Asia Pacific AI Readiness Index

2023

Contents

1. Executive Summary

1.1 Background

Since 2019, when the first edition of the *Asia-Pacific AI Readiness Index* was released, artificial intelligence (AI) has become an everyday reality for consumers, businesses, and governments. This accelerated in 2023 with the emergence of generative AI, which has become one of the most impactful technology launches ever, redefining how we view and respond to the impact of AI.

According to a recent McKinsey study, generative AI alone could add the equivalent of USD2.6 trillion to USD4.4 trillion in economic benefits annually.[1] In Australia, it is estimated that generative AI could contribute up to AUD115 billion annually to the economy by 2030.[2] In Japan, it is estimated generative AI can unlock USD1.1 trillion in productive capacity.[3]

With generative AI now more capable and more widely available than before, consumers are using it for their daily information needs, and companies are incorporating it into their operations. As a result, two-thirds (67 percent) of IT leaders are prioritising generative AI for their business within the next 18 months,[4] with one-third (33 percent) claiming it as a top priority.[5] Likewise, 72 percent of companies say they will significantly increase their investments in AI over the next three years,[6] and 65 percent of business leaders indicate they are either accelerating their existing AI strategies or creating an AI strategy for the first time.[7]

At Salesforce, we are delivering approximately 200 billion AI-powered predictions every day, up from 6.5 billion predictions in October 2019.[8] Salesforce AI Cloud brings together AI, data, analytics, and automation to provide trusted, open, real-time generative AI that is enterprise-ready.

The adoption and utilisation of generative AI requires a level of AI readiness, which includes:

- **Infrastructure:** generative AI models currently require significant computational resources or specialised hardware;
- **Data:** generative AI models require large amounts of high-quality training data to learn meaningful patterns and generate realistic content;
- **Skills:** developing and deploying generative AI models require expertise in AI and machine learning;
- **Ethics:** generative AI can raise ethical concerns, such as the potential for biased or harmful content; and
- **Integration:** AI readiness also encompasses the ability to integrate generative AI models into real-world applications and workflows.

For digital economies to take advantage of the full potential of generative AI, they need to have strong institutional, infrastructural, organisational, and ethical foundations around AI.

Commissioned by Salesforce and prepared by Access Partnership, the 2023 Asia-Pacific AI Readiness Index (the Index) aims to help Asia Pacific (APAC) economies assess businesses' and governments' readiness to adopt, deploy, and integrate AI.

This 2023 edition covers 12 economies in the region: Australia, China (new addition), India, Indonesia, Japan, Malaysia, New Zealand, the Philippines, Singapore, South Korea (new addition), Thailand, and Vietnam.[9]

For each country, the Index measures businesses' and governments' multi-faceted AI readiness and its impact on socio-economic opportunities through 15 statistical indicators.[10]

The report provides recommendations for businesses and governments to help operationalise and maximise the use of AI.

1.2 Key Findings

1. **Overall AI readiness of APAC economies has advanced across the region**
   Out of the 12 economies covered in the 2023 edition, five (Australia, Indonesia, New Zealand, Singapore, and Thailand) have seen their overall AI readiness improve from their 2021 score. This is a direct reflection of the many AI-related initiatives those economies have launched and implemented between 2021 and 2023. Singapore holds the number one spot for the third consecutive time since 2019, the result of a largely conducive policy and business environment. Respectively ranked 2nd and 3rd, Japan and China have developed and implemented several forward-looking initiatives to frame and enable AI adoption by all aspects of the economy. South Korea (4th) and Australia (5th) – two economies that are also prolific in the AI space – close off the top five.

2. **Government AI readiness increased for all APAC economies**
   Government AI readiness has increased for all of the covered APAC economies between 2021 and 2023. Thailand and Indonesia experienced the largest increase, a testament to the momentum created by the publication of their long-awaited national AI strategies in 2022[11] and 2021,[12] respectively. Economies have gone beyond recognising the value of AI; they have taken action and are effectively ready to harness the transformative potential of AI for the digitalisation of government processes and services.

3. **Business AI readiness is stagnating due to MSMEs**
   Business AI readiness has stagnated for most APAC economies between 2021 and 2023. This assessment is largely due to the inclusion of micro, small, and medium enterprises (MSMEs) in these calculations, as these have a tendency to digitise more slowly and at a smaller scale than bigger corporations. Vietnam experienced the largest slowdown, and only Singapore saw its score rise in this area.

4. **There is a divide between economies with mature and emerging AI ecosystems**
   Overall, the 2023 edition Index shows a divide between mature and emerging digital economies: apart from Singapore, all Southeast Asian countries –Indonesia, Malaysia, Thailand, the Philippines, and Vietnam – scored below the APAC average. However, these countries have all launched national AI policies and strategies between 2021 and 2022, suggesting that it may only be a matter of time before we start seeing the on-the-ground impact of these AI initiatives on businesses and government organisations.

5. **AI is a driver of economic dynamism and growth**
   This report's correlations show that an important factor in countries' AI readiness is whether they have an open, robust, dynamic, and diversified economy. Overall AI readiness strongly correlates with GDP per capita, the ability to leverage comparative and competitive advantages, the propensity to harness technological innovation, the dynamism of the local start-up ecosystem, and the ease with which businesses can navigate government processes and bureaucratic mechanisms – suggesting that AI can be a catalyst of change for APAC economies while economies' dynamism can further expand the possibilities of AI use cases.

