04

Strengthening ASEAN-Japan AI Collaboration: Enablers and Barriers

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Section Outline

Abstract

As artificial intelligence (AI) collaboration increasingly becomes a defining component in Association of Southeast Asian Nations (ASEAN)-Japan relations, this article examines the current opportunities and challenges of Japan-led AI initiatives in Southeast Asia. It argues that, despite growing competition in the AI landscape, ASEAN-Japan AI collaboration continues to grow due to Japan's adaptive economic and technological statecraft. By analyzing three emerging cases of ASEAN-Japan AI collaboration – AI governance, the ASEAN Co-Creation Roadmap, and start-up collaboration and funding – this study unpacks the enablers and barriers to achieving practical ASEAN-Japan AI collaboration.

Overall, the article finds that the prospects for ASEAN-Japan collaboration in AI are moderately positive. Japan continues to enjoy a relatively high degree of trust in Southeast Asia. Japanese start-ups and technology companies are uniquely positioned to leverage the longstanding contextual knowledge and trust-based reputation networks of many Japanese companies in the manufacturing and electronics sectors that established a presence in the 1980s. Positive spillover effects from ASEAN-AI collaboration are also on the rise, especially in related technology sectors such as semiconductors, and data centres.

Still, challenges lie on the horizon, including fragmented approaches to cross-border data flows and widening gaps in AI readiness between Japan and ASEAN Member States. While the outsized dominance of the United States and China in the AI stack can impact the likelihood of ASEAN and Japan achieving their shared aim of developing sovereign AI capabilities in the short-to-medium term, they can harness their complementary and comparative strengths in workforce development, smart manufacturing, robotics, green technology, fintech, and entertainment. To enhance ASEAN-Japan AI collaboration and advance an interoperable technological ecosystem, the study suggests focusing on four areas: compute infrastructure, cross-border data flows, capacity building, and the promotion of use-case applications.

1 Context

During the 6th Association of Southeast Asian Nations (ASEAN)-Digital Ministers Meeting (ADDM) in January 2026, Japan's Ministry of Internal Affairs and Communications presented a proposal to ASEAN Member States (AMS) to enhance artificial intelligence (AI) collaboration through a tailored approach that considers the cultural and linguistic diversity across Southeast Asia.1 Japanese Communications Minister Yoshimasa Hayashi stated that several countries have expressed interest in cooperating with Japan to

[1] Mayumi Hirosawa, "Japan to Help ASEAN Develop Local-Language AI amid China Concerns," *Nikkei Asia*, accessed March 28, 2026, https://asia.nikkei.com/business/technology/artificial-intelligence/japan-to-help-asean-develop-local-language-ai-amid-china-concerns.

create context-sensitive AI models and platforms to reduce overdependence on foreign countries. Japan views the growing interest among Southeast Asian countries in developing their respective sovereign AI capabilities as an opportunity for Japanese AI start-ups to further expand overseas.[2] As a point of differentiation from United States (US) and Chinese companies, Japan endeavours to pursue a more "tailored" approach to AI development and deployment that takes account of the cultural and linguistic nuances of target countries in Southeast Asia.[3] To demonstrate this, Minister Hayashi and Cambodia's Minister of Posts and Telecommunications Chea Vandeth agreed to develop a large language model (LLM) for Khmer, the country's official language, on the sidelines of the Japan-ASEAN ADDM. In the joint statement released after the event, officials set out action points to build an enabling AI ecosystem, ranging from building data centres, strengthening digital and security infrastructure, developing human resources, and strengthening regulatory frameworks, to addressing the misuse of AI.

While the aspirations of ASEAN and Japan are timely, and valid, developing sovereign AI capabilities is easier said than done, given the established market presence and scale of leading US and Chinese technology companies across the AI stack (hardware, software, and infrastructure). Moreover, current geopolitical headwinds arising from US-China strategic competition is also restructuring the global and regional trade and tech supply-chains. Crucially, the varying levels of AI readiness and cultural barriers among AMS and Japan, as well as the mobilization of adequate fiscal resources to build compute infrastructure and the availability of talent, remain in question.

Against this backdrop, it is puzzling as to why ASEAN and Japan continue to forge and deepen cooperation, especially in the highly competitive and rapidly evolving field of AI? More importantly, given ASEAN's similar or parallel AI partnerships with more established AI players such as the US and China, it is unclear why Japan continues to be a critical partner for the region. This research argues that the momentum behind ASEAN-Japan AI collaboration is largely anchored in Japan's longstanding position as ASEAN's most trusted dialogue partner, built through its strategic deployment of economic and technological statecraft. Conversely, while the US and China continue to dominate the AI stack, Japan co-creation model offers an alternative 'third path' in AI innovation that aligns with AMS preference towards developing local alternatives that reduces their exposure to both AI superpowers, while promoting culturally sensitive AI innovation.

Through a combination of expert interviews and open-source document analysis, the article identifies the enablers and barriers likely to shape the prospects for ASEAN-Japan AI collaboration moving forward. Overall, the analysis finds that Japan's legitimacy as ASEAN's trusted dialogue partner is a major enabler of its positive AI engagement in Southeast Asia. Although its AI innovation cannot compete with the sheer size, scale, and sophistication of the US and China, Japan continues to enjoy moderate support among key policy and industry elites in Southeast Asia. This support is rooted in its adaptive and flexible use of economic and technological statecraft over the past five decades.

This article defines "economic statecraft" as the use of economic tools, including trade, investment, overseas development aid, export controls, and investment screening. "Technological statecraft" refers to the development and deployment of digital assets, tools, and platforms, including cybersecurity, AI, data, and semiconductors, to accomplish foreign policy goals and objectives. Through the sustained provision of public goods and infusion of investment and technology transfer, Tokyo has incrementally gained ASEAN's trust. Japan seeks to build on this momentum to regain its competitive edge in AI in fields like robotics and semiconductors. Japanese start-ups and technology companies are leveraging the longstanding contextual knowledge and positive reputation of many established Japanese manufacturing and electronics companies. They

2 Hirosawa, "Japan to Help ASEAN Develop Local-Language AI amid China Concerns."
3 Akio Yaita, "Japan Backs ASEAN's Needs-Driven AI Initiative," *MediaConnect*, accessed March 28, 2026, https://mediaconnect.com/japan-backs-aseans-needs-driven-ai-initiative.

are capitalizing on the trust-based networks of Japanese firms to establish horizontal collaboration through strategic partnerships with local start-ups in Southeast Asia to advance research and development (R&D) and talent training. With the provision of funding support, accelerator programmes, and scholarships, opportunities for vertical collaboration are also increasing to help address shortages in the information technology (IT) workforce. This takes the form of joint ventures and partnerships involving start-ups and universities, as well as technical and policy training to enhance two-way exchanges among Japanese and Southeast Asian policymakers, innovators, and entrepreneurs.

However, barriers remain on the horizon to cementing ASEAN-Japan collaboration, such as fragmented data governance frameworks and widening gaps in AI readiness, which are reflected in the overall lack of adequate internet connectivity, compute infrastructure, and skilled IT professionals in Southeast Asia. While Japan and ASEAN aspire to reduce dependencies on US and Chinese technology companies, this remains infeasible in concrete terms over the short-to-medium term. Instead, Japan and ASEAN can shift their focus towards championing niche or targeted and complementary AI use-case applications in smart manufacturing, robotics, green technology, fintech, and entertainment that align with their mutual digital economic priorities, and comparative advantages.

This study aims to make two important contributions. First, it examines the underlying factors that underpin the feasibility of ASEAN-Japan AI collaboration from the viewpoint of Japan's evolving economic and technological statecraft. Japan is clearly not the only state that utilizes economic and technological statecraft in its engagement with ASEAN. However, Japan's legitimacy as a trusted dialogue partner, based on its decades-long engagement, sets it apart from the US, China, the European Union (EU), and the Republic of Korea. The article expounds on such a claim by analyzing a brief historical overview of ASEAN-Japan relations since 1977 following the Fukuda Doctrine. In doing so, it traces the procedural and performative elements that support Japan's legitimacy as a trusted regional power. In adapting its statecraft from economic to technological, Japan has demonstrated agility in identifying and pursuing mutual goals with ASEAN. Japan's patient and flexible engagement anchor the foundational impetus behind its ongoing ASEAN-Japan AI collaboration and the feasibility of the article's suggested policy recommendations in the concluding section. Second, the article's analysis provides policymakers and practitioners across government, industry, academia, and civil society with preliminary insights into ASEAN-Japan AI collaboration, given the nascency of the topic.

This study proceeds in four parts. The first section elaborates on the evolution of Japan's statecraft, the main driver underpinning the positive momentum of ASEAN-Japan AI collaboration. The second section provides an overview of ASEAN-Japan AI initiatives. The third section unpacks the enablers and barriers that could cultivate or inhibit ASEAN-Japan AI collaboration moving forward. The fourth section concludes by noting that the AI prospects of ASEAN and Japan will be best advanced by harnessing their complementarities and comparative advantages and by incrementally embedding human-centred AI principles to promote a more inclusive and equitable AI ecosystem amid intensifying great power competition and rapid technological disruptions.

2

Japan's Evolving Economic and Technological Statecraft

Arguably, Japan's adaptive economic and technological statecraft is the main driver underpinning the prospects of ASEAN-Japan AI collaboration. As ASEAN's first dialogue partner, Tokyo's long track record of strategic engagement over the last 50 years has utilized economic tools and, more recently, technological tools to build trust and confidence in Southeast Asia. Although there is no objective scorecard for evaluating Japan's trust-building with

ASEAN, the State of Southeast Asia, a regional survey of ASEAN political, business, and academic elites, has consistently ranked Japan as one of ASEAN's most trusted partners. In 2023, Japan was crowned as the most trusted partner (54.5%), followed by the US (54.2%), EU (51.0%), China (29.5%), and India (25.7%).[4] Relatedly, the Lowy Institute's Asia Power Index regarded Japan in 2025 as the region's "quintessential smart power", with wide diplomatic influence despite its limited resources and ageing population.[5] To demonstrate how Japan's legitimacy as ASEAN's most trusted dialogue partner was built, the discussion below traces its patient engagement in Southeast Asia characterized by its evolving statecraft from economic to technological, across three stages:

1. Establishment: ASEAN and the Fukuda Doctrine (1977–2000)
2. Recalibration: Japan's economic stagnation and the rise of China (2000–2012)
3. Digitalization: The Fourth Industrial Revolution and great power rivalry (2016–present)

It should be noted that China's accession to the World Trade Organization in 2001 and its rise as the second-largest economy in 2008 were critical events that marked the shift in Japan's statecraft from economic to technological statecraft. This trend has continued since the 2010s amid the rapid adoption of digital technologies in Southeast Asia, the intensifying US-China rivalry that began in 2016, and China's climb to technological leadership beginning in 2020. Turning to ASEAN-Japan relations, the shared goal of harnessing the benefits of digitalization accelerated efforts by ASEAN and Japan to strengthen cooperation in cybersecurity and dual-use technologies such as space capabilities and AI.[6] As US-China competition intensified, ASEAN and Japan increasingly found themselves in a similar position, seeking to carve out strategic agency to achieve policy manoeuvrability. To this end, diversifying partnerships and increasing domestic and regional cooperation to stimulate innovation became a strategic decision aimed at reducing dependence on major global technology players, such as the US and China.

