health tech, and design, intentionally locating universities, companies, incubators, and startups in proximity to foster collaboration.

The social strategy of 22@Barcelona emphasised inclusive growth, attracting professionals globally, and nurturing new talent locally by connecting schools to the district and promoting STEM vocations. This approach has resulted in significant economic success with over 2,000 companies and nearly 100,000 jobs, contributing 40% of Barcelona's turnover. The speaker concludes by highlighting 22@Barcelona as a global reference point for innovation districts and expresses hope for Malaysia to join the global innovation district alliance.

Beyond Borders - Malaysia's Blueprint for Global Innovation Leadership

Malaysia's aspiration to become a high-tech nation by 2030 is anchored in its commitment to advancing Research, Development, Commercialisation and Innovation (R&D&C&I). In his address, The Honourable Datuk Seri Hj. Hasnol Zam Zam bin Hj. Ahmad reaffirmed the government's target to raise Gross Expenditure on R&D (GERD) to at least 2.5% of GDP, underscoring the need to consolidate national efforts and encourage stronger participation from global industry players.

Malaysia's position at 34th in the Global Innovation Index (GII) 2025 meet its expected performance, reflecting continued efforts to build a resilient and innovation-driven economy. While challenges such as regulatory bureaucracy and global economic uncertainty persist, MOSTI remains optimistic that GERD will rise through increased business investment in R&D and enhanced cross-sector collaboration.

The National Technology and Innovation Sandbox (NTIS) continues to serve as a key accelerator for developing local talent and advancing STI-led solutions. However, talent mismatch remains a critical issue, particularly in STEM-related fields. The MyMahir Council under TalentCorp leads reskilling and upskilling initiatives to address these gaps — including collaborations such as the Bioeconomy Corporation (BEC)-Biocon partnership, which trains biotech graduates through matching grants and industry placements.

To achieve national STI targets, Datuk Seri Hasnol highlighted the importance of collaborative funding mechanisms, such as equity models, matching grants, and bonds, to support R&D&C&I activities. MOSTI is currently developing a five-year framework under the 13th Malaysia Plan (RMK13) to elevate Malaysia's STI performance, focusing on biotechnology, nuclear science, and energy innovation as future growth sectors.

Strategic Approaches and the Road Ahead

Science, Technology and Innovation (STI) are positioned as strategic tools to address national challenges — from healthcare transformation to sustainable energy solutions.

Datuk Seri Hasnol reaffirmed MOSTI's mission-based R&D&C&I approach, emphasizing the need to:

I. Foster an innovation-driven culture.
II. Build and retain world-class talent.
III. Scale startups and research outputs for commercial and societal impact.

He also called on academia to demonstrate tangible returns on investment (ROI) and returns on value (ROV) from R&D efforts, ensuring that research directly contributes to Malaysia's economic competitiveness and social well-being.

Towards a Global Mindset

In closing, Datuk Seri Hasnol urged innovators to "start local but think global." By designing solutions that address both domestic and international challenges, Malaysia can elevate its technology ecosystem, enhance global recognition, and achieve sustainable growth in the decade ahead.

Passport Booth – Playbook for Going Borderless

The session brought together insights from Nicholas Field of Datasphere Initiative, Linda Nguyen Schindler of Start2 Group, and Pranpreya Sriwannawit Lundberg of Thailand's Office of Higher Education, Science, Research and Innovation Policy Council, moderated by Eric Lee of Asia Digital Districts, to unpack the realities and requirements for Malaysian startups aspiring to expand beyond domestic borders. The discussion offered both strategic guidance and actionable recommendations, blending perspectives from investors, ecosystem builders, and policymakers across regional and international markets.

1. Building a Global Mindset

International success starts with an international mindset. Linda Nguyen emphasised that to succeed globally, founders must think globally from day one—understanding different markets, diversifying risks, and identifying strong ecosystem partners. She highlighted how countries like Singapore take a broader view of diversification, partnerships, and scalability. While Malaysia's domestic market remains important, it cannot be the final destination. She shared that Vietnam's large local market still pushes startups to look outward due to political and economic volatility—underscoring the need to diversify customer profiles and revenue streams.