2. Main Findings

2.1 Overall AI Readiness

Table 1 provides a breakdown of the scores for the main components of the AI Readiness Index.[13] Singapore retains the top position across all forms of AI readiness, followed by Japan in overall readiness. China ranked 2nd in business readiness, and Australia is 2nd in government readiness.

Since the last report in 2021, Singapore has launched many decisive AI-related initiatives, with an aim to empower public- and private-sector organisations to adopt AI in a responsible manner: the National AI Program in Government,[14] the National AI Program in Finance,[15] the AI in Healthcare Guidelines,[16] and AI Verify.[17]

Japan's AI White Paper[18] and its multilateral push for the Data Free Flow with Trust (DFFT) framework[19] have advanced the international AI agenda, while China's 14th Five-Year Plan for National Informatisation[20] and White Paper on Trustworthy AI[21] have enabled the rise of many innovative AI companies.

Likewise, Australia has released the Navigating AI report,[22] the AI Ecosystem Momentum report,[23] and the Responsible AI Network[24] to operationalise AI.

Overall AI Readiness: Singapore leads the APAC region (70.1), followed by Japan (59.8), and China (59.7).

Business AI Readiness: Singapore leads the APAC region (53.6), followed by China, (43.1), and South Korea (42.7).

Government AI Readiness: Singapore leads the APAC region (86.5), followed by Australia (77.7) and Japan (77.5).

Table 1: Overall, Business, and Government AI Readiness 2023 (scores out of 100)

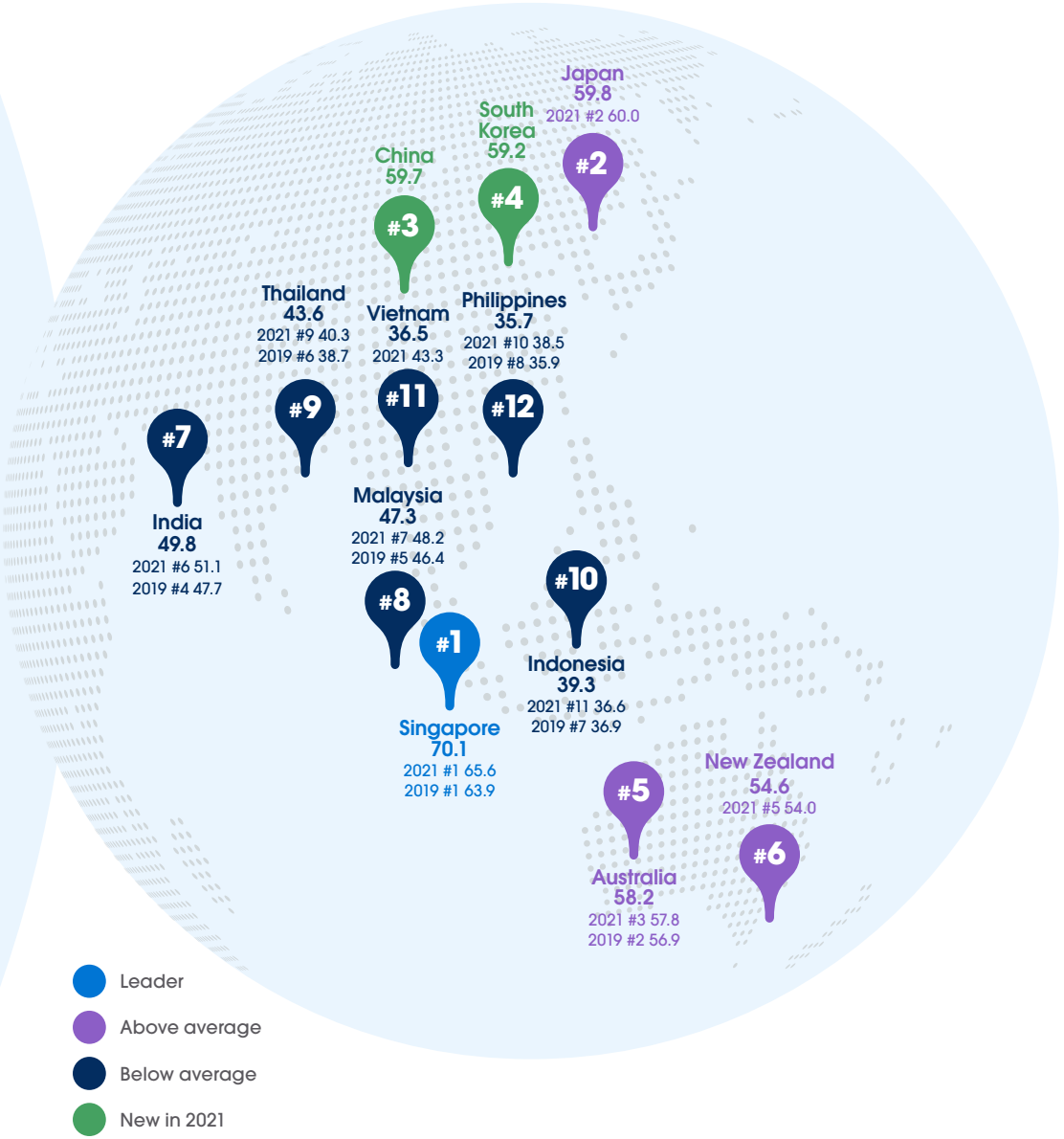
Ranking	Overall AI Readiness 2023 score	Business AI Readiness 2023 score	Government AI Readiness 2023 score
1	Singapore (70.1)	Singapore (53.6)	Singapore (86.5)
2	Japan (59.8)	China (43.1)	Australia (77.7)
3	China (59.7)	South Korea (42.7)	Japan (77.5)
4	South Korea (59.2)	India (42.2)	China (76.3)
5	Australia (58.2)	Japan (42.1)	South Korea (75.7)
6	New Zealand (54.6)	Australia (38.7)	New Zealand (72.9)
7	India (49.8)	New Zealand (36.2)	Malaysia (64.4)
8	Malaysia (47.3)	Malaysia (30.3)	Thailand (59.9)
9	Thailand (43.6)	Thailand (27.3)	India (57.4)
10	Indonesia (39.3)	The Philippines (25.4)	Indonesia (55.0)
11	Vietnam (36.5)	Vietnam (25.0)	Vietnam (48.1)
12	The Philippines (35.7)	Indonesia (23.5)	The Philippines (46.0)