A. Establishment: ASEAN and Japan's Fukuda Doctrine

Since Japan became ASEAN's first dialogue partner in 1977, Tokyo has adopted a nimble approach in its statecraft. Whether such adaptiveness is the outcome of highly deliberate strategic calculations or mere serendipitous efforts, Japan has demonstrated its commitment to strengthening ASEAN's regional economic integration. Indeed, during his speech at the state banquet marking the 50th year of ASEAN-Japan Friendship and Cooperation, held in Tokyo in December 2023, former Japanese Prime Minister Kishida emphasized that the core of the enduring relationship lies in mutual trust.[7] That trust was built over the previous four decades, initiated by the Fukuda Doctrine announced in 1977, which set out Japan's foreign policy blueprint for reshaping its image after World War II. Overall, the Fukuda Doctrine has three pillars: "(i) Japan will not be a militaristic power in Southeast Asia; (ii) Japan will seek a 'heart to heart' relationship (kokoro to kokoro no fureai) with ASEAN, and (iii) Japan will forge an equal relationship with ASEAN and will support it as a regional organization".[8]

After the declaration of the Fukuda Doctrine in 1977, Japan's engagement with ASEAN began to flourish, with economic statecraft taking centre

[4] L. Peng Er, "Closer ASEAN-Japan Relations amid Great Power Transition in the 21st Century?" *Asia-Pacific Review* 30, no. 2 (2023): 44–65, https://doi.org/10.1080/13439006.2023.2248783.

[5] Lowy Institute, "Japan," *Asia Power Index* 2025 Edition, accessed March 28, 2026, https://power.lowyinstitute.org/countries/japan/.[5] https://www.mofa.go.jp/files/100596243.pdf

[6] "Implementation of Plan of the Joint Vision Statement on ASEAN-Japan Friendship and Cooperation Trusted Partners," *Ministry of Foreign Affairs*, December 17, 2023, https://asean.org/wp-content/uploads/2023/12/Final-Implementation-Plan-of-the-ASEAN-Japan-Joint-Vision-Statement.pdf; "The 28th ASEAN Japan Summit," *Prime Minister's Office of Japan*, October 26, 2025, https://japan.kantei.go.jp/104/diplomatic/202510/26asean.html.

[7] "Speech by Prime Minister Kishida at the banquet at the State Guest House, Akasaka Palace commemorating the 50th Year of ASEAN-Japan Friendship and Cooperation – Striving for Peace and Prosperity through Co-Creation based on Trust" *Ministry of Foreign Affairs of Japan*, accessed March 28, 2026, https://www.mofa.go.jp/files/100596243.pdf.

[8] Peng Er, "Closer ASEAN-Japan Relations."

stage. Japan was seen as a model of development by countries such as Singapore and Malaysia due to its re-emergence as an economic and technological frontrunner in East Asia. To buffer against the adverse effects of its trade war with the US, Japan saw Southeast Asia as a viable alternative for expanding its economic footprint.[9] In the mid-1980s, Japanese electronics and automobile companies started to move their production bases to Southeast Asia.[10] With the rapid expansion of regional supply chains, ASEAN became a direct recipient of Japanese investment, leading to the establishment of large-scale industrial parks in Thailand and Indonesia in the 1990s.[11]

Japan's provision of Overseas Development Assistance (ODA) was also a key hallmark of its economic statecraft among AMS and went hand in hand with the expanding presence of Japanese companies in Southeast Asia. Since the announcement of the Fukuda Doctrine, Japan has prioritized Southeast Asia as a key ODA recipient. Former Prime Minister Ohira even noted that Japan's ODA to China at the time should not exceed the amount provided to Indonesia, the largest recipient among AMS.[12] Compared with the Western notion of ODA, the Japanese model was described as the cooperative trinity comprising trade, investment, and economic cooperation. This meant that while Japanese ODA sought to achieve multiple policy goals, such as aiding reparations, supporting humanitarian assistance and enhancing diplomatic relations,[13] it also supported the growing footprint of Japanese companies across Southeast Asia. As a form of public-private partnership, Japanese ODA facilitated the construction of roads and ports to support socioeconomic development in Southeast Asia, while ostensibly creating a sound environment for Japanese industrial firms to flourish.

Amid the transactional views often attached to Japanese ODA in Southeast Asia, it was nevertheless instrumental in providing a safety net via grant aid during the Asian financial crisis, offering both technical and financial support.[14] When the 1997 Asian financial crisis hit, Japan launched the New Miyazawa Initiative, followed by Japan's financial cooperation in Asia under the ASEAN Plus Three Framework (with Japan, China, and the Republic of Korea) to support recovery. Through these efforts, Japan came to be seen as a positive force in East Asia, marking a new phase in ASEAN-Japan cooperation.

B. Recalibration: Japan's Economic Stagnation and the Rise of China

Despite Japan's economic rise through the 1980s, its economy began to stagnate from the early 1990s to 2001. In the first half of the 1990s, Japan's asset bubble burst, leading to a deep recession that was further aggravated by the 1997–1998 Asian financial crisis. Amid these challenges, ASEAN-Japan engagement continued with the announcement of the Obuchi Initiative during the ASEAN Plus Three process, involving Japan, China, and the Republic of Korea. This initiative sought to enhance human resource development and exchanges in East Asia, build social safety nets, revitalize the economy, and meet the challenges of the information age at the start of the new millennium.[15] In 2002, Prime Minister Koizumi Junichiro proposed the concept of an East Asian Community, and in the same year the ASEAN-Japan Comprehensive Economic Partnership was signed.

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[9] Peng Er, "Closer ASEAN-Japan Relations."

[10] Oba Mie, Endo Tamaki, Jimbo Ken, and Mieno Fumiharu, "50th Year of ASEAN-Japan Friendship and Cooperation: Roundtable Discussion of Track Record and Future Prospects," *Asia-Pacific Review* 30, no. 2 (2023): 30–68, https://doi.org/10.1080/13439006.2023.2254636.

[11] Oba et al., "50th Year of ASEAN-Japan Friendship and Cooperation."

[12] Mitsuya Araki, "Japan's Official Development Assistance: The Japan ODA Model That Began Life in Southeast Asia," *Asia-Pacific Review* 14, no. 2 (2007): 17–29, https://doi.org/10.1080/13439000701733218.

[13] Jiyeoun Song, "Japan's Official Development Assistance in Southeast and South Asia: Strategy for Economic Revitalization and Regional Security Cooperation," *Journal of International and Area Studies* 28, no. 1 (2021): 1–20, https://www.jstor.org/stable/27210932.

[14] Araki, "Japan's Official Development Assistance: The Japan ODA Model That Began Life in Southeast Asia."

[15] Narongchai Akrasanee and Apichart Prasert, "The Evolution of ASEAN-Japan Economic Cooperation" in *ASEAN-Japan Cooperation: A Foundation for East Asian Community*, ed. Tadashi Yamamoto, (Tokyo: Japan Centre for International Exchange, 2003), 63-74, accessed March 28, 2026, https://jcie.org/researchpdfs/ASEAN/asean_narongchai.pdf, 69–70.

While the early 2000s offered some relief to the Japanese economy, its recovery was further undermined by the global financial crisis in 2008.[16] At the same time, China's accession to the World Trade Organization had a profound impact on the global economy. By 2008, China had become the second-largest economy and was widely regarded as a peer competitor to the US. Concerned by China's growing economic influence and foreign policy assertiveness in Southeast Asia, especially regarding the maritime disputes in the South China Sea, Japanese policymakers became even more strategic in their dealings with Beijing. Japan pursued a multipronged strategy of mediating China's expanding strategic influence by maintaining the regional military balance through the continuing presence of the US under the US-Japan alliance, while reinforcing its strong engagement with Southeast Asia through the provision of aid, investment, and infrastructure.[17]

Tokyo's refinement of its economic statecraft revitalized Japan's strategic outreach to Southeast Asia, seeking to emphasize economic, environmental, and strategic benefits to differentiate itself from China.[18] This became highly evident when Japan launched its Partnership for Quality Infrastructure in 2015, which adhered to international standards in contrast to China's Belt and Road Initiative. Former Japanese Prime Minister Shinzo Abe's emphasis on Japan's high-quality infrastructure was intended to distinguish Japanese projects from Chinese ones, which at the time received mixed reviews regarding financial and environmental sustainability and governance standards.[19] Since then, Japan and China have poured additional funding into expanding their respective infrastructure development financing portfolios.

Through infrastructure development, Japan and China aimed to spur domestic growth while also generating geostrategic and economic influence. However, a degree of convergence started to emerge as Tokyo and Beijing tried to outbid and outperform each other. Over time, Japan and China complemented and learned from each other's practices, from contracting and technology transfers to additional diplomatic efforts, all of which to some degree has benefitted host countries.[20] These dynamics soon turned Japan and China into "competitive partners" that defied the conventional development financing represented by the Washington Consensus and the Development Assistance (DAC) Committee. Interestingly, this dynamic also underlined Japan's move away from the constraints of the DAC for aid donors, while tacitly endorsing fundamental Chinese practices that were apparently informed by earlier Japanese development practices.[21]

Despite Japan's stagnating economic performance, it has maintained its role as a leading bilateral development partner in Southeast Asia. From 2015 to 2021, Japan released a total of $28 billion in overseas development finance, of which 99% was ODA, accounting for almost 33% of the regional total.[22] In 2003, Japan also revised its ODA Charter to address human security. In moving beyond traditional security issues, Japan utilized ODA to support capacity-building activities related to maritime law enforcement among claimant states in the South China Sea as a way of countering China's grey zone tactics.[23] While Japan is not among the claimant states, the South China Sea is vital to its sea lines of communication, and any Chinese actions in the contested waters could set a precedent for Japan's disputes with Beijing over the Senkaku/Diaoyu Islands.[24]

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[16] Keiichi Tsunekawa, "Japan: The Political Economy of Long Stagnation," in *Two Crises, Different Outcomes: East Asia and Global Finance*, ed. T. J. Pempel and Keiichi Tsunekawa (Ithaca, NY: Cornell University Press, 2015), 185–215.

[17] Corey Wallace, "Japan's Strategic Contrast: Continuing Influence despite Relative Power Decline in Southeast Asia," *The Pacific Review* 32, no. 5 (2019): 863–97, https://doi.org/10.1080/09512748.2019.1569115.

[18] Wallace, "Japan's Strategic Contrast: Continuing Influence despite Relative Power Decline in Southeast Asia."

[19] Hong Zhao, "China–Japan Compete for Infrastructure Investment in Southeast Asia: Geopolitical Rivalry or Healthy Competition?" *Journal of Contemporary China* 28, no. 118 (2019): 558–74, https://doi.org/10.1080/10670564.2018.1557946.

[20] Zhao, "China–Japan Compete for Infrastructure Investment in Southeast Asia."

[21] Jing-Dong Yuan and Ngeow Chow Bing, "Competitive Partners in Development Financing: China and Japan Expanding Overseas Infrastructure Investment," *The Pacific Review* 32, no. 5 (2019): 771–800, https://doi.org/10.1080/09512748.2019.1569117.

[22] Lowy Institute, "Southeast Asian Aid Map 2023: Traditional Development Partners," *Southeast Asia Aid Map*, accessed March 28, 2026, https://seamap.lowyinstitute.org/analysis/2023/traditional-development-partners/.