2. Trust, Compliance, and Data Governance

Nicholas underscored that trust is a startup's greatest asset when entering new markets. Building consumer trust requires strong compliance, transparent data practices, and alignment with international standards. He highlighted that data governance and proactive compliance are not just regulatory requirements—they are strategic tools to gain investor and consumer confidence. Field also advised startups to invest in a Data Protection Officer (DPO) early on and continuously perform research to ensure compliance with local data laws. "*Being transparent about how you collect, store, and use data is not optional—it's what builds your long-term credibility,*" he said.

3. The Role of Culture and Localisation

The panellist pointed out that localisation is key to international success. Understanding the culture,

language, and consumer behavior of the target market determines whether a product can truly fit. Founders are encouraged to "find the right friends in the market"—local partners who can provide honest insights and help startups adapt effectively.

4. Partnerships as the Engine of Expansion

Partnerships emerged as a recurring theme throughout the session. The panelists emphasised ecosystem connectivity—advising founders to tap into accelerators, corporate programmes, and existing startup networks to identify partners who can help bridge market gaps. Nicholas added that before expanding abroad, startups should leverage domestic partnerships to strengthen their products and readiness. Dr. Pranpreya Sriwannawit Lundberg reinforced this by outlining the importance of Public-Private Partnerships (PPP) and regional collaboration. She noted ongoing efforts such as bilateral agreements, ASEAN startup platforms, and innovation corridors that provide access to labs, digital resources, and funding opportunities.

5. Policy Enablers for Cross-Border Growth

From a policymaker's perspective, Dr. Pranpreya highlighted Thailand's approach in creating an enabling environment for innovation-driven enterprises (IDEs). Key measures include:

I. Simplified business registration processes.

II. Financial and tax incentives.

III. Supportive infrastructure such as digital labs.

IV. Talent mobility programmes (e.g., startup visas) to encourage cross-border collaboration.

She also emphasised that governments must build soft-landing support systems that connect startups with resources, investors, and international partners.

"*Connectivity is the key—from policy to startup, from national to international,*" PS remarked.

6. Practical Steps for Founders

The panellists converged on several actionable steps for Malaysian and ASEAN startups:

I. **Think Global Early:** Integrate international scalability into business planning from inception.

II. **Leverage Your Ecosystem:** Identify national strengths and align with global industry verticals.

III. **Find the Right Partners:** Use accelerators, corporate programmes, and peer networks to build trusted collaborations.

IV. **Stay Compliant and Transparent:** Treat regulatory readiness as a growth enabler, not a hurdle.

V. **Localise Smartly:** Adapt products and marketing to fit local contexts and cultural expectations.

VI. **Seek Strategic Funding:** Combine domestic and international funding streams to ensure resilience.

7. The Road Ahead

Ultimately, the panel stressed that global expansion is not a one-size-fits-all journey—it is a process that blends mindset, compliance, partnerships, and cultural intelligence. With Malaysia's innovation ecosystem growing rapidly, the next phase lies in empowering startups to operate borderlessly, supported by policies, partnerships, and regional platforms that nurture sustainable international growth.

I-NATION 2025 Highlights: Tech Talk

What Went Wrong with GII - Tech That's Getting It Right

Khairy Jamaluddin and Shahril Hamdan discussed Malaysia's Global Innovation Index (GII) fluctuation, fragmented innovation system, funding gaps, and the need for a stronger ecosystem with deep tech support to boost talent retention and local tech resilience.

Rankings aren't the problem — impact is.

Malaysia's slip in the Global Innovation Index reflects not a lack of talent or policy, but our struggle to translate research into real-world outcomes. We have strong inputs — brains, policies, and universities — but weak outputs in commercialisation, scalability, and execution.

From consumers to creators of deep tech.

The question isn't whether Malaysia has the people — we do — but whether we have the patience to invest in long-term science and R&D. Deep tech innovation demands conviction and consistency, not quick wins.