Source: Access Partnership research

Looking at trends over time, Figure 1 shows:

- Singapore stands out by consistently keeping its top spot since 2019, along with Japan retaining its 2nd position since 2021.
- The addition of China and South Korea to the 2023 edition of the Index has pushed Australia to 5th from its 3rd place in 2021. Indonesia and Thailand have seen the largest rise in terms of overall AI readiness between 2021 and 2023. The introduction of overarching national AI strategies by both economies, along with a suite of enabling government initiatives. Overall, out of the 12 economies covered in the 2023 edition of the Index, five (Australia, Indonesia, New Zealand, Singapore, and Thailand) have seen their overall AI readiness improve.

Figure 1: Overall AI Readiness 2019-2021-2023 (scores and ranks)



2.2 Government AI Readiness

Government AI readiness assesses governments' ability to leverage and harness data-driven innovations by examining the extent to which they build enabling policies and conducive business ecosystems. It also assesses the degree to which AI is being used by public-sector organisations to improve efficiencies in the delivery of services–thus ensuring wider and fairer access to a range of digital experiences.

Figure 2 shows that Singapore, Australia, and Japan take up the top three spots, followed by China, South Korea, New Zealand, Malaysia, Thailand, and India. Ranking 10th, 11th, and 12th respectively, Indonesia, Vietnam, and the Philippines continue to rank at the lower end of the spectrum.

Although government readiness levels have increased across all economies, the differences between high and low scorers remains consistent with the 2021 and 2019 editions of the Index. Vietnam has shown the smallest increase in government AI readiness, dropping three spots from 8th spot in 2021 to 11th in 2023. While the Vietnam government has rolled out the National Strategy on the Research, Development, and Application of AI Until the Year 2030,[25] and has been heavily investing in AI and other digital technologies,[26] progress is impacted by a lack of AI talent and expertise.[27]

Figure 2: Government AI Readiness 2019-2021-2023 (scores and ranks)

Looking closer at the government readiness indicators, Table 2 shows:

- Across the spectrum, Singapore leads in digital transformation of the public sector, open government data, human capital and research, ICT regulation, and government promotion of investment in emerging technologies.
- Australia is among the top scorers, reflecting its sustained momentum to build on its rich open data sources[28] and to engage beyond the public sector through initiatives such as the Aus Government Data Summit.[29]
- New Zealand is leading in digital government and open government data. This can be attributed to the Open Data Action Plan rolled out in 2021, which seeks to enable open data and accelerate the release and reuse of open government data.[30]

Table 2: Government AI Readiness 2023, detailed scores (scores out of 10)

Government AI Readiness 2023								
Country	Digital Evolution Index	Digital Government Score	E-Participation Index (EPI)	Open Government Data Index (OGDI)	Human Capital and Research	H-index for AI publications	ICT Regulation ("Governance" pillar)	Government Promotion of Investment in Emerging Technologies ("Government" pillar)
Australia	8.0	8.2	9.9	10.0	6.2	6.1	8.8	5.1
China	6.2	6.6	8.6	8.9	5.3	9.4	6.0	10.0
India	4.7	7.2	5.9	9.9	3.8	4.9	6.1	3.5
Indonesia	4.8	7.6	7.2	9.0	2.2	1.2	6.1	6.0
Japan	7.8	8.5	10.0	9.9	5.3	5.3	8.1	7.2
Malaysia	6.9	7.4	6.8	8.6	4.1	3.2	6.9	7.6
New Zealand	8.0	9.3	9.5	10.0	5.5	2.5	8.4	5.2
Philippines	4.4	7.0	4.9	7.3	2.5	0.8	6.0	3.9
Singapore	9.9	9.2	9.8	10.0	6.2	5.5	8.8	10.0
South Korea	8.3	8.7	9.4	9.7	4.8	4.4	7.4	7.7
Thailand	5.3	7.8	7.8	9.3	3.0	1.6	6.6	6.4
Vietnam	4.7	6.5	5.3	6.4	2.7	1.8	5.6	5.4

Source: See the full list of data sources in Appendix I. Methodology. All calculations by Access Partnership.

APAC developments in generative AI

This section provides an overview of the generative AI landscape across the 12 economies covered in this report.

