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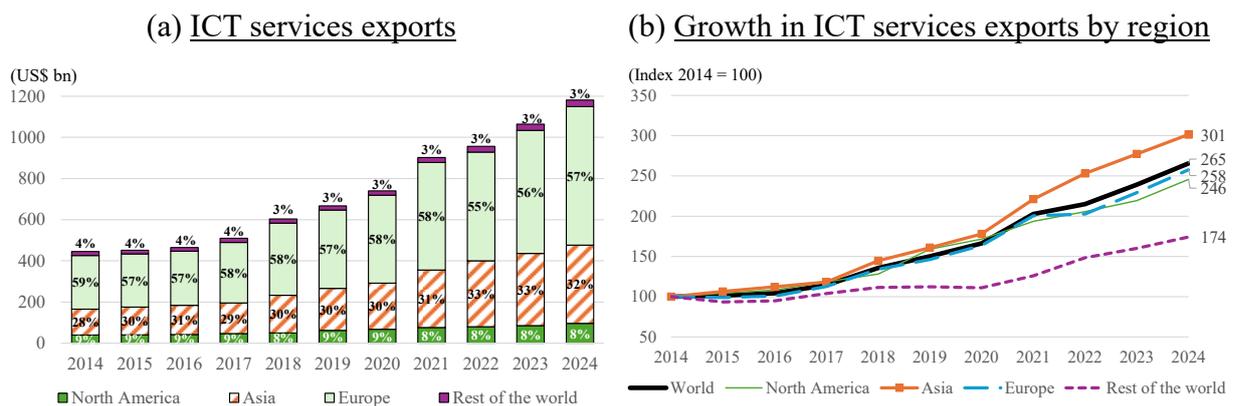
Artificial Intelligence Development in Asia

Artificial intelligence (AI) represents a wide spectrum of technologies designed to enable machines to perceive, interpret, act, and learn with the intent to emulate human cognitive abilities. Across this spectrum, generative AI (Gen AI) can create new content, ranging from text to images, by learning from extensive training data. AI is therefore a core driver of new quality productive forces and holds the potential to vastly augment productivity and efficiency. This article takes a look at recent developments of AI and surveys various international reports to derive insights into AI development in selected Asian economies⁽¹⁾.

AI saw rapid development in recent years, in terms of breakthroughs in machine learning models, computing power, data availability, and algorithmic efficiency as well as its diffusion into different industries. According to the World Trade Organization (WTO)⁽²⁾, trading of AI-related goods (from semiconductors and processors to finished computers, servers and telecommunications equipment) expanded by more than 20% year-on-year in the first half of 2025, contributing nearly half of overall merchandise trade growth. Of this, nearly two-thirds of AI-related trade growth came from Asia. Higher-income Asian economies such as Korea, Japan and Taiwan continued to provide high-value semiconductors and advanced telecom equipment, while emerging economies such as Vietnam and Thailand also benefited from rising related investment and supply-chain diversification.

Strong global demand for AI, supported by wide business adoption and consumer preference for digital services, also drives computer services exports. Based on WTO’s statistics, several selected Asian economies were among the world’s top twenty exporters of digitally delivered services in 2024, viz. India (5th), Chinese Mainland (6th), Singapore (7th), Japan (12th) and Korea (17th). Indeed, Asia as a region saw the fastest growth in information, communications and technology (ICT) services exports over the past decade, and accounted for some one-third of the world total in 2024 (*Chart 1*).

Chart 1: Global ICT services exports*



Note: (*) ICT services are an aggregation of computer and telecommunications services.

Source: UNCTAD.

¹ The nine selected Asian economies are: Singapore, Korea, Taiwan, India, Indonesia, Malaysia, the Philippines, Thailand, and Vietnam. Chinese Mainland, Hong Kong, Japan and the US are also added for comparison.

² WTO: Global Trade Outlook and Statistics, October 2025.

Box 4.1 (Cont'd)

A market report estimated the size of global AI market at US\$137 billion in 2022 and projected it to hit US\$1.8 trillion by end-2030, implying a remarkable average annual growth of nearly 38% in eight years' time⁽³⁾. North America, which accounted for over 41% of global AI market revenue in 2022, is expected to maintain its leading position, while the Asia-Pacific region is anticipated to register the fastest growth and take up a larger market share from 25% to 39% over the projected period⁽⁴⁾. Other data sources pointed out that the US led the world by a wide margin in terms of private AI investment, amounting to US\$471 billion during 2013-24⁽⁵⁾ (**Table 1**). Many Asian economies also made significant investment in AI, though their combined investment was only a fraction of the US'. The US also led in terms of the total number of newly funded AI companies.

Table 1: The US and Asian economies drive global AI development

	Private AI investment (2013-24, US\$bn)	Number of newly funded AI companies (2013-24)	Number of data centres (as of Jan 2026)	Number of cloud infrastructure services (as of mid-2024)	
US	470.9	6956	3779	145	
Chinese Mainland	119.3	1605	364	190	
India	11.3	434	269	32	
Korea	9.0	270	85	n.a.	
Singapore	7.3	239	65	18	
Japan	5.9	388	242	27	
Indonesia	n.a.	n.a.	183	n.a.	Asia ex- Chinese Mainland: 159
Malaysia			107		
Hong Kong			85		
Thailand			57		
Taiwan			37		
Vietnam			39		
Philippines			35		

Sources: Stanford Institute for Human-Centered AI, Data Center Map, UNCTAD.