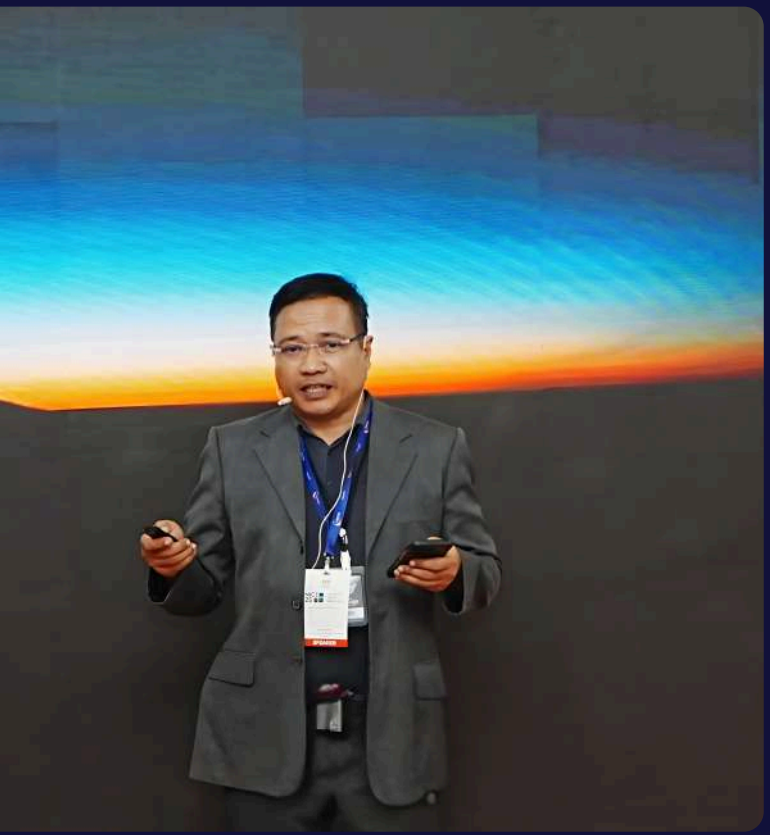
Technology as national resilience.

When it was said that technology is now a matter of national survival, it underscored a deeper truth: this is about sovereignty and the courage to build what lasts. Malaysia's challenge isn't ambition — it's the will to stay the course.

I-NATION 2025 Highlights: Tech Talk

When Inspiration Meets Innovation: The Story Behind AiroFlux

Miza Mohamad's story is one of resilience, purpose, and innovation — a testament to how personal adversity can spark transformative ideas. His journey with AiroFlux reflects how Malaysia's innovation ecosystem enables purpose-driven technology that addresses sustainability and climate challenges.



From Adversity to Purpose

The founder, with a background in mathematics and chemistry, founded AiroFlux after personal losses during the pandemic. Driven by a calling to "feed Syria, feed Palestine," she redefined charity as empowerment — turning compassion into innovation that uplifts communities.

Innovation with Impact

What began as food donation evolved into GroBox, a self-sustaining farming unit that generates its own water and supports precision farming. Powered by AiroCore, a thermal cooling module inspired by trees, it operates on just one-eighth the energy of standard air conditioners — reducing costs while tackling climate challenges.

Ecosystem that Enables

Despite early challenges with space and resources, Miza found support through MRANTI MakersLab, where his ideas were prototyped and realised. Under the banner of Shams Solarise Technology — "Shams" meaning sun and "Solarise" symbolising spirit — his journey reflects how Malaysia's innovation ecosystem empowers purpose-driven technology for sustainability.

I-NATION 2025 Highlights: Tech Talk

Beyond the Buzzwords: From concept to Application with AIoT and Robotics

In this session, Jinn An New, Chief Executive Officer of Hexa IoT Sdn Bhd unpacked what it truly takes to move beyond the hype and deliver real-world value with AI, IoT, and robotics. His insights focused on bridging the gap between concept and application — showing how purposeful, incremental innovation can solve everyday challenges across industries.