Australia: The Australian government and businesses have been taking active steps to harness the potential of generative AI, which is estimated to add up to AUD115 billion annually to Australia's economy by 2030.[31] In July 2023, the Digital Transformation Agency (DTA) and the Department of Industry, Science and Resources (DISR) published a set of "interim" guidelines on the use of generative AI by the public sector, for low risk instances.[32] Within the private sector, Australian employees are seeing a rise in the use of AI in the workplace, with two-thirds (67 percent) of respondents using generative AI tools at work weekly.[33]

China: The Cyberspace Administration of China (CAC) announced comprehensive regulations for generative AI in July 2023, emphasising adherence to core socialist values and a controlled rollout of ChatGPT-like services.[34] The new rules, effective from August 2023, cover all generative AI content services offered to the Chinese public.[35]

India: AI is estimated to unlock USD621 billion of productive capacity in India, which is equivalent to almost a fifth of the country's GDP in 2021.[36] India's generative AI firms have attracted a cumulative investment of more than USD590 million.[37] The Ministry of Electronics and IT (MeitY) has announced plans to draft a new roadmap to develop India's AI ecosystem focused on its domestic IndiaAI Platform to promote local start-ups, research, and innovation.[38]

Indonesia: Indonesia's generative AI market is forecasted to have a compound annual growth rate (CAGR) of over 24.4 percent from 2023 to 2030.[39] Some banks are exploring the potential of using generative AI cloud solutions to improve the quality of their chatbots, increase employee productivity, and automate content creation.[40] The Indonesian government has outlined its overarching AI policy framework in the Strategy for Artificial Intelligence 2020-2045 (Stranas KA).[41]

Japan: In April 2023, the Liberal Democratic Party (LDP) released its AI White Paper.[42] In May 2023, the Japanese government's AI Strategy Council reevaluated and restructured the issues and strategies on generative AI in "Tentative Summary of AI Issues".[43] In July 2023, the government announced a proposed AI audit and certification framework which outlines user guidelines for confidentiality and misinformation issues and a risk-based approach to ensure generative AI compliance with Japan's laws and regulations.[44] Japan's Ministry of Education has published guidelines allowing the limited use of generative AI in elementary, junior high, and high schools.[45]

Malaysia: Nearly a third of surveyed companies have already integrated generative AI, and over 40 percent of ICT professionals report that their organisations are actively exploring the use of generative AI to drive business growth.[46] The Malaysian government has outlined its national AI policy framework in the Malaysian National AI Roadmap for 2021-2025.[47]

New Zealand: In May 2023, the Privacy Commissioner of New Zealand released guidance on his office's expectations on the use of generative AI by businesses that are subject to the Privacy Act 2020.[48] A revised version that outlined potential privacy risks associated with generative AI tools was subsequently issued in June 2023.[49]

The Philippines: It is estimated that generative AI can unlock USD79.3 billion of productive capacity, which is equivalent to a fifth of the country's GDP in 2022.[50] The Philippines government launched its National AI Strategy Roadmap in 2021.[51]

Singapore: In June 2023, the Infocomm Media Development Authority (IMDA) published a discussion paper, in cooperation with Aicadium, to share Singapore's practical and accretive approach to generative AI governance.[52] In June 2023, Deputy Prime Minister Heng Swee Keat shared that a new initiative, Project MindForge, which would help examine the risks and opportunities of generative AI for the financial sector by bringing key stakeholders from the banking sector together with leading AI companies to pilot and prototype tools under the auspices of the government.[53]

South Korea: In May 2023, the South Korean government announced that it will set new standards and guidelines for copyrights of AI-generated content by September 2023 to minimise disputes and confusion over intellectual property rights.[54] In June 2023, the National Institute of Technology and Standards (NITES) established the first national standard (KS) for AI ethics in Korea.[55] This was a response to the global proliferation of generative AI technology and the heightened discussions surrounding AI ethics.[56] In June 2023, President Yoon Suk Yeol declared the Paris Initiative, which contains the basic principles for establishing a global digital order to establish a digital ethics code in the era of advancing technologies such as ChatGPT.[57]

Thailand: The private sector in Thailand is exploring generative AI's potential and applications in marketing and chatbots.[58] The Thai government has published its National AI Strategy and Action Plan (2022-2027) in July 2022.[59]

Vietnam: The private sector has shown interest in generative AI applications, but the number of generative AI-focused companies remains relatively small.[60] In 2021, the Vietnam government launched the National Strategy on the Research, Development, and Application of AI Until the Year 2030.[61]

2.3 Business AI Readiness

Business AI readiness assesses the degree to which private-sector organisations are financially, organisationally, and culturally capable of adapting to the rapidly changing market dynamics of an increasingly data-driven global digital economy.