[23] Kristi Govella, "The Adaptation of Japanese Economic Statecraft: Trade, Aid, and Technology," *World Trade Review* 20, no. 2 (2021): 186–202, https://doi.org/10.1017/S1474745620000543.

[24] Govella, "Adaptation of Japanese Economic Statecraft," 192.

C. Adaptation: The Fourth Industrial Revolution and Great Power Rivalry

On the eve of the ASEAN-Japan Commemorative Summit in 2023, several experts noted that Japan and ASEAN cannot remain complacent amid regional and global uncertainty, particularly amid the deepening US-China rivalry amid the Fourth Industrial Revolution.[25] Since 2009, Japan has gradually re-engineered its statecraft to emphasize critical and emerging technologies beginning with cybersecurity. This shift towards technological statecraft has been integral, given the growing threats that cyberattacks pose to Japanese companies operating in East Asia. From the lens of technological statecraft, Japan seeks to benefit from digital economic growth through the expansion of its technology companies and by building stronger diplomatic relations in Southeast Asia. In 2023, Tokyo was the leading source of foreign direct investment, with approximately $26 billion directed to the manufacturing, storage, and automotive sectors.[26] Connectivity, in both the infrastructure and digital fronts, has been a key priority area for Japan. In 2024, Japan contributed $100 million to the Japan-ASEAN Integration Fund and launched the Japan-ASEAN Comprehensive Connectivity Initiative.[27] With the wave of digitalization trend, Japan has expanded its technological statecraft portfolio, first with cyber capacity-building in late 2009 and later extending to dual-use technologies such as AI.

Cybersecurity

As Japan's economy and society have become increasingly dependent on the integration of physical and digital technologies, the country has placed greater emphasis on cybersecurity. With rapid internet penetration and digital technology adoption, the threat surface available to malicious actors has expanded, thereby posing serious risks to Japanese companies operating at home and abroad.[28] Given the borderless nature of cybersecurity threats, Japan embarked on international cybersecurity cooperation in the Asia-Pacific region, especially Southeast Asia, where Japanese companies have long maintained a presence.[29] This underscores the role of ASEAN as a focal point of Japanese government's cyber diplomacy efforts, encompassing a wide range of cyber capacity-building initiatives aimed at improving the region's capacity to confront the alarming rate of state-linked cyber threats stemming from geopolitical flashpoints like the South China Sea, and the increasing risks and vulnerabilities created by rapid digitalization, which cybercriminals have been gainfully exploiting through online scams and ransomware attacks.

During the first ASEAN-Japan Information Security Policy Conference in Tokyo in 2009, Japan and ASEAN established various formal mechanisms to promote high-level exchanges, such as the ASEAN-Japan Critical Information Infrastructure Protection Guidelines, the ASEAN-Japan Cybercrime Dialogue in 2014,[30] the ASEAN-Japan Policy Meeting on Cybersecurity Cooperation, the ASEAN-Japan Ministerial Meeting, and the Senior Officials Meeting on Transnational Crime. Aside from regular dialogue and consultations, Japan also embarked on major initiatives that raised the cybersecurity capacity of AMS across the technical, policy, and strategic levels. These included the Internet Traffic Monitoring Data Sharing Project, which expanded threat information-sharing cooperation between the Japan Computer Emergency Team Coordination Center and other Computer Emergency Response Teams in the region. The Japan-ASEAN Security Partnership was also established to enhance technical cooperation and facilitate the Proactive Response Against Cyberattacks Through Collaborative Exchange. In 2018, the ASEAN-Japan Cybersecurity Capacity

[25] Peng Er, "Closer ASEAN-Japan Relations;" Oba et al., "50th Year of ASEAN-Japan Friendship and Cooperation."
[26] Rupakjyoti Borah, "Japan's Opportunity in Southeast Asia," *Global Asia* 19, no. 2 (June 2024): 87–93, https://www.globalasia.org/v19no2/cover/japans-opportunity-in-southeast-asia_rupakjyoti-borah.
[27] Borah, "Japan's Opportunity in Southeast Asia."
[28] Bartlett, "Why Do States Engage in Cybersecurity Capacity-Building Assistance?."
[29] Benjamin Bartlett, "Why Do States Engage in Cybersecurity Capacity-Building Assistance? Evidence from Japan," *The Pacific Review* 37, no. 3 (2024): 475–503, https://doi.org/10.1080/09512748.2023.2183242.
[30] Mark Bryan F. Manantan, "Advancing Cyber Diplomacy in the Asia Pacific: Japan and Australia," *Australian Journal of International Affairs* 75, no. 4 (2021): 432–59, https://doi.org/10.1080/10357718.2021.1926423.

Building Centre (AJCCBC) was opened in Thailand to augment Southeast Asia's increasing demand for cybersecurity workforce development amid the region's maturing digital economies. The AJCCBC was indeed a critical turning point for ASEAN-Japan cybersecurity cooperation because it institutionalized regular training for many cybersecurity professionals in governments across the region. The centre offered courses ranging from incident response and forensic analysis for digital evidence to malware analysis.

During the 50th year of ASEAN-Japan Friendship and Cooperation, a performance report was published offering a snapshot of the depth and scope of cybersecurity collaboration.[31] In the report, Former Minister for Digital Transformation Taro Kono noted the importance of bolstering cooperation in information-sharing and capacity-building. At the conclusion of the 2023 International Conference on ASEAN-Japan Cybersecurity Community, ASEAN and Japan outlined new and prospective areas of collaboration suited to the challenges of the evolving cyber threat landscape. These efforts included joint awareness-raising, the Remote Cyber Exercise, or RCX, which simulated a series of incident detection, information deployment, analysis, and response activities using recent ransomware attacks as case studies, a regional table-top exercise to share knowledge and best practices on sensitive cybersecurity issues and updated Critical Information Infrastructure Protection Workshops. Japan's Computer Emergency Response Team, or JPCERT, also led Computer Security Incident Response Team Capacity-Building on network traffic analysis, and malware analysis hands-on exercises. As a next step, the Japan International Cooperation Agency (JICA) developed the Cluster for Cybersecurity in December 2022 to assess a target country's capability to optimize cooperation. Moving forward, the AJCCBC also committed to train 500 personnel over the next four years. As the pace of digitalization reaches unprecedented levels, the AJCCBC launched a joint project with JICA in June 2023, titled "Project for Enhancing ASEAN-Japan Capacity-Building Program for Cybersecurity and Trusted Digital Services", to provide training exercises to build capacity in the region.[32]

Dual-Use Technologies: Artificial Intelligence

Domestically, Japan's view of AI is deeply rooted in its concept of Society 5.0, or the rise of a human-centred society in which economic development and the resolution of social issues are compatible through a highly integrated system of cyberspace and physical space.[33] To realize Society 5.0 vision, Japan's cabinet issued the 6th Science, Technology and Innovation Basic Plan on 26 March 2021. As Japan transitions towards Society 5.0, the government will develop an integrated system based on knowledge derived from natural sciences, humanities and social sciences. Internationally, Japan's techno-statecraft in AI started to take shape under the leadership of the Ministry of Economy, Trade and Industry (METI) and was implemented by the Japan External Trade Organization (JETRO), which mobilized Japanese companies and technology start-ups across Southeast Asia to form joint partnerships.

For instance, in September 2024, Sony Research Inc., a subsidiary of Sony Corporation, signed a memorandum of agreement with AI Singapore to conduct joint research through Sea-Lion, an LLM project tailored to Southeast Asia. Sony will support efforts for testing and receiving feedback on AI models to accommodate the diversity of more than 1,000 Southeast Asian languages. In Thailand, METI and Thailand's Office of Small and Medium-sized Enterprises launched a business-matching service that utilizes AI-powered translation chat to connect Japanese SMEs with similarly sized firms in Thailand and facilitate direct negotiations. Relatedly, the Japanese company Kao Corp. is also collaborating with Thailand to co-develop an AI model that predicts the transmission of mosquito-borne viruses. In 2022,

[31] "ASEAN-Japan Cybersecurity Capacity Building Performance Report," *National Center of Incident Readiness and Strategy for Cybersecurity (NISC)*, accessed March 28, 2026, https://www.cyber.go.jp/eng/pdf/en_ASEAN-Japan_Performance_Report.pdf.
[32] "ASEAN-Japan Cybersecurity Capacity Building Performance Report," *National Center of Incident Readiness and Strategy for Cybersecurity (NISC)*.
[33] "Society 5.0, Tokyo," *Government of Japan, Cabinet Office*, accessed March 28, 2026, https://www8.cao.go.jp/cstp/english/society5_0/index.html.

the project was selected for the Japan-ASEAN Asia Digital Transformation initiative.[34]

As the examples highlighted above show, Japan's adaptation of its statecraft from economic to technological forms exemplifies Tokyo's nimble response to domestic and regional/international challenges. From the establishment of formal relations with ASEAN in the 1970s to the ongoing reconfiguration of the global order amid rapid technological disruptions, Japan and ASEAN have built a strong track record of collaboration enabled by established institutional linkages and regional mechanisms. Taken together, these provide Japan and ASEAN with a springboard in forging collaboration in the AI domain.

3

Emerging ASEAN-Japan AI Collaboration

Building on the previous discussion of the longstanding track record of Japan's engagement with ASEAN through its adaptive economic and technological statecraft, the subsection below examines the scope and depth of ongoing AI initiatives led by the Government of Japan through METI and JETRO in Southeast Asia. While not an exhaustive list, the analysis underscores that despite the nascency of AI, ASEAN and Japan can draw key lessons from their previous cybersecurity and more broadly, ICT collaboration which is highly relevant in the growing deliberations on AI governance principles, capacity-building, and start-up innovations. This section begins with an overview of the AI landscape in ASEAN and Japan, then identifies Japanese government-led AI initiatives, mainly through METI and JETRO. It then examines the enablers and barriers that may support or stifle ASEAN-Japan AI collaboration.

AI Governance: Japan and ASEAN

Under former Prime Minister Shinzo Abe, Japan published its first national AI strategy in 2017, built around the concept of Society 5.0. The second national AI strategy, released in 2019, focused on human resources and R&D. After a government review, a revised AI strategy was released in 2022 which prioritized the deployment of AI systems in society.[35] Multiple revisions to Japan's national AI strategies were attributed to the structural issues within METI, specifically the lack of adequate human resources and expertise, which had impacted implementation.[36] With the rapid emergence of Open AI's ChatGPT, Japan issued the Tentative Summary of AI Issues in May 2023 to address possible risks linked to generative AI. In May 2025, Japan established its AI Promotion Act, which takes a comprehensive approach to promoting AI utilization and innovation while addressing specific risks.[37]

[34] Yaita, "Japan Backs ASEAN's Needs-Driven AI Initiative."
[35] https://www.csis.org/analysis/norms-new-technological-domains-japans-ai-governance-strategy#h2-approaches-of-japan-s-ai-governance-policy
[36] Tagui Ichikawa, "Norms in New Technological Domains: Japan's AI Governance Strategy," *Center for Strategic and International Studies*, June 2025, accessed February 26, 2026, https://csis-website-prod.s3.amazonaws.com/s3fs-public/2025-06/250617_Ichikawa_Technological_Domains.pdf.
[37] Hiroki Habuka, "Japan's Agile AI Governance in Action: Fostering a Global Nexus Through Pluralistic Interoperability," *Center for Strategic and International Studies*, October 9, 2025, https://csis-website-prod.s3.amazonaws.com/s3fs-public/2025-10/251009_Habuka_Japan_AI.pdf.