Start with real-world value

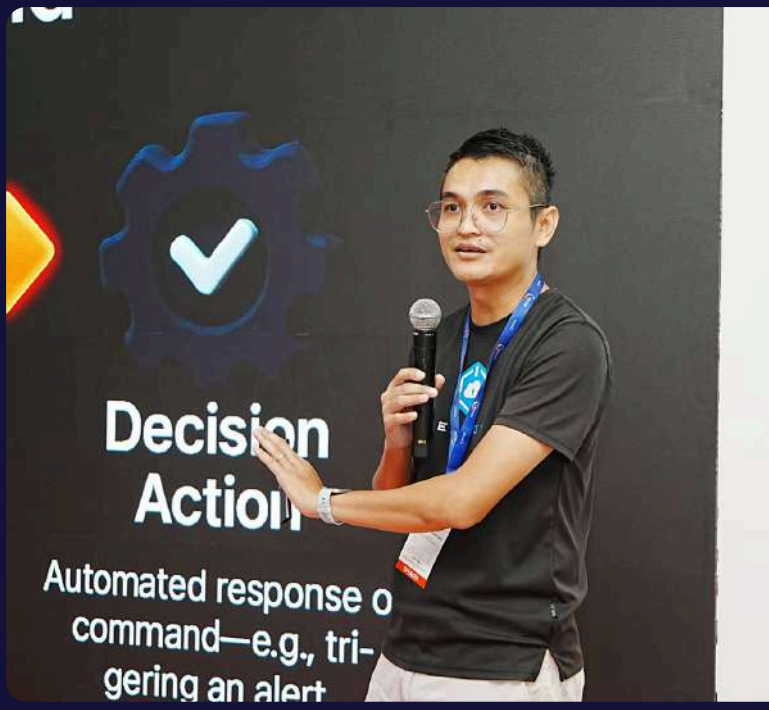
Technology must solve tangible problems — reducing labour, saving time, and improving productivity. The key is to start small by addressing specific issues rather than pursuing large-scale automation. Even simple robots can make a big impact when designed for clear, practical use cases.

AI as the intelligent filter

In agriculture, sensors can capture soil and nutrient data invisible to the naked eye. AI helps filter and translate this information into actionable insights, closing the loop from data to decision. This ensures that technology empowers users, not overwhelms them with complexity.

From automation to autonomy

Robotics today goes beyond repetitive tasks — powered by AI vision and decision-making, systems can now identify ripe crops or optimise warehouse operations. The goal is not just autonomous machines, but autonomy with purpose: technology that solves in-house challenges and delivers measurable value, step by step.



I-NATION 2025 Highlights: Tech Talk

The Robotic Revolution: Infineon's Role in Shaping the Future of Intelligent Machines

At I-Nation 2025, Sara Woo from Infineon Technologies delivered an insightful session on how robotics and embodied AI are reshaping the landscape of intelligent systems — where machines are no longer confined to pre-programmed tasks but are evolving into adaptive, context-aware systems capable of learning and decision-making.

From Automation to Embodied Intelligence

Robotics is shifting from fixed, pre-programmed routines to embodied systems that can perceive, decide, and act in real-world environments. This evolution is powered by sensors, edge computing, and ultra-efficient chips that enable machines to respond intelligently to context.

Systems Thinking Over Components

Infineon's approach goes beyond individual hardware. The company focuses on integrating intelligence, power, and safety into cohesive systems — demonstrating that the true frontier of AI lies in how machines move, sense, and make decisions alongside humans.

A Market in Motion

The global humanoid robot market is projected to exceed one million units by 2031, four (4) years earlier than expected. This growth is fueled by advances in AI, declining hardware costs, and technology spillovers from the EV and automation industries.

I-NATION 2025 Highlights: Tech Talk

From Pilots to Scalable outcomes - A How-To-Guide for Building a Sovereign AI Nation

Siddharth Porkkatil from Dell Technologies emphasised that scaling AI from pilot projects to national impact requires strategic alignment between people, policy, and purpose. While many AI initiatives falter due to limited governance and unclear objectives, true success lies in designing AI systems that are locally grounded yet globally competitive.