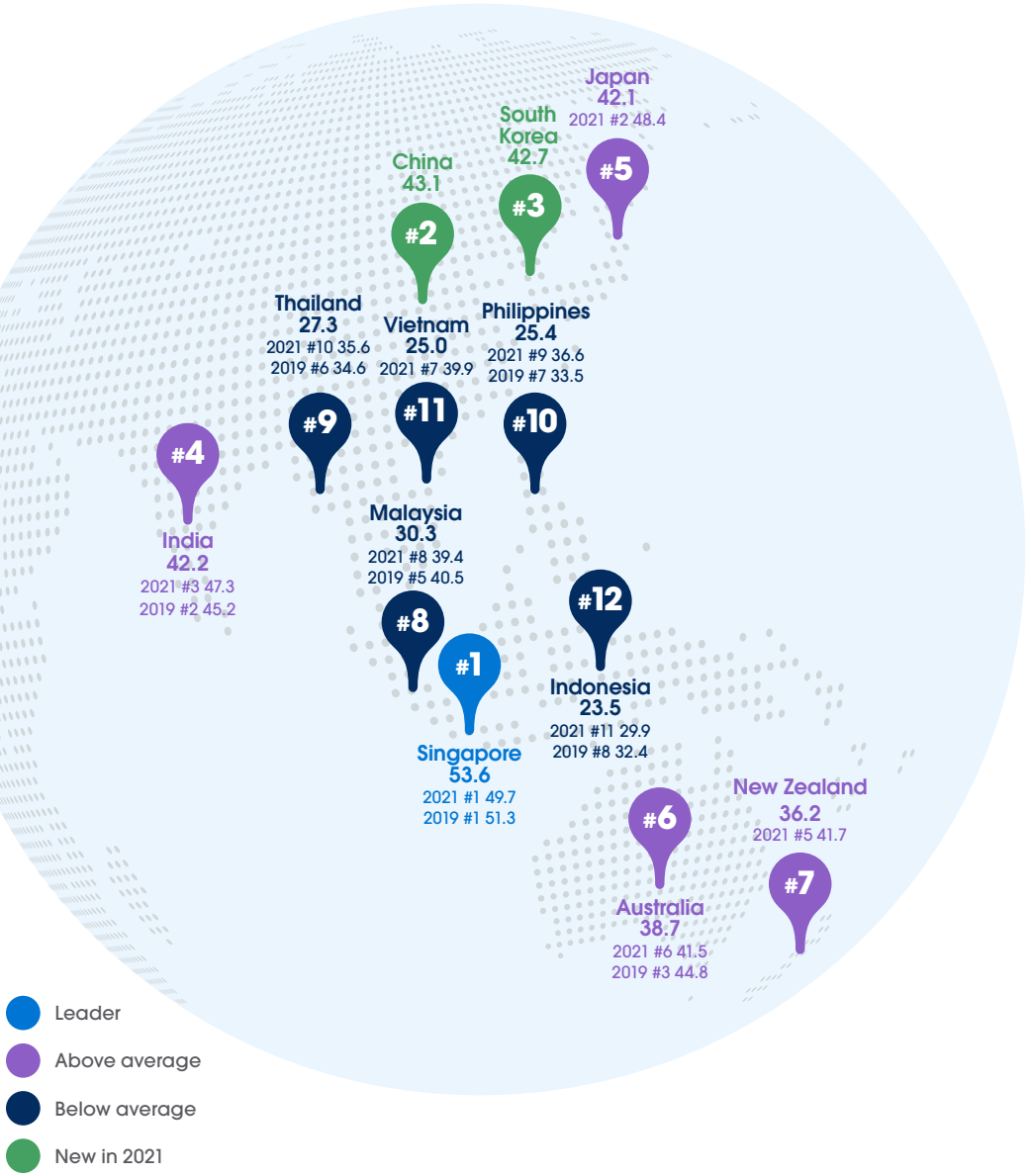
The Business AI readiness score is lower than the Government AI readiness score as businesses covered in the readiness score also comprise start-ups and MSMEs in addition to enterprises. It is estimated that SMEs alone comprise 96 percent of all businesses in Asia.[62] Hence, even though enterprises are quick to adopt AI in their business operations, smaller players like MSMEs lag behind in adoption due to lack of technological infrastructure, budget, and a shortage of AI talent and expertise.[63]

Generative AI is likely to level the playing field and encourage broader AI adoption among smaller players by offering affordable and customised solutions, automating tasks, improving decision-making, enhancing customer experience, and facilitating scalable growth.[64]

Figure 3 shows that:

- Singapore, China, and South Korea hold the top three spots, followed by India, Japan, Australia, New Zealand, Malaysia, and Thailand. Ranking 10th, 11th, and 12th respectively, the Philippines, Vietnam, and Indonesia sit at the lower end of the spectrum.
- Singapore has retained the top position in the region since 2019, with businesses across key sectors–financial services, healthcare, transport and logistics, and tourism–well-equipped to adopt AI.[65]
- In China, AI adoption has mainly focused on the financial services, retail, and high-tech sectors, which together represent over a third of the country's AI market.[66]
- Vietnam has shown the greatest decrease in business readiness, dropping from 7th spot in 2021 to 11th in 2023. This may be due to a shortage of AI talent.[67]
- Of the countries covered in the inaugural 2019 edition of the Index, Indonesia has experienced the largest fall (dropping from 8th spot in 2019 to 12th in 2023), followed by Malaysia, Thailand, and the Philippines (which all dropped by three spots between 2019 and 2023). While these countries have all recently launched national AI strategies and roadmaps, they remain below the APAC average for business readiness. This highlights the pressing need for national initiatives to equip the region's 70 million SMEs with the tools to capitalise on AI.[68]

Figure 3: Business AI Readiness 2019-2021-2023 (scores and ranks)



Looking closer at the business readiness indicators, Table 3 shows that:

- Singapore is ahead of other countries in terms of businesses' adoption of emerging technologies and business sophistication. Singapore also leads in terms of venture capital availability and valuation, a major factor behind the dynamism–and longevity–of AI start-ups. China leads the way in terms of knowledge and technology outputs.[69]
- South Korea leads in terms of creative outputs, which include intangible assets (such as global value of 5,000 most valuable brands),[70] creative goods and services, and creative goods exports (such as movies, music, and dramas).[71]
- India leads in terms of number of AI start-ups, scoring ahead of other APAC economies. This may be linked to the fact that total investments in AI start-ups in India stood at USD3.24 billion in 2022, with funding devoted to AI start-ups totalling USD7.73 billion between 2013 and 2022.[72]

Table 3. Business AI Readiness 2023, detailed scores (scores out of 10)

