

ASEAN CIO DAILY



Show Daily Newsletter for the 8th ASEAN CIO Forum

September 18, 2024



8th ASEAN CIO Forum

18 – 19 September 2024

Dusit Thani Manila, The Philippines

ACIOA
ASEAN Chief Information Officer Association

Welcome message by ACIOA President

On behalf of the ASEAN CIO Association (ACIOA), I would like to extend a warm welcome to all invitees, speakers and delegates to the 8th ASEAN CIO Forum.

We are grateful for the opportunity to host our flagship event in the Philippines, a nation known for its vibrant culture and dynamic technological landscape.

This year's forum, themed "Empowering C-Suites: Pioneering ASEAN's Sustainable Digital Future with AI, Cybersecurity, and Green Innovation" is crucial for advancing ASEAN's digital future in light of the latest technological developments.

I am pleased to welcome a diverse and talented group of speakers and moderators from various industries and areas of expertise:

- USec. Alexander Ramos, Department of Information and Communications Technology, Cybercrime Investigation and Coordinating Centre (CICC) (Philippines)

- Dr. Hammam Riza, President, KORIKA (Indonesia)
- Dr. Kittti Kosavisutte, Chairman, TB-CERT (Thailand)
- Mr. Baljit Singh, Head of Planning Strategy and Governance, Digital Nasional Berhad (Malaysia)
- Mr. Lim Chinn Hwa, Co-founder and CEO, dConstruct Technologies (Singapore)

With digital threats emerging, such as cyberattacks utilising AI, the demand for cybersecurity has only increased, calling for innovation and the establishment of long-term preventative measures.

Sustainability has always been a core value in all ASEAN nations. We must not only strive to preserve our rich culture and heritage, but also preserve the natural resources and environment of our planet, even more so as we pursue technological advancements. It is this balance that will allow us to smoothly transition into a digital future that is both prosperous and sustainable.



I look forward to the meaningful exchanges and connections that will emerge from this event, and once again, a heartfelt thank you to all the sponsors, hosts and affiliates who have supported and continue to support us throughout all the years.

To keep up with the latest developments and updates regarding the forum, follow ACIOA on LinkedIn.

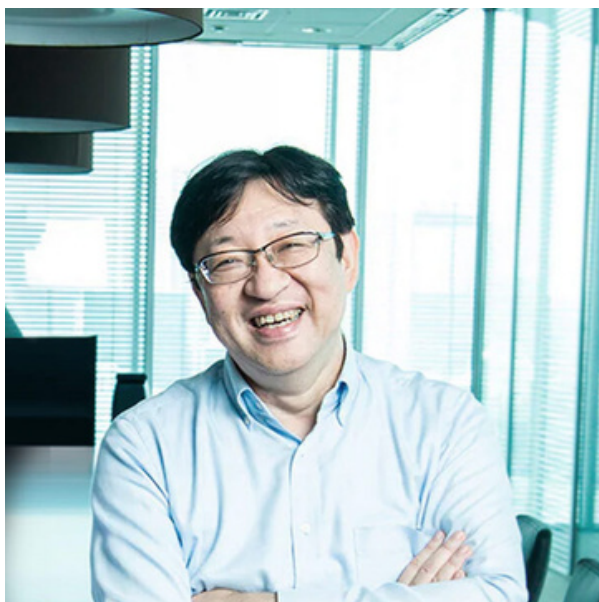
Yours sincerely,
Ng Hoo Ming
President
ACIOA



Sony Research and AI Singapore partner to advance LLMs for Southeast Asian languages

Sony Research and AI Singapore (AISG) have signed a memorandum of understanding (MOU) to collaborate on research for the Southeast Asian Languages In One Network (SEA-LION) family of large language models (LLMs), which are specifically pre-trained and instructed for Southeast Asia (SEA).

Through this shared research endeavour, Sony Research and AISG aim to address the gap in the representation of SEA in the global LLM landscape and work to ensure LLMs are more globally representative of all languages and populations. The work will be conducted through Sony AI, a division of Sony Research.



Hiroaki Kitano, President, Sony Research

“Access to LLMs that address the global landscape of language and culture has been a barrier to driving research and developing new technologies that are representative and equitable for the global populations we serve,” said Hiroaki Kitano, President of Sony Research.