95% of enterprise AI pilots fail to scale

Often due to unclear purpose, weak governance, "lab-only" initiatives, and lack of executive buy-in. As highlighted, AI is not the solution itself but the fuel that powers human-led problem-solving. Without clarity and direction, even the most advanced models fall short.

Malaysia must evolve from being an AI user to an AI producer

Ensuring sovereignty over data, model autonomy, and locally defined regulations that remain globally aligned. Data should stay within national borders, while models can be built using global tools yet owned, customised, and governed locally.

Emerging AI trends

This include small, task-specific language models and AI agents capable of automating complex workflows. The conversation on synthetic data and provenance underscored the importance of building AI systems that are not only powerful but also trusted, transparent, and compliant.

People Behind the Scene

PROJECT SPONSOR

Dato' Dr. Rais Hussin bin Haji Mohamed Ariff

PROJECT ADVISORS

Safuan Zairi, Chief Ecosystem Officer
Khalid Yashaiya, Chief Strategy Officer
Sabrina Haris Maurice, Chief People Officer
Adit Rahim, Director, Strategic Communication

STRATEGIC COMMUNICATION DIVISION

A. Event Management & Conference

Shariza Abdullah
Siti Syafieqa Satria
Rastam Khairuddin
Syarah Abd. Hamid
Nur Alya Batrisya Ismail

B. Exhibitor Management & Identification

Abd Razak Abd Rahim
Muhamad Razali bin Jaafar

C. Branding & Visuals

Saiful Nor Adzhar
Nurul Yasmin Azizan
Syameel Fariz Lao Zarief
Hazwan Hisyam Ahmad Supian
Faidi Fauzi

D. PR, Marketing & Social Media

Syarifah Farhana Syed Nokman
Sharifah Sakinah binti Syed Alwi
Sofeya Illiyyiana Suhaimi
Abdul Qayyum Adzim Azmi
Abdin Shakirin Azmir
Syafie Mustafa

ECOSYSTEM DIVISION

E. Conference Content

Syazwani Ismail
Ng Kar Sin
Khairul Mazwan Ibrahim Pati
Dr. Afnizanfaizal Abdullah
Dr. Mohd. Hazwan Mohd. Daut
Azizah Amirah Touhid Ahmad
Ts. Norazlina Md Sani
Ahmad Rizal Azwir

F. Speaker Management Bureau

Kamalia Abd Aziz
Ainin Sofiya Ihsan
Nur Alya Batrisya Ismail
Noor Arliza Adlan
Masita Hasim
Siti Nadhirah Zazali
Maizurah Abdul Razak
Mohd Rozaini Razman
Mohd Muhizam Mohd Shahid
Badzlan Aiman Khan Beramkhan
Sharienna Sharman
Muhammad Izzwan Dzulkifli
Alyssa Safiyyah

G. Business Matching

Muhammad Fikri Ashraf
Anis Afina Shahran
Thangeswaran Khrishnan
Muhammad Muqri Abdullah Zawawi

STRATEGY DIVISION

H. Protocol, VIP & Government Liaison

Ir Ahmad Syahrir Mohd Shuib
Zurina Johari
Sofiya Qistina Yin Izhar

I. Rapporteur

Aliya Ayob
Nizam Marzuki
Cassandra Lew Wye Han
Fatin Aina
Shahnaz Husain Sukri
Tasha Syafiq