Government AI Readiness 2023							
Country	Companies' Adoption of Emerging Technologies	Business Sophistication	Knowledge and Technology Outputs	Creative Outputs	Labour-Market Reconfiguration ("Churn") Due to Digital Transformation	Number of AI Start-Ups	Venture Capital Availability & Valuation
Australia	8.2	4.9	3.2	3.8	2.1	2.1	2.8
China	..	5.6	5.7	4.9	2.3	4.5	2.9
India	5.2	3.1	3.4	2.4	2.2	9.4	3.9
Indonesia	5.9	2.2	1.9	1.9	2.8	0.4	1.4
Japan	8.5	5.8	5.3	3.9	2.4	1.2	2.4
Malaysia	7.2	3.6	3.2	2.7	2.5	0.4	1.6
New Zealand	7.8	4.4	3.6	3.8	..	0.3	1.8
Philippines	5.2	3.7	3.1	2.1	2.6	0.1	1.1
Singapore	8.9	6.6	4.9	3.9	2.1	2.0	9.3
South Korea	7.5	5.8	5.5	5.5	2.3	1.6	1.7
Thailand	6.1	3.6	3.0	2.5	2.4	0.3	1.3
Vietnam	5.0	3.2	2.6	3.1	2.1	0.4	1.1

Sources: See the full list of data sources in Appendix I. Methodology. All calculations by Access Partnership.

3. Recommendations

The 2023 Index findings show that despite APAC economies' varying degrees of AI readiness and their differing approaches, all of them are prioritising the advancement of AI and generative AI. Compared to 2019 and 2021, AI is now at the top of national agendas for all economies, the implementation of national AI strategies is well underway, and awareness on the potential impact of AI for economic growth and development is at an all-time high.

Implement National AI strategies

At the time of writing, most APAC countries have a National AI strategy in place, and, in some cases, a National AI body devoted exclusively to coordinating AI efforts. Yet not all countries have progressed in terms of readiness. This is because having a National AI policy or agency in place does not automatically lead to effective AI adoption and operationalisation. This entails giving government agencies the mandate, authority, legitimacy, budget, and resources to implement the strategy.

To be truly effective, National AI strategies need to be distilled as whole-of-government efforts, with action plans and roadmaps that are industry- and sector-specific. As demonstrated by the experiences of Singapore, Japan, China, South Korea, and Australia, this is an approach that allows national AI strategies to be sustained over time.

Adopt a risk-based approach to AI regulation, and harmonisation and consistency around existing rules

A tailored risk-based AI regulation approach is key: A one-size-fits-all approach to regulation may hinder innovation, disrupt healthy competition, and delay the adoption of the technology that consumers and businesses around the world are already using to boost productivity.[73]

Risk-based AI regulation focuses most on the high-risk applications, especially those that could cause significant harm or impact someone's rights and freedoms.[74] Regulation should also differentiate the context, control, and uses of the technology and assign guardrails accordingly. Generative AI developers, for instance, should be accountable for how the models are trained and the data they are trained on, while those deploying the technology decide how the tool is being used and should have rules according to that interaction.

Data protection laws that protect the fundamental human right to privacy are a foundation of responsible AI regulation. AI is powered by data. Additional rules specific to generative AI should address the use and privacy of personal data for training future models, safeguarding personal data within the AI ecosystem.[75]

Finally, harmonisation and consistency should be applied with existing rules, some of which already provide some guardrails around AI, such as global data protection laws. As regulators and other stakeholders develop new guidance, they should assess and clarify whether there is an existing law addressing these concerns.[76]

Enable responsible AI and ethics

The emergence of generative AI has put this issue at the very forefront. Nearly six in 10 (59 percent) said they think generative AI outputs are inaccurate.[77]

Responsible AI is critical. From policymakers to entrepreneurs, there is a real sense of urgency to develop and deploy AI responsibly.[78] The design of responsible AI lies with the adoption of fairness principles, bias safeguards, and ethical guidelines at every stage of AI development. These should be complemented by laws, policies, and a risk-based approach governing the deployment of AI to ensure it solves problems, improves lives, and leaves no one behind.

The UNESCO Recommendation on the Ethics of Artificial Intelligence, the OECD Principles on AI, and the G20 AI principles are frameworks that provide crucial guidance on ethical and societal implications of AI, can inform the development of dynamic and sustainable AI ecosystems. It is important to note that the recent breakthrough of generative AI has further increased the urgency to enable responsible AI.

One area for consideration for Government is to appoint a Chief Ethical Humane Use Officer or an AI Safety Officer to help with the implementation of the framework for the ethical and humane use of technology within government and as it applies to digital government services.

The capability of generative AI has prompted new concerns around privacy, data mining, copyright, and misinformation that all governments should be actively seeking to address.[79] Governments will need to respond to this by providing further principles and guidelines specific to generative AI. Ongoing development in this area include OECD's effort to update its guidelines on regulating artificial intelligence to cover generative AI.[80]

Boost AI talent

Governments and businesses need to cultivate a strong pool of AI talent to meet the market's demand for skilled AI professionals that are required in all segments of the economy.

The vast majority of companies are looking to leverage open-source generative models (41 percent) or cloud API generative models (37 percent), while very few are looking to build their own generative models (22 percent).[81] AI talent will be critical to building owned generative models.

The application of generative AI will have implications for the workforce across all industries. It is likely that the implementation of generative AI will change the focus within certain jobs rather than replace jobs entirely. Nevertheless, there will be significant demand for AI skills.

In response to the strong demand for AI talent, economies like Singapore are working with key industries to double the number of AI apprenticeships over the next five years.[82]

Leverage AI for societal and economic benefit, together with an education campaign

AI is not just a technological issue; increasingly it is becoming a core driver for economic growth and promotion of digital trade across APAC. AI also has a greater implication for society, as it can be transformative for capital and labour relations, and encourage more sustainable and inclusive forms of economic growth.