“As a global company, diversity and localisation are vital forces. In SEA specifically, there are more than a thousand different languages spoken by the citizens of the region. This linguistic diversity underscores the importance of ensuring AI models and tools are designed to support the needs of all populations around the world. We look forward to our collaboration with AISG and the potential to make AI work for everyone.”

Sony Research and AISG will explore testing and feedback of the SEA-LION model, particularly for Tamil and other Southeast Asian languages, as well as sharing best practices on LLM development and research methodologies.

Leveraging Sony Research’s strong presence in India, the exploration will extend to its expertise in LLM development on Indian languages, including Tamil, and the applicability of its recent research in the areas of speech generation, content analysis and recognition. Tamil is estimated to be spoken by 60-85 million people worldwide, with many in India and the Southeast Asian region.

“AI Singapore is excited to collaborate with Sony Research in this groundbreaking partnership. The integration of the SEA-LION model, with its Tamil language capabilities, holds great potential to boost the performance of new solutions. We are particularly eager to contribute to the testing and refinement of the SEA-LION models for Tamil and other Southeast Asian languages, while also sharing our expertise and best practices in LLM development. We look forward to seeing how this collaboration will drive innovation in multilingual AI technologies,” said Leslie Teo, Senior Director of AI Products, AISG.



ST Engineering expands AI applications in business and critical sectors

ST Engineering spotlighted over 20 AI-powered solutions at its InnoTech Conference 2024 held in Singapore this month, which expanded AI's use cases and applications for businesses and critical sectors. Showcased AI applications included advanced fraud and deepfake detection, guided crime analysis, real-time emergency response, and the optimisation of hospital operations and resources.

"ST Engineering has consistently embraced AI as a core component of our product development strategy, evolving and adopting new technologies to enhance our offerings. Our AI-driven applications address some of the most pressing challenges of our time – from countering cybercrime to optimising emergency response and improving hospital operations," said Low Jin Phang, President, Digital Systems, ST Engineering.

"By integrating AI with our existing technologies, we've unlocked new possibilities, delivering highly effective solutions that enhance decision making, boost operational efficiency and create real value for businesses, governments and individuals."



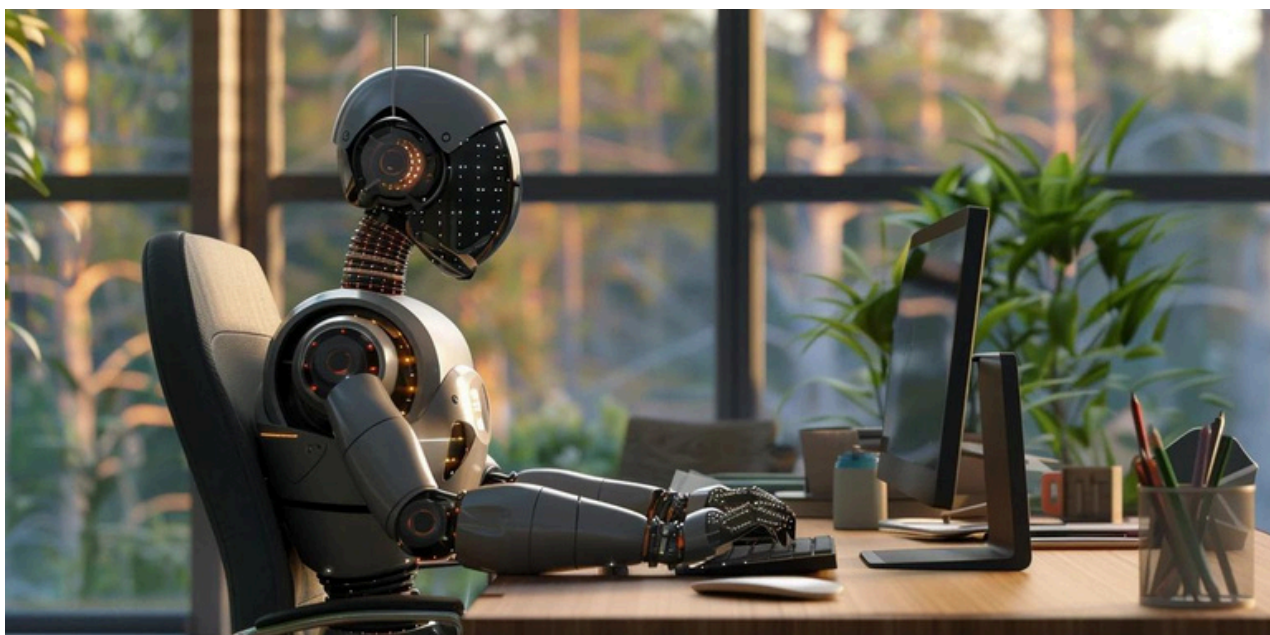
In sectors where precision and speed are crucial, ST Engineering's AI-powered solutions such as its Merlin, Einstein.AI, AGIL Response and AGIL Care solutions offer advanced real-time analytics, tailored insights and automation to address complex challenges.