J. Data Management

Ts Shaari Alwi
Aina A Rahman

HUMAN RESOURCE, LEGAL & FINANCE DIVISION

K. Administration, Logistics and Accommodation

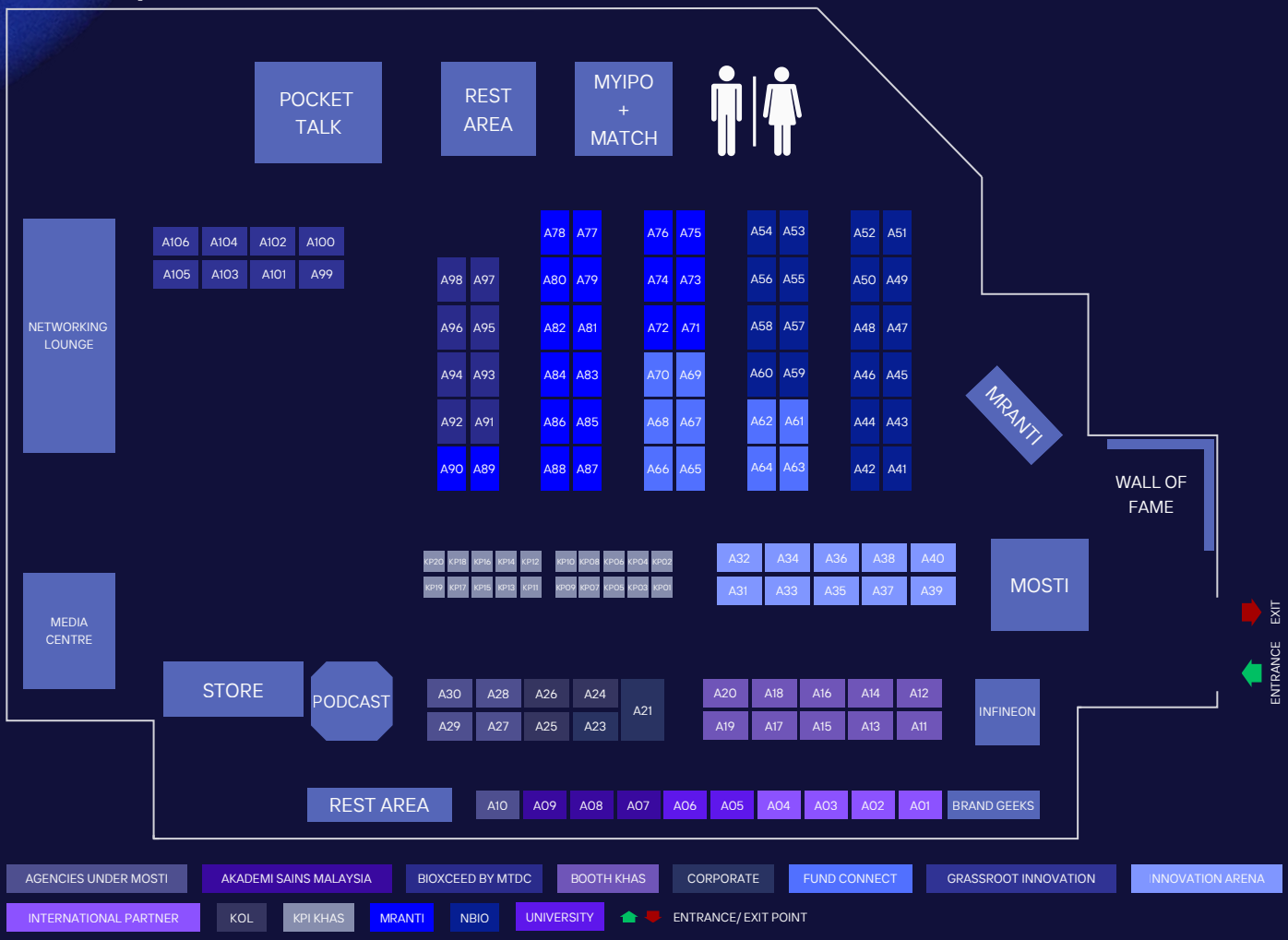
Dylan Chiam Tat Seng
Khairul Nur Afiqah
Zarina Binti Salim
Siti Aznee Noor Hassan