Correlation analysis in this report demonstrates overall AI readiness has a significant positive relationship with GDP per capita, world competitiveness, readiness for frontier technologies, global start-up ecosystem competitiveness, and ease of doing business.

APAC governments should expand collaboration with NGOs, and the private sector to actualise the transformative potential of AI. Governments could also consider education campaigns to inform their communities about the capabilities and potential risks of generative AI, educating users about how to identify AI-generated content and raise awareness about the importance of verifying sources of information.

Appendix I. Methodology

The AI Readiness Index is a composite index that measures different components of AI frameworks and ecosystems for 12 economies in the region: Australia, China, India, Indonesia, Japan, Malaysia, New Zealand, the Philippines, Singapore, South Korea, Thailand, and Vietnam.[83]

The Index combines qualitative research and quantitative modelling to demonstrate how business and government leaders can better focus the efforts and resources they are devoting to AI.

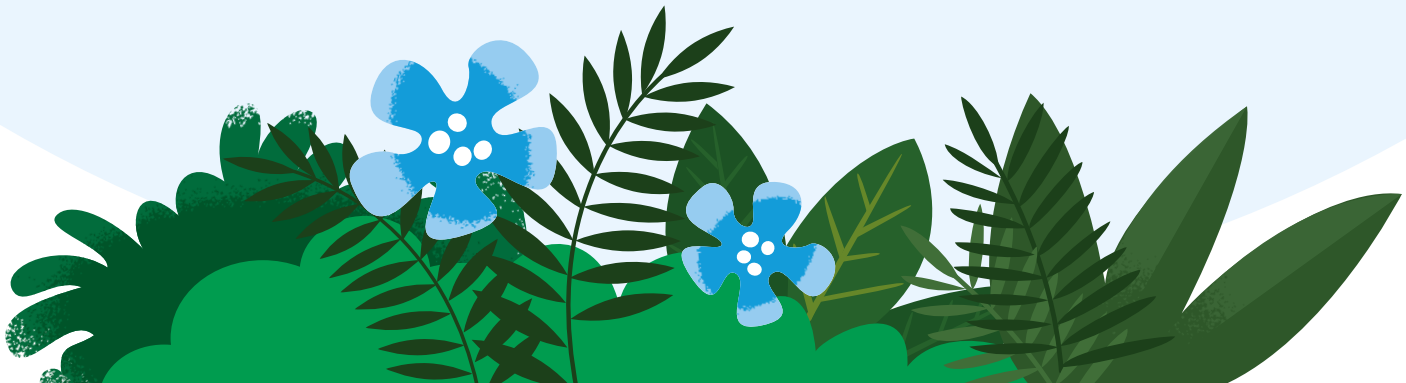
Since no exact measurements of readiness exist specifically for AI, the 2023 edition of the Index uses 15 proxy indicators clustered into two key dimensions:[84]

- **Business readiness** (7 indicators): How the private sector–start-ups, small and medium enterprises (MSMEs), and enterprises–are equipped to adopt AI. This is important to understand businesses' ability to drive and sustain the growth of AI.
- **Government readiness** (8 indicators): How the public sector–regulators, policymakers, institutions, and organisations–are enabling AI through funds and frameworks. This is important to evaluate governments' ability to make AI a key driver of economic growth and competitiveness.

All scores for the indicators are normalised to 10, while the overall total is normalised to 100 for comparison. Where available, the most recent data is used. All data is publicly available and accessible online in the sources and URLs presented below.

Business Readiness Indicators		
Companies' Adoption of Emerging Technologies	Measures the extent to which companies are adopting five emerging technologies (artificial intelligence, robotics, app- and web-enabled markets, big data analytics, and cloud computing)	Portulans Institute & University of Oxford, Network Readiness Index, 2022
Business Sophistication	Measures the extent to which firms are conducive to innovation activity.	Cornell University, INSEAD, and the World Intellectual Property Organisation (WIPO), Global Innovation Index, 2022
Knowledge and Technology Outputs	Measures firms' and countries' ability to create, impact, and diffuse knowledge.	Cornell University, INSEAD, and the World Intellectual Property Organisation (WIPO), Global Innovation Index, 2022
Creative Outputs	Measures firms' and countries' ability to create and market innovative physical and digital products.	Cornell University, INSEAD, and the World Intellectual Property Organisation (WIPO), Global Innovation Index, 2022
Labour-Market Reconfiguration ("Churn") Due to Digital Transformation	Measures the digitally driven disruptions that the labour market is expected to go through in the next five years, including the reallocation and displacement of workers and jobs ("churn in 5 years").	World Economic Forum (WEF), Future of Jobs Report, 2023
Number of AI Start-Ups	Measures the number of active companies headquartered in a country and categorised as "artificial intelligence."	Tracxn, Database of AI start-ups, 2023: Australia · Hong Kong · India · Indonesia · Japan · Malaysia · New Zealand The Philippines · Singapore · South Korea · Thailand · Vietnam
Venture Capital Availability & Valuation	Measures the size, value, and dynamics of venture capital. Includes: the market capitalisation of listed domestic companies, the number of venture capital deals invested in, the number of venture capital deals received, and the total value of venture capital received.	Cornell University, INSEAD, and the World Intellectual Property Organisation (WIPO), Global Innovation Index, 2022