It also sets a new standard in wireless connectivity with the launch of its 5G System-on-Chip (SoC) Small Cell, which leverages AI for both intelligent network management and dynamic load balancing, integrating both 5G and Wi-Fi 7 technologies.

Several strategic collaborations with industry leaders were established at the conference, including partnership with Philips to synergise digital health solutions that transform care delivery models and optimise hospital resources; and a memorandum of understanding with Toshiba and SpeQtral to deliver quantum-safe solutions for critical sectors.

R&D collaborations on AI with universities and government agencies were also announced, alongside the launch of 16 projects focused on green computing, energy-efficient large language models and multimodal deepfake detection.

Held annually as part of the group's commitment to advancing technology, the ST Engineering InnoTech Conference 2024 brought together industry experts and government leaders to discuss the latest trends and transformative potential of disruptive technologies and their impact on businesses.



Global humanoid robot shipments to reach 38,000 units in 2030

According to Omdia, global humanoid robot shipments are expected to exceed 10,000 by 2027 and reach 38,000 units in 2030. This translates to a CAGR of 83 per cent between 2024 and 2030.

2024 marks the breakthrough year for humanoid robots. Driven partially by the hype surrounding human-mimicking generative AI (GenAI), humanoid robots represent the next significant technological leap. Several factors have now aligned to make the bipedal anthropomorphic form factor ready for mass commercialisation following extensive investment from tech pioneers such as Boston Dynamics.

The development cost for humanoid robots has now reached an optimal point, with key technologies such as servo motors, harmonic drives, and sensors, becoming more advanced.

Additionally, improvements in on-device AI computing have enabled the integration of AI software for motion control, navigation and computer vision.

In line with these advancements, AI chip market leader NVIDIA has been actively promoting humanoid robots over the past six months recognising their potential in the future of robotics automation, due to the high demand for computational-intensive on-device AI.

Initial use cases of humanoid robots have focused on automotive manufacturing as this sector has seen early adoption from companies such as Tesla and Nio.

Humanoid robots also hold potential in various other fields, including general manufacturing and logistical tasks, retail, food and beverage, customer service, and healthcare.

Despite optimistic forecasts, humanoid robot technology remains in its infancy. The complexity of these robots complicates mass production and widespread deployment, with most still in trial or proof-of-concept stage. Large-scale implementation is likely a few years away.

“Chinese companies such as Data Robotics are exploring the integration of foundation models into humanoid robots to enable natural language interactions between humans and robots,” said Lian Jye Su, Chief Analyst at Omdia.

More importantly, the excitement around humanoid robots coincides with the bigger picture of the rising demand for robotics automation worldwide. Omdia expects strong growth with robotics deployment in the enterprise and industrial segments, mainly driven by automated guided vehicles, autonomous mobile robots, quadrupeds, and humanoid robots.

ST Engineering: Pushing the boundaries of cybersecurity innovations

ST Engineering cyber business area is one of the leading providers of cybersecurity solutions in Asia. Headquartered in Singapore, it offers a comprehensive range of cybersecurity solutions and services that cater to the needs of government agencies, critical infrastructures and commercial enterprises.

We caught up with **Benjamin Goh, SVP/Deputy Head and Chief Technology Officer, Deep Cybersecurity Capabilities, Cyber at ST Engineering**, ahead of his keynote session on day one of the 8th ASEAN CIO Forum, to find out more about how the visionary firm is leveraging AI and machine learning to protect critical systems from emerging threats while ensuring regulatory compliance and operational resilience.

How do you see AI transforming the cybersecurity landscape, especially in response to adversaries that are also leveraging AI for attacks?

When ChatGPT first emerged, it marked the moment we witnessed large language models (LLMs) operating at full capacity. From that point, it became evident that AI had reached a level of maturity suitable for widespread use.