L. Budget Management

Mohd Khairul Arrif Bakhari
Nur Izatty Sukran

Floor Plan and Exhibitor Listing

Level 4, Tun Razak Hall 4



List Of Exhibitors

INTERNATIONAL PARTNER

LEAVE A NEST	**A01**
FUTURA INGREDIENTS	**A02**
TUSSTAR	**A03**
WAVE GLOBAL DIGITAL	**A04**

UNIVERSITIES AND RESEARCH INSTITUTE

INSTITUTE FOR MEDICAL RESEARCH	**A05**
HYDRO PLANT	**A06**

Floor Plan and Exhibitor Listing

AKADEMI SAINS MALAYSIA

GLOBAL PSYTECH SDN BHD	**A07**
INTELLIGENCE TRACEABILITY SDN BHD	**A08**
MEDIKA NATURA SDN BHD	**A09**

BOOTH KHAS

MALAYSIA PALM OIL BOARD	**A11**	ADASTREAM SDN BHD	**A16**
MYBIO BEAUTY AND HEALTH SDN BHD	**A12**	MYB INNOVATION SDN BHD	**A17**
ADA BIOT SDN BHD	**A13**	MY MYRACLE SDN BHD	**A18**
UNIVERSITI TUN HUSSEIN ONN MALAYSIA	**A14**	MALAYSIAN AGRICULTURAL RESEARCH AND DEVELOPMENT INSTITUTE	**A19**
LIPIDWARE SDN BHD	**A15**	MYBIO BEAUTY AND HEALTH SDN BHD	**A20**

CORPORATE

BILLION PRIMA SDN BHD	**A21**
MYRNA DIAGNOSTIC SDN BHD	**A23**

KOL

PLUS VIBES	**A24**
RICHARD KER	**A25**
QARBOTECH	**A26**

AGENCIES UNDER MOSTI

MALAYSIAN INDUSTRY-GOVERNMENT GROUP FOR HIGH TECHNOLOGY	**A10**	AGENSI NUKLEAR MALAYSIA	**A28**
NATIONAL INSTITUTES OF BIOTECHNOLOGY MALAYSIA	**A27**	MALAYSIAN SPACE AGENCY	**A29**
		MALAYSIA TECHLYMPICS	**A30**

INNOVATION ARENA

XERAYA CAPITAL	**A31**	MATRADE	**A36**
MIMOS BERHAD	**A32**	CRADLE FUND SDN BHD	**A37**
PERBADANAN PERUSAHAAN KECIL DAN SEDERHANA MALAYSIA	**A33**	BNP LABS	**A38**
		MDEC	**A39**
SURUHANJAYA SYARIKAT MALAYSIA	**A34**	NANO MALAYSIA	**A40**
HALAL DEVELOPMENT CORPORATION BHD	**A35**		

Floor Plan and Exhibitor Listing

MOTHER BOOTH

MOSTI	**C01**
MRANTI	**D01**

SPONSORS

INFINEON TECHNOLOGIES ASIA PACIFIC	**B03**
BRANDGEEKS	**E01**

KPI KHAS MCY

ENTOMAL BIOTECH SDN BHD	**KP01**
MALAYSIAN NUCLEAR AGENCY	**KP02**
JUTJEL SDN BHD	**KP03**
UNIVERSITI MALAYSIA KELANTAN/ SNH COSMETIC LAB SDN BHD	**KP04**
INFRA MOBILE DIGITAL SDN BHD	**KP05**
ADVANCE LIGHTNING SURGE FIRE SDN BHD	**KP06**
R FEX GLOBAL TRADE SDN BHD	**KP07**
CK NEXT SOLUTIONS SDN BHD	**KP08**
INSTITUTE OF MICROENGINEERING AND NANOELECTRONICS	**KP09**
PUTRA AGROTECH SDN BHD	**KP10**
EDSTEM SDN BHD	**KP11**
JKS BIOMEDICAL SDN BHD	**KP12**
LARISS QUNA ENTERPRISE	**KP13**
MIKRO MSC BERHAD	**KP14**
PRONATURE LIVING SOLUTIONS SDN BHD	**KP15**
CRE8 IOT SDN BHD	**KP06**
PURE ASIA INGREDIENTS SDN BHD	**KP07**
MALAYSIAN PALM OIL BOARD	**KP08**
TENTERA UDARA DIRAJA MALAYSIA	**KP09**
AURORA HEALTH SDN BHD	**KP10**