Externally, Japan channels its engagement in regional and global AI governance through the Hiroshima AI Process, a set of guiding principles and a code of conduct that promote safe, secure, and trustworthy AI while fostering innovation. Early on, Japan recognized that it was still catching up with the US and China in terms of the scale and speed of AI innovation. However, like the EU, Japan possesses a distinct diplomatic influence in diffusing norms and principles that can foster interoperability and serve as the basis for internationally agreed principles. This approach was explored during the launch of the Hiroshima AI process in 2023 during Japan's G7 chairmanship. The membership eventually expanded in May 2024 and became known as the Friends Group of Hiroshima AI Process. Brunei Darussalam, Cambodia, Indonesia, the Lao People's Democratic Republic, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam joined the expanded membership.[38] Japan's pivotal role as a founding member of the Comprehensive and Progressive Agreement for Trans-Pacific Partnership also provides instructive pathways for setting standards on cross-border data flows, digital trade, and the responsible use of AI-enabled technologies.

In 2024, ASEAN shared its AI Guidelines comprising seven principles to promote the responsible use of AI in the public and private sectors. The guidelines aimed to establish interoperability across AI frameworks in different jurisdictions, given the dual-use applications of AI technologies in both military and commercial sectors. The document included national-level and regional-level recommendations for governments to design, develop, and deploy AI systems in a responsible fashion.[39] To address the emerging challenges brought by generative AI, ASEAN released the Expanded ASEAN Guide on AI Governance and Ethics in January 2025.[40] At the country level, AMS have also released their respective national AI strategies and roadmaps, as shown in Table 1.

Table 1. National AI Strategies and Roadmaps

Country	AI Strategy/Roadmap
Singapore	Singapore National AI Strategy 2.0 (2023) Singapore National AI Strategy (2019)
Thailand	Thailand's National AI Strategy and Action Plan 2022–2027
Indonesia	National Strategy for Artificial Intelligence 2020–2045
Malaysia	Malaysia National Artificial Intelligence Roadmap 2021–2025
Philippines	National AI Strategy and Roadmap (2021) National AI Strategy Roadmap 2.0 (2024) National AI Strategy Philippines (2025)
Viet Nam	National AI Development Strategy 2030
Brunei Darussalam	Draft Guide on AI Governance and Ethics (2024)
Cambodia	National AI Strategy (2025–2030)
Lao PDR	Drafting of National AI Strategy (2026)
Myanmar	Drafting of National AI Strategy (2026)
Timor-Leste	Timor Digital 2032

Source: Compiled by the author

[38] Hiroshima Process, "Friends Group," *Ministry of Internal Affairs and Communications*, accessed February 26, 2026, https://www.soumu.go.jp/hiroshimaaiprocess/en/supporters.html.
[39] "ASEAN Guide on AI Governance and Ethics," *ASEAN Secretariat*, 2024, https://asean.org/wp-content/uploads/2024/02/ASEAN-Guide-on-AI-Governance-and-Ethics_beautified_201223_v2.pdf.
[40] "ASEAN Expanded ASEAN Guide on AI Governance and Ethics for Generative AI," *ASEAN Secretariat*, 2024, https://asean.org/book/expanded-asean-guide-on-ai-governance-and-ethics-generative-ai/.

The respective AI policies of Japan and AMS at the national and regional levels lay the strategic groundwork for deeper collaboration. It is worth noting that the ASEAN AI Guidelines also drew on the Hiroshima AI process, the EU AI Act, and the UNESCO Recommendation on the Ethics of AI as key reference frameworks.[41] Through the ASEAN-Japan Summit and other relevant meetings, formal mechanisms already exist that will facilitate further discussion and implementation. During the 28th ASEAN Japan Summit held in October 2025, Japanese Prime Minister Sanae Takaichi stressed the importance of ASEAN-Japan AI collaboration as a key component of the relationship under the theme "Partners for Co-Creation of Economy and Society of the Future".[42] Conversely, the ASEAN Chairman's Statement in 2025 welcomed progress under the Future Design and Action Innovative and Sustainable ASEAN-Japan Economic Co-Creation 2023–2033 to advance the ASEAN-Japan Economic Co-Creation Vision, which includes the ASEAN-Japan Master Plan Initiative for the Next-Generation Automotive Industry and the ASEAN-Japan AI Innovation and Co-Creation Roadmap.[43]

ASEAN Co-Creation Initiative/Roadmap

In July 2024, METI launched the ASEAN-Japan AI Co-Creation Initiative with three main pillars: (1) innovation of AI and innovation by AI; (2) safety and security; and (3) promotion of international collaboration. Through the initiative, METI endeavours to strengthen its convening role for both the government and the Japanese AI industry to support Japan's AI Strategy Council's whole-of-government approach to enhancing Japan's AI competitiveness.[44] At the regional level, the initiative also underscores METI's commitment to deepening cooperation with the ASEAN Economic Ministers in the areas of the digital economy and emerging technologies, following the success of the ASEAN-Japan 50th year Commemorative Summit in 2023.[45]

Diving deeper into the ASEAN-Japan AI Co-Creation Initiative, the first two pillars are directed towards domestic stakeholders in Japan, while the third is focused on international partners. Under the first pillar on innovation of AI and by AI, METI will provide computing power and resources to spur domestic innovation, targeting AI developers and encouraging the exchange of knowledge and expertise. There is also assistance provided on the procurement of computing resources.[46] Under the second pillar, security and safety of AI, the AI Guidelines for Business were issued to promote a soft-law approach that encourages stakeholders to build internal AI governance systems that adopt or build on international best practices. Other salient aspects of the guidelines include the emphasis on a multistakeholder approach involving key stakeholders and the importance of accessibility to ensure that the public can comprehend the guidelines.[47]

The third pillar, on international collaboration, focuses on Japan's philosophy of "AI innovation for Asia", which essentially means the co-development of large language models (LLMs) between Japanese AI engineers and major companies and developers across AMS. A critical aspect of the third pillar is AI talent development, where Japan seeks to develop 100,000 advanced digital professionals in the next five years from the East Asian region. In addition, there is also momentum to develop an AI governance framework that is specific to the Asian context, given that notions of safety, security, and trustworthiness are shaped by specific sociopolitical, economic, and cultural factors. Moreover, Japan's AI Safety Institute

[41] "ASEAN Expanded ASEAN Guide on AI Governance and Ethics for Generative AI," *ASEAN Secretariat*.
[42] Ministry of Foreign Affairs, "The 28tH ASEAN Japan Summit," *Japan-ASEAN Relations*, October 26, 2025, https://www.mofa.go.jp/a_o/rp/page-ite_000001_00004.html#:~:text=October%2026%2C%202025,the%20meeting%20is%20as%20follows.
[43] "Future Design and Action Plan for Innovative and Sustainable ASEAN-Japan Economic Co-Creation 2023 – 2033," *Ministry of Economy and Trade*, accessed February 26, 2026, https://www.meti.go.jp/press/2023/08/20230822005/20230823005-8.pdf; "Chairman's Statement of the 28th ASEAN-Japan Summit," *ASEAN Secretariat*, October 26, 2025, https://asean.org/wp-content/uploads/2025/11/CHAIRMANS-STATEMENT-28TH-ASEAN-Japan-SUMMIT.pdf.
[44] Ryo Funakoshi, "Japan's AI Policy and AI-Co-Creation Initiative," PowerPoint presentation from the Ministry of Economy and Trade during CONVERGE: Indo-Pacific Critical Tech Forum, Tokyo, Japan, October 10-11, 2024,
[45] Funakoshi, "Japan's AI Policy and AI-Co-Creation Initiative."
[46] Funakoshi, "Japan's AI Policy and AI-Co-Creation Initiative."
[47] Ibid.

will also collaborate with the ASEAN Secretariat to establish the ASEAN AI Safety Network as part of implementing the ASEAN DEFA.[48] The network will convene experts to draft recommendations to support AI policy capacity-building, pilot testing of AI use-case applications, and regulatory sandboxing.[49]

In December 2024, the ASEAN-Japan Business Leaders' Summit released a joint statement emphasizing the formation of the ASEAN-Japan Co-Creation Ecosystem, highlighting the rebranding of the initiative as the ASEAN-Japan AI Co-Creation Roadmap in order to facilitate an integrated start-up ecosystem between Japan and Southeast Asia.[50] This latest development highlighted the importance of funding streams, talent mobility, and even the listing of ASEAN companies on the Tokyo Stock Exchange, which will be discussed in greater detail in the next section.

Start-Up Collaboration: Funding and Accelerator Programmes

To support the expansion of Japanese companies and start-ups into the ASEAN region, JETRO has launched the Global Acceleration Hub Programme, which provides Japanese companies with mentorship opportunities to gain a better understanding of specific markets in Southeast Asia, as well as match-making opportunities with possible local partners. JETRO has established three types of partnership: programme partners, ecosystem partners, and co-working space partners. So far, JETRO's engagement has begun to gain traction in Southeast Asia. For instance, JETRO Bangkok has confirmed that, with almost 6,000 Japanese companies operating in Thailand, many Japanese start-ups have expressed interest in entering the market and exploring opportunities to provide software as a service. Zeroboard, a Japanese climate technology startup has partnered with a Thai clean innovation company, Innopower. Under this partnership, Zeroboard provides greenhouse gas calculation, and reporting platform capabilities to support Innopower's clients in achieving carbon neutrality goals. In Malaysia, Sunway Innovation Labs (iLabs) and JETRO launched the J-StarX Malaysia Deep Tech programme in November 2025 to fast-track the expansion of Japanese start-ups.[51] The accelerator supports start-ups in developing proof of concept, facilitating market entry, and leveraging extensive support from JETRO and Sunway iLabs. This latest partnership is an iteration of the Digital Transformation Accelerator programme for top Japanese start-ups in Malaysia to localize their technologies, which the two organizations have been hosting since 2019.[52]

To further support Japan's international AI collaboration, METI launched the Generative AI Accelerator Challenge, or GENIAC. Recognizing the unprecedented impact of generative AI, the GENIAC programme seeks to accelerate Japan's competitiveness by supporting start-ups through funding, computing resources, training, and mentorship to co-develop LLMs tailored to Southeast Asian languages and cultures. For instance, Tokyo-based Elyza, a unit of mobile carrier KDDI, is developing a Thai LLM, a use-case application that can be replicated in other Southeast Asian markets through the funding allocation provided by GENIAC.

Over the last few years, several start-up companies from Southeast Asia have also entered the Japanese market. Since 2018, Malaysian drone service provider Aerodyne Group has been expanding its operations in Tokyo. Aerodyne's unmanned aerial vehicles are deployed to gather data to tackle complex industrial challenges, specifically in the infrastructure sector. Meanwhile, Singapore's Umami Bioworks is also collaborating with Maruha Nichiro, Japan's second-largest seafood seller, to cultivate seafood in response to rising ocean temperatures. Another Singapore-based start-up, Eureka Robotics, which

[48] Interview, ASEAN Secretariat, online.
[49] Interview, ASEAN Secretariat, online.
[50] "ASEAN-Japan Business Leaders Summit 2024," *Ministry of Economy, Trade and Industry*, December 2024, https://www.meti.go.jp/press/2024/12/20241225002/20241225002-b.pdf.
[51] "Sunway iLabs and JETRO Prepare Four AI and Deeptech Japanese Startups for Entry into Malaysia and ASEAN," *Digital News Asia*, accessed March 28, 2026, https://www.digitalnewsasia.com/startups/sunway-ilabs-jetro-prepare-four-ai-and-deeptech-japanese-startups-entry-malaysia-and-asean.
[52] "Japan-Malaysia Accelerator Program: Japanese Startups Tackle Social Issues Overseas," *JETRO*, accessed March 28, 2026, https://www.jetro.go.jp/en/invest/insights/japan-insight/japan-malaysia-accelerator-program-japanese-startups-tackle-social-issues-overseas.html.

offers automation software for industrial robots, has also partnered with robot manufacturer Denso Wave and optical equipment Sigma Koki.