Initially, we believed this advancement would benefit attackers more than defenders, as AI-enabled tools began facilitating the creation of deepfakes, disinformation campaigns, and highly convincing phishing emails. Cybercriminals were quick to harness the capabilities of AI and LLMs, leveraging them almost immediately and with minimal barriers to entry.

We knew we had to do something about it immediately. However, LLMs on their own were not specifically designed for cybersecurity applications. This led us to invest in engineering AI into our cybersecurity solutions so that our customers, who were cybersecurity professionals themselves, could use it to enhance their efficiency and effectiveness. We refer to this approach as "AI for cybersecurity."

However, like any tool, AI can be a double-edged sword. While it offers significant benefits for performing tasks, adversaries can also exploit and target it. This is where "cybersecurity for AI" becomes critical, ensuring the protection and integrity of AI systems themselves.



At the 8th ASEAN CIO Forum, we were invited to discuss how we are leveraging AI to enhance cybersecurity. However, there is also the other side of the equation: cybercriminals targeting AI systems. This raises key concerns, such as defending against threats like model poisoning, bias, and the compromise of AI systems that could result in data leakage. These two critical aspects, leveraging AI for cybersecurity and securing AI systems, will be the focus of our keynote at the event.

When did ST Engineering start offering AI-powered cybersecurity solutions?

We started offering AI-powered cybersecurity innovations in 2023, led by our two signature offerings – Adaptive and Intelligent Cyber Monitoring of OT Systems (AICYMO) and Cyber Co-Pilot.

AICYMO leverages AI and machine learning to create intelligent detectors for operational technology (OT) systems.

By integrating data from multiple sources within OT systems, AICYMO features advanced AI capabilities to monitor and detect activities across both plant-level operations and cyber components, which offers a comprehensive approach to provide visibility into both the cyber and physical layers of the system and bridge a crucial gap in operational security and management.



Our Cyber Co-Pilot solution gathers intelligence from diverse sources to provide context and insights comparable to those of tier 3 analysts. It also offers operational recommendations that enable tier 1 analysts to perform advanced tasks, such as threat hunting and investigation, effectively bridging the gap between entry-level and advanced expertise.

Think of it as a LLM that is designed specifically for security operations centre (SOC) analysts. Their work is often exhausting due to the high volume of repetitive tasks and the risk of burnout. Our goal was to assist these analysts in performing their jobs more effectively by helping them find answers to queries and even generating Python or Splunk scripts to aid in event analyses.

How can enterprises effectively strike a balance between deploying AI solutions and maintaining human oversight to ensure both operational efficiency and ethical decision making in cybersecurity?

I believe there's a socially accepted notion that AI will always serve as a co-pilot or aid to humans. We often say that AI can assist in various tasks, but ultimately, the human mind must make the final decision. This belief is deeply influenced by societal norms. For instance, if a self-driving car were to hit someone, it would make headlines. Yet, when human drivers cause accidents—something that happens daily—it rarely becomes news. Society tends to accept human error, but we are far less forgiving when AI makes mistakes.

This mindset makes it difficult for companies to market AI solutions where AI is solely responsible for decision making. After all, no AI can be right 100 per cent of the time. While AI is expected to make decisions autonomously in the future, there is still a lingering fear that AI could become uncontrollable, akin to dystopian depictions like Skynet in the Terminator movie. However, AI is developed by humans, and as long as societal norms dictate that humans must be in control, even the most advanced AI systems may not be fully adopted.

Ultimately, the adoption of AI depends not just on its capabilities but on what society is willing to accept. We may not yet be ready for AI to completely replace human decision making. Instead, we often prefer a system where AI provides recommendations, but a human still has to give the final approval—for instance, when AI suggests a stock purchase or recommends a strategic target, a human is expected to confirm the action.

For CIOs or CISOs who are planning to integrate AI into their cybersecurity infrastructure, what topline tips or advice would you give them, especially those that are sceptical about AI?

Before introducing any new tool into your environment, you should first ask yourself whether you truly need it. If you determine that you do, then consider the purpose: what specific problem or need is this tool addressing? Avoid chasing trends without a clear justification.

Once the CIO confirms that there is a solid business case for integrating AI, the CISO should step in to evaluate the security implications.

As a cybersecurity expert, the CISO must identify the potential mitigations and threats associated with AI adoption. The risks related to AI are well documented. Basic risks include model poisoning and data bias.

More nuanced concerns involve privacy, ethics, and the challenge of explainability and transparency—especially when AI is used for critical decision making.