BIOXCEED BY BIOECONOMY

ZACROS MALAYSIA SDN BHD	**A41**
HYDRO PLANT SDN BHD	**A42**
MYMAB BIOLOGICS SDN BHD	**A43**
FRAIS FUNGHI SDN BHD	**A44**
KLSMC STEM CELLS SDN BHD	**A45**
WHOLLY GROVE SDN BHD	**A46**
NP ASIA SDN BHD	**A47**
THE SMARTER SOLUTION EDGE SDN BHD	**A48**
NUPLAS SOLUTIONS SDN BHD	**A49**
BIOEKAR (GELAMEKAR SDN BHD)	**A50**
CYTOMED THERAPEUTICS (MALAYSIA) SDN BHD	**A51**
BIANCO LABO SDN BHD	**A52**
DUNITA INTERNATIONAL SDN BHD	**A53**
EPG BIOTECH SDN BHD	**A54**
MSR GROWTH SDN BHD	**A55**
AGTC GENOMICS	**A56**
GLOBAL PRECISION DIAGNOSTICS SDN BHD	**A57**
VIDANEX	**A58**
AIRESTEC INNOVATIONS SDN BHD	**A59**
BEST ENVIRONMENTAL TECHNOLOGIES (M) SDN BHD	**A60**

Floor Plan and Exhibitor Listing

FUNDCONNECT

UNIVERSITI TEKNOLOGI MARA	**A61**	XIAMEN UNIVERSITY MALAYSIA	**A66**
SOLID LAB SDN BHD	**A62**	EARTISTIC SDN BHD	**A67**
FREE THE SEED SDN BHD	**A63**	AGENSI NUKLEAR MALAYSIA	**A68**
AERODYNE TECHNOLOGY SDN BHD	**A64**	UNIVERSITI KEBANGSAAN MALAYSIA	**A69**
OUTSIDE BOX SOLUTIONS SDN BHD	**A65**	SAGE PROMASTER SDN BHD	**A70**

MRANTI EXHIBITORS

BIO-ANGLE VACS SDN BHD	**A71**	BINA TENAGA ENERGY SDN BHD	**A81**
SPACEIN SDN BHD	**A72**	PROSTRAIN TECHNOLOGIES SDN BHD	**A82**
FORMEDIC TECHNOLOGIES SDN BHD	**A73**	MOVE ROBOTIC SDN BHD	**A83**
BNETWORKS SDN BHD	**A74**	IDEASPARQ ROBOTIC SDN BHD	**A84**
BIOGENES TECHNOLOGIES SDN BHD	**A75**	MENTARI ALAM EKO (M) SDN BHD	**A85**
ULTIMEAT	**A76**	ATOZ CARBON CYCLE	**A86**
HEVEATEX (M) SDN BHD	**A77**	DATASPEAK ANALYTICA SDN BHD	**A87**
CELL BIOPEUTICS RESOURCES SDN BHD	**A78**	GK AQUA SDN BHD	**A88**
Y US SDN BHD	**A79**	SHAMS SOLARISE TECHNOLOGY PLT	**A89**
BIOAPPS SDN BHD	**A80**	ULTRACK TECHNOLOGY SDN BHD	**A90**

BIOXCEED BY MTDC

BAMBUSOIDEAE TECHNOLOGY SDN BHD	**A91**	DELIGATEAUX (M) SDN BHD	**A95**
MYSPATIAL SDN BHD	**A92**	LAI HIN TRADING SDN BHD	**A96**
SINISANA TECHNOLOGIES SDN BHD	**A93**	PS FOOD & BEVERAGE SDN BHD	**A97**
ZAZEN HEALTH SOLUTIONS SDN BHD	**A94**	HEXA FOOD SDN BHD	**A98**

GRASSROOT INNOVATION (YIM)

OPTIVAP ESSENCE	**A99**	WAHII'S	**A103**
OZO-BUBBLE	**A100**	SCOPINE LEATHER	**A104**
B-GOOLEE	**A101**	A LORA	**A105**
GOHIJAU	**A102**	NANG NGESEP	**A106**

Thank you!