In 2023, METI and JETRO, in partnership with ASEAN government agencies launched a cooperation scheme called the ASEAN-Japan Co-Creation Fast Track Initiative in commemoration of the 50th anniversary of the ASEAN-Japan Friendship Cooperation.[53] The Fast Track Initiative aims to accelerate tangible collaboration efforts between Japanese and ASEAN companies, start-ups, and small and medium-sized enterprises. METI has encouraged Japanese companies to utilize the initiative to develop strategic partnerships and seize the momentum of the burgeoning digital landscape in Southeast Asia.[54] As of January 2025, the Fast Track Initiative has been held in Indonesia, Malaysia, Viet Nam, and Singapore.

Building on the ASEAN-Japan Co-Creation Vision, Japan announced Tokyo Stock Exchange (TSE) Asia Startup hub, a ¥10 trillion start-up investment, to facilitate cross-border capital market integration that goes beyond traditional initial public offering preparation. The TSE hub will address specific challenges that Southeast Asian companies face when entering the Japanese market.[55] Through its integrated support structure, involving securities companies, audit firms, law firms, venture capital investors, and information vendors, the TSE hub will provide start-ups with resources to support market entry, including deep local expertise, strategic partnerships, and cultural understanding that will hopefully lead to eventual public listing.[56] The 2025 cohort includes 20 companies specializing in healthcare, fintech, e-commerce, and logistics, with Singapore leading with seven companies.[57]

4 Prospects for Collaboration: Enablers and Barriers

After analyzing the ASEAN AI innovation landscape, this section tackles the opportunities and challenges facing Japanese and Southeast Asian technology companies and start-ups. Using document analysis, and expert interviews, the findings below seek to provide a clear-eyed assessment of the current state of AI collaboration.

Enablers

Long History of Knowledge and Tech Transfer: From Manufacturing to AI, Robotics, and Smart Automation

The longstanding presence and contributions of Japanese companies in Southeast Asia's manufacturing sector provide Japanese technology start-ups with a strong foundation. The decades-long experience of many Japanese companies in engaging with public and private sector partners across various AMS affords start-ups with contextual knowledge of specific markets and countries.[58] At the same time, Japan's historical record of knowledge

[53] "METI Held the Inno Vietnam-Japan Fast Track Pitch Event 2023 in Hanoi to Accelerate Global Open Innovation of Japanese Companies/Start-ups," METI, November 6, 2023, https://www.meti.go.jp/english/press/2023/1106_001.html.
[54] "August FY2023," Ministry of Economy, Trade and Industry, accessed February 28, 2026, https://www.meti.go.jp/english/press/nBackIssue202308.html.
[55] Paolo Joquino, "Japan's Y10 Trillion Bridge Extends to Southeast Asia: How the TSE Asia Startup Hub is Reshaping Cross-Border Innovation," Insignia Ventures Review, September 25, 2025, https://review.insignia.vc/2025/09/25/tse-asia-startup-hub/.
[56] 56 Joquino, "Japan's Y10 Trillion Bridge Extends to Southeast Asia: How the TSE Asia Startup Hub is Reshaping Cross-Border Innovation."
[57] Ibid.
[58] Interview, ASEAN-Business Advisory Council, online.

and technology transfer with many Southeast Asian companies is another unique selling point.[59] Parallels are now being drawn between Japan's automotive industry and critical and emerging technologies like AI, along with its growing application in robotics, precision manufacturing, and embedded software and hardware systems as automation takes centre stage.[60]

Despite strong competition from China and the Republic of Korea, leading Japanese companies such as Fanuc, Keyence, Omron, and SMC continue to occupy vital segments of robotics supply chains.[61] The increasing integration of AI and industrial robotics is paving the way for the adoption of smart manufacturing technologies in essential services, supply chains, and manufacturing in Singapore, Indonesia, Malaysia, Thailand, and Viet Nam. For instance, Hitachi and the Standards and Industrial Research Institute of Malaysia launched the Smart Manufacturing Experience Centre to promote Industry 4.0 in Malaysia and support small and medium-sized enterprises in adopting smart manufacturing technologies. In Singapore, Hitachi also offers industrial and collaborative robotics. The former deals with industrial tasks, from multi-axis robotic arms to automated guided vehicles, while the latter works alongside employees to complement specific tasks.[62]

Because commercial and business ties in Southeast Asia are mostly built around trust-based social networks, experts suggest that Japanese technology companies are often associated with high-quality standards. This halo effect thus gives incoming Japanese technology companies a competitive edge. Combining contextual or market knowledge with positive impressions can support Japanese technology companies or start-ups in effectively finding potential local partners to pursue joint partnerships. Furthermore, Japanese companies can also take advantage of the digital strategies and roadmaps of individual AMS, which incentivize foreign investment. For instance, Singapore, Indonesia, and Viet Nam have their respective digital transformation plans, while Malaysia and the Philippines have launched digital economy blueprints, Malaysian tax incentives, and the CREATE bill to attract investors with substantial reductions in power costs.

Parallel Technological Development: Semiconductors and Data Centres

Some experts have noted that Japan's increasing AI collaboration in Southeast Asia is generating positive spillover effects in the current drive to develop highly relevant and equally critical technologies, such as semiconductors, and the proliferation of data centres across the region. Advanced semiconductors provide the computational power and memory needed to process data and train machine learning algorithms. Within the AI technology stack, semiconductors provide the hardware responsible for increasing computational efficiency and enabling the transfer of large data sets through memory and storage.[63] Experts argue that ASEAN and Japan can leverage each other's comparative strengths in semiconductors in tandem with the AI boom, especially amid growing concerns about supply chain disruptions.[64] Japan's expertise in high-quality semiconductor materials and manufacturing equipment can augment ASEAN's desire to move beyond assembly, packaging, and testing to chip design and wafer fabrication.[65] Japanese company Fujitsu is also collaborating with NVIDIA to develop energy-efficient AI chips by 2030 in support of Japan's push towards developing its AI infrastructure, which will be vital to its sovereign AI capa-

[59] Interview, tech company executive, online.
[60] Interview, tech company executive, online.
[61] Global X Research Team, "Four Japanese Companies Leading Robotics and Automation," *GlobalX ETFS*, September 29, 2023, https://www.globalx-etfs.com.au/insights/post/four-japanese-companies-leading-robotics-and-automation/.
[62] Hitachi Global, "Smart Automation Matters in Southeast Asia," *Hitachi*, accessed March 28, 2026, https://www.hitachi.com/en-sea/insights/articles/smart-automation-matters-in-southeast-asia/.
[63] McKinsey Global Institute, "Artificial Intelligence Hardware: New Opportunities for Semiconductor Companies," *McKinsey & Company*, accessed March 28, 2026, https://www.mckinsey.com/~/media/McKinsey/Industries/Semiconductors/Our%20Insights/Artificial%20intelligence%20hardware%20New%20opportunities%20for%20semiconductor%20companies/Artificial-intelligence-hardware.pdf.
[64] "Inducing Innovation: Reinvigorating ASEAN-Japan Growth and Collaboration in the Semiconductor Industry with AI," *ASEAN-Japan Centre*, April 2, 2025, *Tokyo: ASEAN-Japan Centre*, https://www.asean.or.jp/en/event-report/20250402/.
[65] "Inducing Innovation: Reinvigorating ASEAN-Japan Growth and Collaboration in the Semiconductor Industry with AI," *ASEAN-Japan Centre*.

bilities.[66] NVIDIA Chief Executive Officer Jensen Huang remarked that they are connecting Fujitsu's central processing units on electronic boards and servers powered by NVIDIA chips so that they function as a single processor. Fujitsu, NVIDIA, and the Riken research institute are expected to launch the supercomputer FugakuNEXT, which will be 10 times faster than its predecessor.[67] If successful, Fujitsu and NVIDIA's AI-optimized chips will be beneficial to ASEAN, considering the region's push towards more environmentally friendly data centers.

Japan and Southeast Asia also display complementarity in data centres. For context, Japan was the world's third-largest data centre market in 2024, after the US and China. Much of Japan's data centre growth is linked to its stable regulatory environment, especially the open and free flow of data, talent competitiveness, and political stability. However, the country's limited power supply, rising labour and construction costs, and vulnerability to natural disasters such as earthquakes and tsunamis pose serious problems that may encourage investors to look elsewhere.[68] In this regard, Indonesia, Malaysia, Thailand, the Philippines, and Viet Nam could be viable alternatives due to lower labour costs and the availability of land. Over the past two years, Southeast Asia has been riding the data centre boom, with governments upgrading infrastructure and energy supplies while relaxing regulatory rules on foreign ownership to attract investment.[69] With stronger demand for cloud services to support robust AI R&D, the Asia-Pacific data centre market will remain robust, making it a promising area that ASEAN and Japan can cultivate further to support the region's AI innovation ecosystem.

Norm-Setting and Institutional Capacity-Building

As demonstrated in the field of cybersecurity and ICT, Japan's role in norm-setting and rulemaking is a defining pillar of its evolving statecraft. This is exemplified in the rapidly changing AI policy space. Japan's efforts, whether through the Data Free Flow with Trust (DFFT) and the Hiroshima AI process, have influenced regional AI governance, including ASEAN's AI Guidelines. However, Japan goes the extra mile. It has been highly entrepreneurial in utilizing trade agreements to make soft law or non-binding principles, such as DFFT on cross-border data transfers, enforceable.[70] This is highly evident in the legal provisions enshrined in the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), which reflect the same language as DFFT and can serve as an important reference framework in the ongoing negotiations on cross-border data flows under the ASEAN-led DEFA. It should also be noted that Singapore, Malaysia, Thailand, and Brunei Darussalam are also members of the CPTPP.