To address these challenges, it's crucial to develop strategies for enhancing explainability and managing risks related to model and data security.

CISOs need to assess how AI will be implemented within their environment and determine how to effectively manage these risks. While solutions for these issues are available, it is essential that CISOs carefully evaluate the need for AI before integrating it into their systems. Understand its purpose and implications thoroughly before making a decision.

Mylene Abiva: Championing female leadership in business and tech



Mylene Abiva is President and CEO of FELTA Multi-Media Inc., a renowned company with a 59-year history that specialises in innovative instructional materials and educational technology for schools in the Philippines.

A pioneering leader in entrepreneurship and edutech, Abiva has garnered numerous prestigious accolades throughout her career.

Her awards include Ernst & Young Entrepreneur of the Year Philippines (Women Entrepreneur) in 2009, ASEAN Business Leader (Women Category) in 2014, ASEAN Woman Entrepreneur in 2015, and recognition as one of the 100 Most Influential Filipina Women in the World in 2016. Additionally, her company was named Asia CEO Most Innovative Company in 2017 and she served as the World Robot Olympiad Ambassador from 2018 to 2021, among others.

Join her on the second day of the 8th ASEAN CIO Forum, where she discusses the future of work and the transformative impact of AI and robotics on the workforce in ASEAN as a panel speaker.

A promotional banner for the 8th ASEAN CIO Association Forum. The background is yellow with a cityscape silhouette at the bottom. On the left, it says "8TH ASEAN CIO ASSOCIATION FORUM" in bold black letters, followed by "Manila, The Philippines" and "18 - 19 September 2024". Below that is the website "acioa.com". In the center, a white box contains the text "EMPOWERING C-SUITES: PIONEERING ASEAN'S SUSTAINABLE DIGITAL FUTURE WITH AI, CYBERSECURITY, AND GREEN INNOVATION". On the right, there are logos for "ACIOA" and "PCIOA".

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Google Cloud Security: Mandiant is a recognised leader in dynamic cyber defence, threat intelligence and incident response services. By scaling decades of frontline experience, Mandiant helps organisations to be confident in their readiness to defend against and respond to cyber threats. Mandiant is now part of Google Cloud. Google Cloud accelerates every organisation’s ability to digitally transform its business and industry. It delivers enterprise-grade solutions that leverage Google’s cutting-edge technology, and tools that help developers build more sustainably. Customers in more than 200 countries and territories turn to Google Cloud as their trusted partner to enable growth and solve their most critical business problems.

ST Engineering is a global technology, defence and engineering group with a diverse portfolio of businesses across the aerospace, smart city, defence and public security segments. The Group harnesses technology and innovation to solve real-world problems, enabling a more secure and sustainable world. Headquartered in Singapore, it has operations spanning Asia, Europe, the Middle East and the U.S., serving customers in more than 100 countries. ST Engineering reported revenue of over \$10b in FY2023 and ranks among the largest companies listed on the Singapore Exchange. It is a component stock of MSCI Singapore, FTSE Straits Times Index and Dow Jones Sustainability Asia Pacific Index.

Headquartered in Sunnyvale, California, **Azul** provides the Java platform for the modern cloud enterprise. Azul is the only company 100 per cent focused on Java. Millions of Java developers, hundreds of millions of devices and the world's most highly regarded businesses trust Azul to power their applications with exceptional capabilities, performance, security, value, and success. Azul customers include 36 per cent of the Fortune 100, 50 per cent of Forbes top-10 World's Most Valuable Brands, all 10 of the world's top-10 financial trading companies and leading brands like Avaya, Bazaarvoice, BMW, Deutsche Telekom, LG, Mastercard, Mizuho, Priceline, Salesforce, Software AG and Workday.

Eclypsium's cloud-based platform provides digital supply chain security for critical software, firmware and hardware in enterprise infrastructure. **Eclypsium** helps enterprises and government agencies mitigate risks to their infrastructure from complex technology supply chains.

Hitachi Vantara is transforming the way data fuels innovation. A wholly owned subsidiary of Hitachi Ltd., Hitachi Vantara provides the data foundation the world's leading innovators rely on. Through data storage, infrastructure systems, cloud management and digital expertise, the company helps customers build the foundation for sustainable business growth.