Government Readiness Indicators		
Digital Evolution Index	Measures governments' digital readiness by assessing their competitiveness and trust in the global digital arena.	Tufts University, Digital in the Time of COVID, 2020
Digital Government Score	Measures national digital government readiness and development across ten indicators and 35 sub-indicators.	Waseda University, IAC 17th Digital Government Survey, 2022
E-Participation Index (EPI)	Measures ICT-supported participation in government and governance processes including administration, service delivery, decision-making, and policymaking.	United Nations, E-Government Survey, 2022
Open Government Data Index (OGDI)	Measures the free and open publication of government data.	United Nations, E-Government Survey, 2022
Human Capital and Research	Measures the level of government spending and support on skills, training, science, and research.	Cornell University, INSEAD, and the World Intellectual Property Organisation (WIPO), Global Innovation Index, 2022
H-Index for AI Publications	Measures the productivity and the citation impact of a scientific publication.	Scimago, Journal & Country Rank, 2022
ICT Regulation ("Governance" pillar)	Measures the extent to which a government promotes participation in the network economy through regulation, policy, and planning.	Portulans Institute & University of Oxford, Network Readiness Index, 2022
Government Promotion of Investment in Emerging Technologies ("Government" pillar)	Measures the extent to which a government fosters investment in five emerging technology sectors (artificial intelligence, robotics, app- and web-enabled markets, big data analytics, and cloud computing)	Portulans Institute & University of Oxford, Network Readiness Index, 2022



Appendix II. Correlation Analysis between AI Readiness and Economic Performance

Correlation analysis was conducted to better understand the relationship between measures of economic performance, indicators of technological advancement, and key components of AI readiness.

As shown in Table 4 below, the overall AI readiness and business AI readiness have a positive relationship with GDP per capita, world competitiveness, readiness for frontier technologies, global start-up ecosystem competitiveness, and ease of doing business.

Across the three readiness components, the relationship is strongest with readiness for frontier technologies. This suggests that the greater the economy's propensity to harness technological innovation and frontier technologies, the likelier it is to be ready to fully realise the economic potential of AI.

These findings suggest that AI can be both the product and the driver of economic dynamism and growth; in short, AI can be a catalyst of change for APAC economies while economies' dynamism can further expand the realm of potential use cases for AI.

Table 4: Asia Pacific AI Readiness Index – Breakdown of Correlations (Pearson, Sig. 2-Tailed)

	GDP (Constant 2015 USD) millions	GDP per capita (Constant 2015 USD)	2022 IMD World Competitiveness score	2023 Index of Economic Freedom	Readiness for Frontier Technologies Index 2021	Global Startup Ecosystem Index 2022	Ease of doing business score, 2020
Overall Readiness Pearson Correlation	0.331	0.809**	0.865**	0.503	0.902**	0.857**	0.768**
Sig. (2-Tailed)	12	12	11	12	12	12	12
N	0.289	0.001	0.000	0.091	0.000	0.000	0.003
Business Readiness Pearson Correlation	0.303	0.840**	0.860**	0.572*	0.895**	0.808**	0.841**
Sig. (2-Tailed)	12	12	11	12	12	12	12
N	0.334	0.000	0.000	0.048	0.000	0.001	0.000
Government Readiness Pearson Correlation	0.340	0.694*	0.783**	0.362	0.830**	0.849**	0.598*
Sig. (2-Tailed)	12	12	11	12	12	12	12
N	0.276	0.010	0.003	0.243	0.001	0.000	0.036

Notes:

* indicates the correlation is significant at the 0.05 level – Sig. (2-Tailed);
** indicates the correlation is significant at the 0.01 level – Sig. (2-Tailed)

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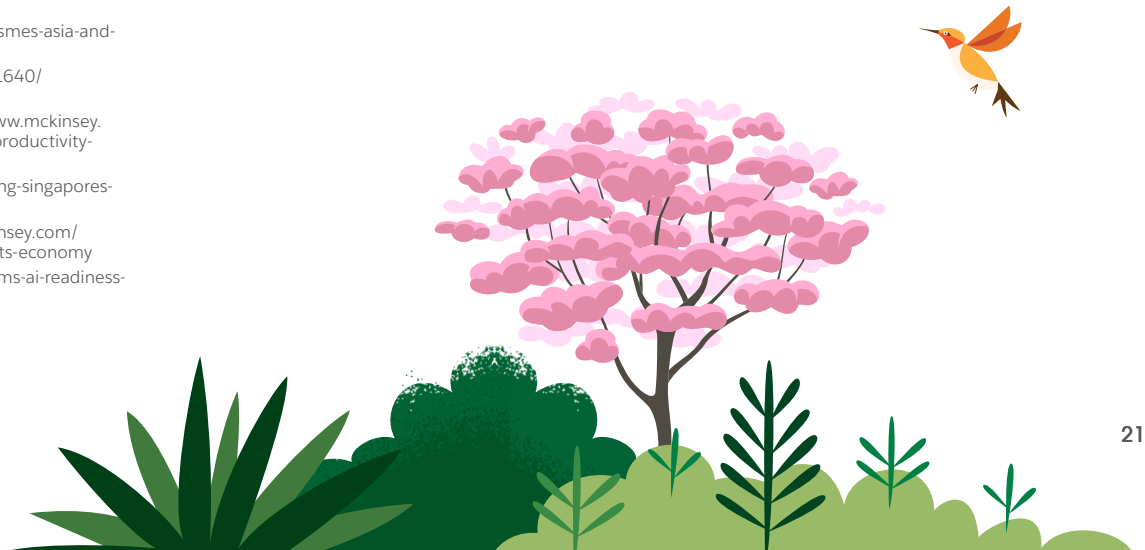


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