Japan's historical track-record in institutional capacity-building in Southeast Asia is deeply rooted in its regionalization strategy, which began in the 1980s and spanned technology transfer, physical infrastructure development, and human resource development.[71] Aside from trade and infrastructure development, Japan is also a major ASEAN partner in education, training, and capacity building. In the 1980s, the expansion of Japanese companies in the region ushered in new industrial human resource development and higher education opportunities, which continued

[66] Tsubasa Suruga, "Fujitsu and Nvidia to Develop Energy-Efficient AI Chips by 2030," *Nikkei Asia*, accessed March 28, 2026, https://asia.nikkei.com/business/technology/fujitsu-and-nvidia-to-develop-energy-efficient-ai-chips-by-2030.
[67] Suruga, "Fujitsu and Nvidia to Develop Energy-Efficient AI Chips by 2030."
[68] Yoshiki Tsurumaki, Tomoyuki Miyazaki, Munetoshi Esaki, and Shuhei Sugai, "Navigating Data Centre Opportunities across APAC – Japan," *King & Wood Mallesons*, July 16, 2025, https://www.kwm.com/global/en/insights/latest-thinking/navigating-data-centre-opportunities-across-apac-japan.html.
[69] CBRE Research, "Asia Pacific Data Centre Trends & Opportunities," *CBRE*, May 29, 2025, https://www.cbre.com/insights/reports/asia-pacific-data-centre-trends-opportunities.
[70] Mark Bryan Manantan, "Japan's Data Free Flow with Trust: Progress and Prospects in Data Governance," in *Navigating the New Political Economy in Southeast Asia*, ed. Alan Hao Yang and Masahiro Matsumura (Singapore: World Scientific Publishing, July 2023), https://doi.org/10.1142/13124.
[71] Kaoru Natsuda and Gavan Butler, "Building Institutional Capacity in Southeast Asia: Regional Governed Interdependence," *ASEAN Economic Bulletin* 22, no. 3 (2005): 331–39, https://muse.jhu.edu/article/387995.

until the 1990s.[72] In the early 2000s, Japan's human development cooperation with individual AMS became increasingly institutionalized through the establishment of Japan-supported human development centres geared towards capacity-building projects for government and education institutions, including the provision of scholarships for Southeast Asian students to enrol in Japanese universities. In 2022, JICA confirmed that Japan-supported programmes had cultivated 12,508 industrial talents in Southeast Asia. Additionally, Japan is the biggest provider of ODA in the education sector in Southeast Asia, totalling $1.03 billion spent on 2,760 projects from 2015 to 2021, surpassing the US and China respectively.[73] Japan also launched short-term educational initiatives that further enhanced people-to-people exchanges, such as the Japan-East Asia Network of Exchange for Students and Youths.[74]

Amid Japan's shrinking population and ageing workforce, Viet Nam, the Philippines, and Indonesia have increasingly become sources of foreign workers for Japan. In response to this growing labour demand, the Japanese government has made changes to its existing Specific Skilled Worker scheme, which facilitates the recruitment of foreigners to work in specific industrial fields. The pending amendment to the framework seeks to reflect the changing nature of labour cooperation between Japan and Southeast Asia, which goes far beyond a benefactor-beneficiary relationship.[75] This is evident in the 2023 ASEAN-Japan Joint Vision Statement, which seeks to reduce barriers to entry for foreign workers in professional and technical fields in Japan, which may include AI-related fields such as data science. Such efforts require language training, educational and skill programmes for Southeast Asian workers, and exploration of mutual recognition of workers' skills. However, some experts noted that, while this is a positive step to ensuring talent mobility, especially among Southeast Asian professionals seeking experience in Japan, the country's conservative corporate nature, which often shies away from foreign talent, as well as language proficiency barriers, remains an obstacle. Others also pointed out that some Southeast Asian professionals with postgraduate qualifications view Japanese AI companies as less competitive than AI companies in Hong Kong, the Republic of Korea, and even Singapore for obtaining experience and certifications.

Nevertheless, there is strong evidence to support ASEAN-Japan AI collaboration in talent mobility. With its young demographics and improving economic prospects, especially through its digital economy, Southeast Asia offers considerable scope for accelerating talent mobility exchanges through university-to-university partnerships or company internships between Japan and AMS. Both sides have substantial experience on which to draw in developing a region-wide qualifications and training framework.

[72] Hoang Thi Ha and Pham Thi Phuong Thao, "Japan and Southeast Asia Set to Co-Create an Interwoven Future," *ISEAS Perspective*, no. 24 (Singapore: ISEAS – Yusof Ishak Institute, 2024), https://www.iseas.edu.sg/wp-content/uploads/2024/03/ISEAS_Perspective_2024_24.pdf.
[73] Hoang Thi Ha and Pham Thi Phuong Thao, "Japan and Southeast Asia Set to Co-Create an Interwoven Future."
[74] Ibid.
[75] Hoang Thi Ha and Pham Thi Phuong Thao, "Japan and Southeast Asia Set to Co-Create an Interwoven Future."

Barriers

While the prospects are high for ASEAN and Japan to move forward with their AI collaboration, several roadblocks may hinder the realization of their mutual goals.

Japan Playing Catch-Up?

Although Japan had an early start in AI development in the 1980s, which led to its specialized knowledge in auto-drive and voice command systems and neural networks, the AI landscape has undergone tectonic shifts. AI innovation has since moved towards a scale that demands vast data sets, deep capital markets, and energy-intensive compute infrastructure. Rather than setting the scale and pace of AI development, Japan's AI advancement has been incremental and more niche and specialized.

Japan has recently expressed its intention to reduce its dependence on foreign AI players and to strengthen its sovereign AI capabilities, or more broadly, indigenous AI innovation. While progress is ongoing, there remain opportunities to further advance these efforts, especially in the presence of strong competition from the United States and China.[76] Major obstacles to Japan's AI innovation capacity lie in the lack of skilled IT labour. METI already projects that Japan's technology workforce will face a shortfall of 3.2 million workers.[77] This labour shortage stems from Japan's limited number of advanced educational programmes in computer science and data science, and is further exacerbated by brain drain and a lack of competitive salary levels in the industry over the last three decades.[78] Japanese companies also lack access to the vast amounts of data needed to train foundational AI models. There is a shortage of Japanese-language text data compared with English and Chinese, in terms of both quantity and quality, in large part because of the absence of major Japanese internet platforms like Facebook or WeChat.[79] Unlike English or Chinese language systems, which benefit from continuous feedback loops, Japanese-language data remain comparatively scarce, affecting model performance.

Moreover, Japan caters to a narrower market, which consequently limits commercial reach and makes it harder to incentivize private sector investment. As a result, AI capital investment in Japan remains relatively modest compared to that in the US and China. In addition, the high pace of AI development, which demands low-cost power and large-scale data centres, serves as another challenge for Japan, given its limited land, high energy costs, and reliance on imported resources.

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[76] Atsushi Sumikawa, "Inside Japan's Struggle to Build Sovereign AI," *Asia Times*, September 10, 2025, https://asiatimes.com/2025/09/inside-japans-struggle-to-build-sovereign-ai/.

[77] "Ministry of Economy, Trade and Industry estimates a shortage of 3.26 million people to handle the use of AI and robots by 2040," *Nikkei*, accessed March 28, 2026, https://www.nikkei.com/article/DGXZQOUA1948E0Z10C25A5000000/.

[78] Richard Katz, "Last place out of 27 countries...The fundamental reason why Japan lacks IT talent," *Toyo Keizai*, May 2, 2023, https://toyokeizai.net/articles/-/669331.

[79] Courtney Radsch, "Dismantling AI Data Monopolies Before It's Too Late," *Tech Policy Press*, accessed March 28, 2026, https://www.techpolicy.press/dismantling-ai-data-monopolies-before-its-too-late/.

Disparity in AI Readiness

The prevailing disparity in AI readiness remains an Achilles heel in Southeast Asia's AI journey.[80] As shown in Table 2: Oxford Insights' annual index released in 2025, which employs six interrelated pillars – policy capacity, AI infrastructure, resilience, development and diffusion, public sector adoption, and governance – reveals this clearly. In extreme cases, Singapore obtained an overall score of 76.42, while Timor-Leste, the most recent member of ASEAN, scored 18.39.[81] Understandably, Singapore and Timor-Leste vary greatly in economic status, but the implications of such a wide gap in government AI readiness among AMS are significant, because they may undermine ASEAN's aspiration for inclusive growth and regional economic integration.

Table 2. Comparison between AI governance in Japan and Southeast Asia (in the context of digital trade)

Country	Rank	Score
Singapore	2	76.42
Japan	4	72.24
Thailand	6	63.22
Malaysia	7	62.34
Philippines	8	60.51
Viet Nam	9	59.98
Indonesia	10	59.87
Brunei Darussalam	12	40.51
Cambodia	13	33.91
Lao PDR	14	29.92
Myanmar	17	20.54
Timor-Leste	18	18.39

Source: Compiled by the author, with East Asia regional analysis from Oxford Insights' Government AI Readiness Index 2025.[82]

A number of experts involved in the current rollout of UNESCO's AI Readiness Assessment Methodology in Southeast Asia, a more detailed micro-level assessment of AMS such as Indonesia, the Philippines, Malaysia, and Timor-Leste that complements the high-level analysis of Oxford Insights' Governance Readiness AI Index, agree that many governments in Southeast Asia are struggling to implement a holistic approach to AI strategy and policy implementation. As UNESCO's Recommendation on the Ethics of AI remains a key reference point for ASEAN's AI Guidelines, experts argue that the concept of "AI readiness" must not only factor in the conventional building blocks of AI innovation, such as infrastructure, legal, economic, and technical capacity, but should equally emphasize other dimensions, such as sociocultural, environmental, scientific, and educational aspects. In practice, this means that the widening gap between advanced and emerging economies in AI adoption can further entrench existing inequalities. Well-resourced and more developed countries are better able to extract value from data because they have the infrastructure and talent to do so. In contrast, those with limited resources may simply release or store data without deriving much value from it to enhance their societies and economies. Southeast Asia's technology drive is warranted amid the region's potential to grow its digital economy. However, policymakers must also remain alert to the consequences of adopting a very techno-

[80] Ikumo Isono and Hilmy Prilliadi, "Accelerating AI Discussions in ASEAN" Addressing Disparities, Challenges, and Regional Policy Imperatives," *ERIA Discussion Paper Series* no. 488, November 2023, https://www.eria.org/uploads/media/discussion-papers/FY23/Accelerating-AI-Discussions-in-ASEAN-.pdf.

[81] https://oxfordinsights.com/ai-readiness/government-ai-readiness-index-2025/#:~:text=The%202025%20edition%20is%20here,Explore%20the%20index.

[82] Oxford Insights, *Government AI Readiness Index 2025*, (Oxford, UK: Oxford Insights, 2025), https://oxfordinsights.com/ai-readiness/government-ai-readiness-index-2025/.

deterministic lens in which AI is seen as a silver bullet for solving the region's major challenges without being mindful of ensuring an equitable AI ecosystem for all.

Data Localization and Digital Sovereignty

The fragmentation of data regulations in Southeast Asia is another roadblock to cementing ASEAN-Japan AI cooperation. As shown below, the patchwork of personal data protection frameworks in the region is characterized by differences in (i) the maturity of personal data regulations, (ii) personal data transfer requirements, and (iii) the lack of common legal definitions on terminologies such as consent.[83]

Table 3: Data Governance Frameworks

Country	Regulation	Data Transfer Requirements
Singapore	**Personal Data Protection Act 2012** Updated in 2020 and 2024, with recent amendments effective in 2025	Specific requirements on data transfers
Thailand	**Personal Data Protection Act of 2022** Enforced on 1 June 2022	Permit transfer based on adequate personal data protection standards and compliance with other conditions specified
Indonesia	**Personal Data Protection Law 2022** Enacted in 2022 Enforced on 17 October 2024	Consent-based model for data processing
Malaysia	**Personal Data Protection Act 2020** Updated: Personal Data Protection (Amendment) 2024	Data controller can transfer under specific conditions (adequate level of protection, part of a contract)
Philippines	**Data Privacy Act of 2012**	No specific requirements for cross-border transfers; voluntary adoption of model contractual clauses
Viet Nam	**Law on Personal Data Protection** Enforced on 1 January 2026	Consent-based approach
Brunei Darussalam	**Personal Data Protection Order 2025**	Accorded a standard protection under the Order; will provide more guidance
Cambodia	**Law on Personal Data Protection 2025** (Draft)	No regulations or provisions
Lao PDR	**Law on Electronic Data Protection No, 25, May 2017**	
Myanmar	No comprehensive data protection law	No explicit requirements
Timor-Leste	No comprehensive data protection law	

Source: Compiled by the author.