Based in Singapore, **OneT Solutions** is a homegrown IT company offering a wide range of enterprise solutions and consulting services that meet the ever-changing demands of the industry. Its professional team of sales and consultants are certified and trained experts in their respective domains. OneT Solutions has worked with numerous clients in the financial, telecommunications and government sectors to overcome the challenges faced in their digital transformation journey.

Axway enables enterprises to securely open everything by integrating and moving data across a complex world of new and old technologies. Axway's API-driven B2B integration and MFT software, refined over 20 years, complements Axway Amplify, an open API management platform that makes APIs easier to discover and reuse across multiple teams, vendors, and cloud environments. Axway has helped over 11,000 businesses unlock the full value of their existing digital ecosystems to create brilliant experiences, innovate new services, and reach new markets.

EfficientIP is a network security and automation company specialising in DNS, DHCP and IPAM, collectively known as DDI Technology. It promotes business continuity by making IP infrastructure foundation reliable, agile and secure. Since 2004, EfficientIP has continued to expand its reach internationally, providing solutions, professional services, and support all over the world with the help of select business partners. Its passionate teams have delivered successful projects to over 1,000 customers globally and ensured operational efficiency through dedicated customer care.

Menlo Security protects organisations from cyber threats that attack web browsers. Menlo Security's patented Cloud-Browser Security Platform scales to provide comprehensive protection across enterprises of any size, without requiring endpoint software or impacting the end user-experience. Menlo Security is trusted by major global businesses, including Fortune 500 companies, eight of the ten largest global financial services institutions, and large governmental institutions. The company is backed by Vista Equity Partners, Neuberger Berman, General Catalyst, American Express Ventures, Ericsson Ventures, HSBC, and JPMorgan Chase. Menlo Security is headquartered in Mountain View, California.

The Southeast Asia Plus Technology Entrepreneurs' Network (**SEAPTEN**) is a Manila-based organisation dedicated to empowering tech entrepreneurs through collaboration with groups such as the ASEAN and Philippine CIO Association. SEAPTEN aims to link together the public and private sectors of ASEAN countries and other interested nations to explore collaboration on technology and related ventures, particularly in the realm of information and communications technology (ICT) and public private partnerships (PPP).

Funded by world-class investors, including Evolution Equity Partners, Silver Lake Partners, Sequoia Capital, GV, Riverwood Capital, and others, **SecurityScorecard** is the global leader in cybersecurity ratings, response, and resilience, with more than 12 million companies continuously rated. Founded in 2014 by security and risk experts Dr. Aleksandr Yampolskiy and Sam Kassoumeh, SecurityScorecard's patented security ratings technology is used by over 25,000 organisations for enterprise risk management, third-party risk management, board reporting, due diligence, cyber insurance underwriting, and regulatory oversight.

As a leader in providing technology-enabled business services, **Trends** helps businesses navigate digital transformation and business adaptation through a wide range of solutions, including cybersecurity, cloud adoption, managed services, IT consulting, network infrastructure, data centre infrastructure, IT computing, enterprise applications, and converged access, among other capabilities.



The ASEAN CIO Association (ACIOA) is a non-profit organisation formed in 2014 to provide the platform for greater collaboration and sharing of ICT best-practices amongst CIOs, industry leaders and public sector representatives. ACIOA recognises the immense value of business relationships in the highly technical field of information systems management, believing the development of an active community of ICT leaders is key to ASEAN's success in the digital age.

ACIOA offers a diverse array of activities, programmes and resources to support ASEAN ICT leaders with opportunities for information sharing and education at the executive level. Through monthly meetings, ASEAN CIO Forums, strategic partnerships with regional ICT associations as well as resources like CIO Consulting and Business Bridge, ACIOA enables CIOs to build invaluable personal alliances and tap on the expertise of accomplished ASEAN ICT leaders.



DEEPTECH TIMES

ASEAN CIO Daily was produced by Deeptech Times in consultation with ACIOA for the 8th ASEAN CIO Forum.

AI, blockchain, decentralisation, metaverse, robotics, space tech, quantum computing and Web3 – these are among the group of deep technologies that are imminent on the horizon and inextricably entwined with all the activities of business and organisations. Deeptech Times was founded to offer enterprises, business leaders and policy makers a lens through which they can better understand the progress of these technologies and their consequent issues so that they can make informed decisions.

Deeptech Times offers industry news, features and interviews that are insightful and analytical, across various multimedia formats including text, video, audio, graphics and experiential events; bringing trusted journalism and information to help business leaders navigate the deep tech landscape with confidence.

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