[83] Poomthawat Wachirapornpruet, "Mind the Gap: How Southeast Asia's Fragmented Personal Data Rules Impact Digital Finance," *Asia House*, accessed March 28, 2026, https://www.asiahouse.org/files/documents/Poomthawat-Wachirapornpruet-Mind-the-Gap-How-Southeast-Asias-fragmented-personal-data-rules-impact-digital-finance.pdf.

The differing regulatory approaches in ASEAN on cross-border data flow can hamper the region's ability to establish a seamless and interoperable approach for cultivating a vibrant AI ecosystem. Japanese start-ups are struggling to deepen cross-border collaboration through joint R&D because they must navigate regulatory complexity in different countries across the region. The patchwork of regulations on data protection complicates the operations of Japanese start-ups and tech firms, as they need to allocate additional resources to achieve operational sufficiency. Likewise, multinational corporations share similar frustrations because they must adjust their internal compliance practices to address the complexity of moving important data or information in each AMS market. Cumulatively, the implications of rising data localization policies are twofold. First, Japanese companies are unable to support the establishment of robust regional R&D and supply chains. Second, as a result, many companies will become more hesitant to expand their business operations across the region, which will undermine the prospects of technology transfer resulting from R&D investment.[84]

5

Way Forward: Conclusion and Policy Recommendations

With five decades of partnership and a broad collaborative portfolio, ASEAN and Japan have helped shape the agenda in East Asia to realize mutually beneficial outcomes. The current wave of geopolitical transition and the rapid AI revolution present myriad opportunities and challenges to ASEAN-Japan relations. While Japan and ASEAN both face stiff competition – comprising the data, hardware, software, R&D, talent, infrastructure, and capital investment – with other global leaders such as US and China, they are well positioned to harness their complementarities and comparative advantages to advance sovereign capabilities and lead in targeted AI use-case applications.

With its human-centred approach, Japan can translate its credibility in global AI policymaking into support for narrowing Southeast Asia's AI readiness gap. Japan's AI Safety Institute can play a crucial role in supporting the ASEAN AI Safety Network by helping to embed AI principles such as safety, accountability, transparency, and explainability in national legislation to spur the holistic adoption and public recognition of trusted and reliable AI-enabled systems and technologies. Through more sustained and holistic investment in human talent development, ASEAN can help address Japan's looming workforce deficit in STEM fields. Given the growing two-way exchanges between ASEAN and Japan among start-ups and technology companies, enabled by strategic partnerships, R&D, digital innovation, and investment hubs, ASEAN and Japan must forge

[84] Shota Watanabe, Ema Ogura, and Keita Oikawa, "Current Status of ASEAN Data Governance and Its Implications for the Digital Economy Framework Agreement," *ERIA Discussion Paper Series* no. 539, January 2025, https://www.eria.org/uploads/Current-Status-of-ASEAN-Data-Governance-and-Its-Implications-for-the-DEFA.pdf.

ahead towards equitable and productive collaboration amid uncertainty stemming from China's sluggish economy and the US' erratic international economic, trade, and technology policies.

As this article has demonstrated, the pathways to collaboration are already established and remain highly dynamic. Both Japan and ASEAN have learned that proactive dialogue combined with collective action is indispensable for preserving strategic agency and maneuverability amid the fluctuations of uncertainty. By building on their early successes in the cybersecurity and ICT sector, ASEAN and Japan can leverage the lessons learned into new and emerging domains such as AI. Japan and ASEAN's contributions in the AI space may be less visible than the breakthroughs produced by US or Chinese start-ups, but if the AI principles set out in the Hiroshima Process or ASEAN Guidelines are incrementally embedded in national AI legislation, the result could be a more lasting positive impact that makes AI a tool for equity rather than just exploitation.

Considering the enablers and barriers discussed above, the following policy recommendations are suggested to ensure that ASEAN and Japan continue along a path of AI collaboration built around inclusivity, openness, and equity.

Enhancing Cross-Border Data Flows

- Japan could continue to invest in institutional capacity to support AMS in harmonizing technical, policy, and regulatory standards on cross-border data flows. In light of ASEAN's ongoing negotiations on the DEFA, Japan could also play a convening role in regional and multisectoral discussions to help introduce more specific rules on the protection of personal data, building on the ASEAN Framework on Personal Data Protection.

- To achieve long-term interoperability on cross-border data flows, the CPTPP can provide guidance on the specific conditions and measures on data transfer that meet policy objectives. It should be noted that Singapore, Malaysia, Brunei Darussalam, and Viet Nam are already members of the CPTPP and thus provide a foundation for future discussions aimed at better aligning regulatory approaches. As negotiations are still under way, more targeted and practical approaches, such as the ASEAN Model Contractual Clauses and certification systems, can facilitate cross-border data transfers in compliance with national data protection laws and support existing R&D and digital economic investments.

Supporting Compute Infrastructure

- Japan can mobilize funding support through the ASEAN-Japan Co-Creation Initiative for AI to help address the region's shortage of compute infrastructure.

- The Japanese government may also tap into the growing investment and operations in energy-efficient data centres, cloud services, and graphics processing unit systems of multinational Japanese companies, including NTT Data, KDDI, NEC Corporation, Mitsubishi Heavy Industries, and Sakura Internet, to support collaboration involving Japanese and Southeast Asian start-ups. This will help Japanese and Southeast Asian start-ups and technology companies produce meaningful AI innovations that address social and economic challenges, while also enhancing the implementation of regulatory frameworks based on human-centric approaches to AI.

Building Capacity and Strategic Partnerships

- Through the Japan-ASEAN Science, Technology, and Innovation Platform and the ASEAN-University Network, Japan and ASEAN can prioritize strengthening human capital development dedicated to STEM courses by benchmarking research ecosystems and establishing institutional academic mobility schemes, research commercialization mechanisms, and the production of international publications. This will deepen strategic partnerships, raise visibility, and create pathways for future joint initiatives.

- Another key area for strengthening capacity and human talent exchange is the pilot testing of academic exchanges and internship opportunities for STEM graduates between Japan and Southeast Asia. This would help address the lack of awareness and cultural knowledge among many Japanese professionals about Southeast Asia. Such a collaborative, two-way dynamic will be crucial in helping students gain knowledge of specific demographics, which is vital to the development of localized LLMs. It will also help foster new entrepreneurial mindsets across the region.

Raising Awareness of Use-Case Applications through a Public Repository

- Given strong competition in the international AI landscape, Japan and Southeast Asia must continue to showcase their respective joint-innovation by leveraging its comparative strengths in robotics, smart manufacturing, and the electronics sector. Demonstrating actual use-case applications that deliver tangible benefits will help further develop localized LLMs through growing collaboration and raise the profile of Japanese and Southeast Asian AI actors.

References

Akrasanee Narongchai and Apichart Prasert. “The Evolution of ASEAN-Japan Economic Cooperation” in *ASEAN-Japan Cooperation: A Foundation for East Asian Community*. Ed. Tadashi Yamamoto. (Tokyo: Japan Centre for International Exchange, 2003), 63-74. Accessed March 28, 2026, https://jcie.org/researchpdfs/ASEAN/asean_narongchai.pdf, 69–70.

Araki Mitsuya. “Japan's Official Development Assistance: The Japan ODA Model That Began Life in Southeast Asia.” *Asia-Pacific Review* 14, no. 2 (2007): 17–29. https://doi.org/10.1080/13439000701733218.

“ASEAN Expanded ASEAN Guide on AI Governance and Ethics for Generative AI.” *ASEAN Secretariat*. 2024, https://asean.org/book/expanded-asean-guide-on-ai-governance-and-ethics-generative-ai/.

“ASEAN Guide on AI Governance and Ethics.” *ASEAN Secretariat*. 2024. https://asean.org/wp-content/uploads/2024/02/ASEAN-Guide-on-AI-Governance-and-Ethics_beautified_201223_v2.pdf.

ASEAN, Expanded ASEAN Guide on AI Governance and Ethics: Generative AI, Jakarta: *ASEAN Secretariat*, 2025, https://asean.org/wp-content/uploads/2025/01/Expanded-ASEAN-Guide-on-AI-Governance-and-Ethics-Generative-AI.pdf.

“ASEAN-Japan Business Leaders’ Summit 2024.” *Ministry of Economy, Trade and Industry*. December 2024. https://www.meti.go.jp/press/2024/12/20241225002/20241225002-b.pdf.

“ASEAN-Japan Cybersecurity Capacity Building Performance Report.” *National Cybersecurity Office*. Accessed March 28, 2026, https://www.cyber.go.jp/eng/pdf/en_ASEAN-Japan_Performance_Report.pdf.

“August FY2023.” *Ministry of Economy, Trade and Industry*. Accessed February 28, 2026, https://www.meti.go.jp/english/press/nBackIssue202308.html.

Bartlett, Benjamin. “Why Do States Engage in Cybersecurity Capacity-Building Assistance? Evidence from Japan.” *The Pacific Review* 37, no. 3 (2024): 475–503. https://doi.org/10.1080/09512748.2023.2183242.

CBRE Research. “Asia Pacific Data Centre Trends & Opportunities.” *CBRE*. May 29, 2025 https://www.cbre.com/insights/reports/asia-pacific-data-centre-trends-opportunities.

“Chairman’s Statement of the 28th ASEAN-Japan Summit.” *ASEAN Secretariat*. October 26, 2025, https://asean.org/wp-content/uploads/2025/11/CHAIRMANS-STATEMENT-28TH-ASEAN-Japan-SUMMIT.pdf.

Corey Wallace. “Japan’s Strategic Contrast: Continuing Influence despite Relative Power Decline in Southeast Asia.” *The Pacific Review* 32, no. 5 (2019): 863–97. https://doi.org/10.1080/09512748.2019.1569115.

Govella, Kristi. “The Adaptation of Japanese Economic Statecraft: Trade, Aid, and Technology.” *World Trade Review* 20, no. 2 (2021): 186–202. https://doi.org/10.1017/S1474745620000543.

Funakoshi, Ryo. “Japan’s AI Policy and AI-Co-Creation Initiative.” PowerPoint presentation from the Ministry of Economy and Trade during CONVERGE: Indo-Pacific Critical Tech Forum, Tokyo, Japan, October 10-11, 2024.

“Future Design and Action Plan for Innovative and Sustainable ASEAN-Japan Economic Co-Creation 2023 – 2033.” *Ministry of Economy and Trade*. Accessed February 26, 2026. https://www.meti.go.jp/press/2023/08/20230822005/20230823005-8.pdf.

Global X Research Team. "Four Japanese Companies Leading Robotics and Automation." *GlobalX ETFS*. September 29, 2023. https://www.globalxetfs.com.au/insights/post/four-japanese-companies-leading-robotics-and-automation/.

Habuka, Hiroki. “Japan’s Agile AI Governance in Action: Fostering a Global Nexus Through Pluralistic Interoperability. *Center for Strategic and International Studies*. October 9, 2025. https://csis-website-prod.s3.amazonaws.com/s3fs-public/2025-10/251009_Habuka_Japan_AI.pdf.

Hirosawa, Mayumi. "Japan to Help ASEAN Develop Local-Language AI amid China Concerns." *Nikkei Asia*. Accessed March 28, 2026. https://asia.nikkei.com/business/technology/artificial-intelligence/japan-to-help-asean-develop-local-language-ai-amid-china-concerns.

Hiroshima Process. “Friends Group,” *Ministry of Internal Affairs and Communications*. Accessed February 26, 2026. https://www.soumu.go.jp/hiroshimaaiprocess/en/supporters.html.

Hitachi Global. "Smart Automation Matters in Southeast Asia." *Hitachi*. Accessed March 28, 2026, https://www.hitachi.com/en-sea/insights/articles/smart-automation-matters-in-southeast-asia/.

Hoang Thi Ha, and Pham Thi Phuong Thao. “Japan and Southeast Asia Set to Co-Create an Interwoven Future.” *ISEAS Perspective*, no. 24. Singapore: ISEAS – Yusof Ishak Institute, 2024. https://www.iseas.edu.sg/wp-content/uploads/2024/03/ISEAS_Perspective_2024_24.pdf.

Ichikawa, Tagui. “Norms in New Technological Domains: Japan’s AI Governance Strategy.” *Center for Strategic and International Studies*. June 2025. Accessed February 26, 2026. https://csis-website-prod.s3.amazonaws.com/s3fs-public/2025-06/250617_Ichikawa_Technological_Domains.pdf.

“Implementation of Plan of the Joint Vision Statement on ASEAN-Japan Friendship and Cooperation Trusted Partners.” *Ministry of Foreign Affairs*. December 17, 2023. https://asean.org/wp-content/uploads/2023/12/Final-Implementation-Plan-of-the-ASEAN-Japan-Joint-Vision-Statement.pdf.

“Inducing Innovation: Reinvigorating ASEAN-Japan Growth and Collaboration in the Semiconductor Industry with AI.” *ASEAN-Japan Centre*. April 2, 2025. https://www.asean.or.jp/en/event-report/20250402/.

Isono, Ikumo and Hilmy Prilliadi. “Accelerating AI Discussions in ASEAN” Addressing Disparities, Challenges, and Regional Policy Imperatives.” *ERIA Discussion Paper Series* no. 488. November 2023. https://www.eria.org/uploads/media/discussion-papers/FY23/Accelerating-AI-Discussions-in-ASEAN-.pdf.

Japan-Malaysia Accelerator Program: Japanese Startups Tackle Social Issues Overseas." JETRO. Accessed March 28, 2026. https://www.jetro.go.jp/en/invest/insights/japan-insight/japan-malaysia-accelerator-program-japanese-startups-tackle-social-issues-overseas.html.

Joquino, Paolo. "Japan’s Y10 Trillion Bridge Extends to Southeast Asia: How the TSE Asia Startup Hub is Reshaping Cross-Border Innovation." *Insignia Ventures Review*. September 25, 2025. https://review.insignia.vc/2025/09/25/tse-asia-startup-hub/.

Katz, Richard. “Last place out of 27 countries...The fundamental reason why Japan lacks IT talent.” *Toyo Keizai*. May 2, 2023. https://toyokeizai.net/articles/-/669331.

Lam Peng Er. "Closer ASEAN-Japan Relations amid Great Power Transition in the 21st Century?" *Asia-Pacific Review* 30, no. 2 (2023): 1–29. https://doi.org/10.1080/13439006.2023.2248783.

Lowy Institute. "Japan." *Asia Power Index 2025 Edition*. Accessed March 28, 2026. https://power.lowyinstitute.org/countries/japan/.

Lowy Institute. "Southeast Asian Aid Map 2023: Traditional Development Partners." *Southeast Asia Aid Map*. Accessed March 28, 2026. https://seamap.lowyinstitute.org/analysis/2023/traditional-development-partners/.

Manantan, Mark Bryan. “Advancing Cyber Diplomacy in the Asia Pacific: Japan and Australia.” *Australian Journal of International Affairs* 75, no. 4 (2021): 432–59. https://doi.org/10.1080/10357718.2021.1926423.

Manantan, Mark Bryan. “Japan’s Data Free Flow with Trust: Progress and Prospects in Data Governance.” In *Navigating the New Political Economy in Southeast Asia*, edited by Alan Hao Yang and Masahiro Matsumura. Singapore: World Scientific Publishing, July 2023. https://doi.org/10.1142/13124.

McKinsey Global Institute. “Artificial Intelligence Hardware: New Opportunities for Semiconductor Companies.” *McKinsey & Company*. Accessed March 28, 2026. https://www.mckinsey.com/~/media/McKinsey/Industries/Semiconductors/Our%20Insights/Artificial%20intelligence%20hardware%20New%20opportunities%20for%20semiconductor%20companies/Artificial-intelligence-hardware.pdf.

“METI Held the Inno Vietnam-Japan Fast Track Pitch Event 2023 in Hanoi to Accelerate Global Open Innovation of Japanese Companies/Start-ups.” *METI*. November 6, 2023. https://www.meti.go.jp/english/press/2023/1106_001.html.

“Ministry of Economy, Trade and Industry estimates a shortage of 3.26 million people to handle the use of AI and robots by 2040.” *Nikkei*. Accessed March 28, 2026. https://www.nikkei.com/article/DGXZQOUA1948E0Z10C25A5000000/.

Ministry of Foreign Affairs. “The 28tH ASEAN Japan Summit.” *Japan-ASEAN Relations*. October 26, 2025. https://www.mofa.go.jp/a_o/rp/pageite_000001_00004.html#:~:text=October%2026%2C%202025,the%20meeting%20is%20as%20follows.

Ministry of Internal Affairs and Communications, Japan, Hiroshima AI Process Supporters List, Tokyo: MIC. Accessed March 28, 2026, https://www.soumu.go.jp/hiroshimaaiprocess/en/supporters.html.

Natsuda, Kaoru, and Gavan Butler. “Building Institutional Capacity in Southeast Asia: Regional Governed Interdependence.” *ASEAN Economic Bulletin* 22, no. 3 (2005): 331–39. https://muse.jhu.edu/article/387995.

Oba Mie, Endo Tamaki, Jimbo Ken, and Mieno Fumiharu. "50th Year of ASEAN-Japan Friendship and Cooperation: Roundtable Discussion of Track Record and Future Prospects." *Asia-Pacific Review* 30, no. 2 (2023): 30–68. https://doi.org/10.1080/13439006.2023.2254636.

Oxford Insights. *Government AI Readiness Index 2025*. Oxford, UK: Oxford Insights, 2025. https://oxfordinsights.com/ai-readiness/government-ai-readiness-index-2025/.

Radsch, Courtney. "Dismantling AI Data Monopolies Before It's Too Late." *Tech Policy Press*. Accessed March 28, 2026. https://www.techpolicy.press/dismantling-ai-data-monopolies-before-its-too-late/.

Rupakjyoti Borah. "Japan's Opportunity in Southeast Asia," *Global Asia* 19, no. 2 (June 2024): 87–93. https://www.globalasia.org/v19no2/cover/japans-opportunity-in-southeast-asia_rupakjyoti-borah.

Sumikawa, Atsushi. "Inside Japan's Struggle to Build Sovereign AI." *Asia Times*. September 10, 2025. https://asiatimes.com/2025/09/inside-japans-struggle-to-build-sovereign-ai/.

“Society 5.0.” *Government of Japan, Cabinet Office*. Accessed March 28, 2026. https://www8.cao.go.jp/cstp/english/society5_0/index.html.

Song, Jiyeoun. “Japan’s Official Development Assistance in Southeast and South Asia: Strategy for Economic Revitalization and Regional Security Cooperation.” *Journal of International and Area Studies* 28, no. 1 (2021): 1–20. https://www.jstor.org/stable/27210932.

“Speech by Prime Minsiter Kishida at the banquet at the State Guest House, Akasaka Palace commemorating the 50th Year of ASEAN-Japan Friendship and Cooperation – Striving for Peace and Prosperity through Co-Creation based on Trust” Ministry of Foreign Affairs of Japan. Accessed March 28, 2026. https://www.mofa.go.jp/files/100596243.pdf.

"Sunway iLabs and JETRO Prepare Four AI and Deep tech Japanese Startups for Entry into Malaysia and ASEAN." *Digital News Asia*. Accessed March 28, 2026. https://www.digitalnewsasia.com/startups/sunway-ilabs-jetro-prepare-four-ai-and-deeptech-japanese-startups-entry-malaysia-and-asean.

Suruga, Tsubasa. "Fujitsu and Nvidia to Develop Energy-Efficient AI Chips by 2030." *Nikkei Asia*. Accessed March 28, 2026, https://asia.nikkei.com/business/technology/fujitsu-and-nvidia-to-develop-energy-efficient-ai-chips-by-2030.

“The 28th ASEAN Japan Summit.” *Prime Minister’s Office of Japan*. October 26, 2025. https://japan.kantei.go.jp/104/diplomatic/202510/26asean.html.

Tsunekawa, Keiichi. “Japan: The Political Economy of Long Stagnation.” in *Two Crises, Different Outcomes: East Asia and Global Finance*. ed. T. J. Pempel and Keiichi Tsunekawa (Ithaca, NY: Cornell University Press, 2015). 185–215.

Tsurumaki, Yoshiki, Tomoyuki Miyazaki, Munetoshi Esaki, and Shuhei Sugai. “Navigating Data Centre Opportunities across APAC – Japan.” *King & Wood Mallesons*. July 16, 2025. https://www.kwm.com/global/en/insights/latest-thinking/navigating-data-centre-opportunities-across-apac-japan.html.

Wachirapornpruet, Poomthawat. “Mind the Gap: How Southeast Asia’s Fragmented Personal Data Rules Impact Digital Finance.” Asia House. Accessed March 28, 2026. https://www.asiahouse.org/files/documents/Poomthawat-Wachirapornpruet-Mind-the-Gap-How-Southeast-Asias-fragmented-personal-data-rules-impact-digital-finance.pdf.

Watanabe, Shota, Ema Ogura, and Keita Oikawa. “Current Status of ASEAN Data Governance and Its Implications for the Digital Economy Framework Agreement.” *ERIA Discussion Paper Series* no. 539. January 2025. https://www.eria.org/uploads/Current-Status-of-ASEAN-Data-Governance-and-Its-Implications-for-the-DEFA.pdf.

Yaita, Akio."Japan Backs ASEAN's Needs-Driven AI Initiative." *MediaConnect*. Accessed March 28, 2026, https://mediaconnect.com/japan-backs-aseans-needs-driven-ai-initiative.

Yuan, Jing-Dong and Ngeow Chow Bing. "Competitive Partners in Development Financing: China and Japan Expanding Overseas Infrastructure Investment." *The Pacific Review* 32, no. 5 (2019): 771–800. https://doi.org/10.1080/09512748.2019.1569117.

Zhao, Hong. “China–Japan Compete for Infrastructure Investment in Southeast Asia: Geopolitical Rivalry or Healthy Competition?”. *Journal of Contemporary China* 28, no. 118 (2019): 558–74. https://doi.org/10.1080/10670564.2018.1557946.

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