The integration of AI into business operations is fueling demand for advanced data centres and cloud infrastructure. Southeast Asian economies have attracted significant investment in cloud and AI infrastructure from major technology companies in the Western world. For example, according to the United Nations Conference on Trade and Development (UNCTAD), in 2024 Microsoft announced investment of US\$1.7 billion in Indonesia and US\$2.2 billion in Malaysia, and in 2025 Amazon Web Services launched a new hub in Thailand with planned investment of over US\$5 billion by 2037⁽⁶⁾. While the US still houses most of the world's data centres (38%), Asia is catching up. The nine Asian economies, Singapore, Korea, Taiwan, India, Indonesia, Malaysia, the Philippines, Thailand, and Vietnam, collectively account for 8% of the world total, whereas Chinese Mainland, Japan and Hong Kong together take up another 7%. In terms of cloud infrastructure services, Asia far outperforms by hosting 349 services, more than double the US' 145.

³ Facts and Factors (2024): Artificial Intelligence market size, trends, growth, forecast report to 2030, <https://www.fnfresearch.com/artificial-intelligence-ai-market>.

⁴ References: Spherical Insights; Grand View Research; and Domainshift.ai.

⁵ Stanford Institute for Human-Centered AI: 2025 AI Index Report.

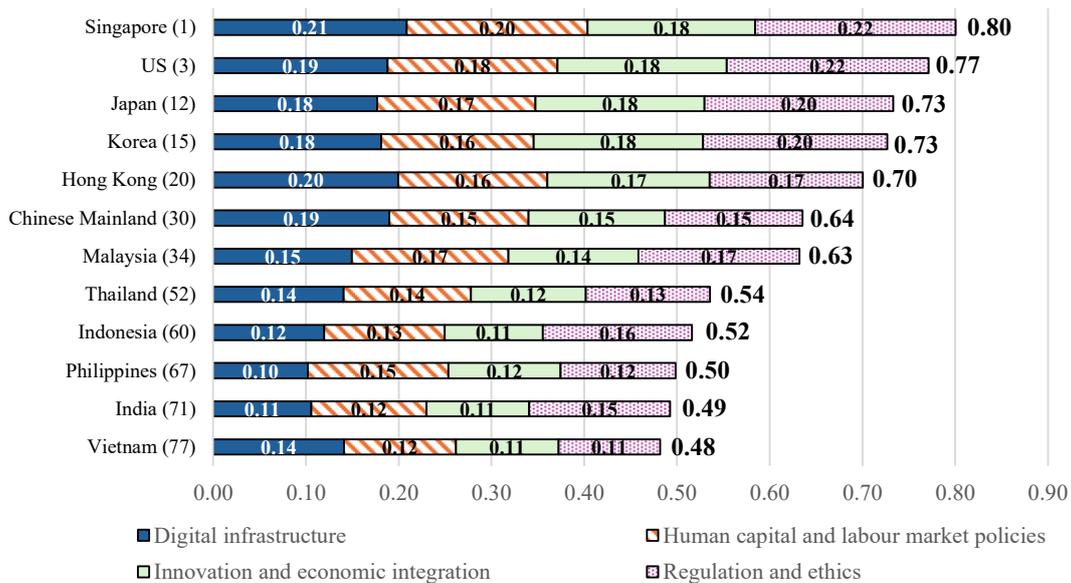
⁶ UNCTAD: Technology and Innovation Report 2025.

Box 4.1 (Cont'd)

Apart from the trade and investment angle, the growing prevalence of AI has prompted a proliferation of measures to gauge the readiness for AI adoption and application in recent years⁽⁷⁾. These measures have common elements to reflect salient aspects of AI adoption, such as infrastructure, human capital, data, innovation (R&D), investment/financing, and institutions. For example, the International Monetary Fund (IMF) proposed an AI Preparedness Index (AIPI)⁽⁸⁾ to summarise the overall AI preparedness based on a set of macro-structural indicators relevant for AI adoption organised under four dimensions: (1) digital infrastructure, (2) human capital and labour market policies, (3) innovation and economic integration, and (4) regulation and ethics⁽⁹⁾.

As depicted in *Chart 2*, higher-income economies tend to have higher AIPI ranking than emerging economies. Singapore ranks top globally. Korea also does well in digital infrastructure, innovation, and regulation. As for emerging economies, Malaysia stands out and compares favourably among its peers in the four dimensions, most notably in human capital and regulation, while Thailand and Vietnam fare relatively better in digital infrastructure among the emerging economies. In overall terms, Hong Kong ranks 20th globally and 4th in Asia, scoring more favourably in digital infrastructure as well as innovation and economic integration as compared to Asia’s average.

Chart 2: IMF’s AIPI by dimension for selected economies



Note: Taiwan’s overall figures are not available. Figures in brackets denote global rank.

Source: IMF.

⁷ For example, the Global AI Index published by Tortoise Media; the Global Index on Responsible AI by the Global Center on AI Governance; the Government AI Readiness Index by Oxford Insights; and the Frontier Technologies Readiness Index covering, inter alia, AI by UNCTAD. Various ranking institutions such as the World Intellectual Property Organization’s Global Innovation Index and the International Institute for Management Development’s world competitiveness rankings also added indicators on AI in recent years.

⁸ The IMF released the new AIPI in its staff discussion note published in January 2024 titled “Gen-AI: Artificial Intelligence and the Future of Work”, based on 2023 data.

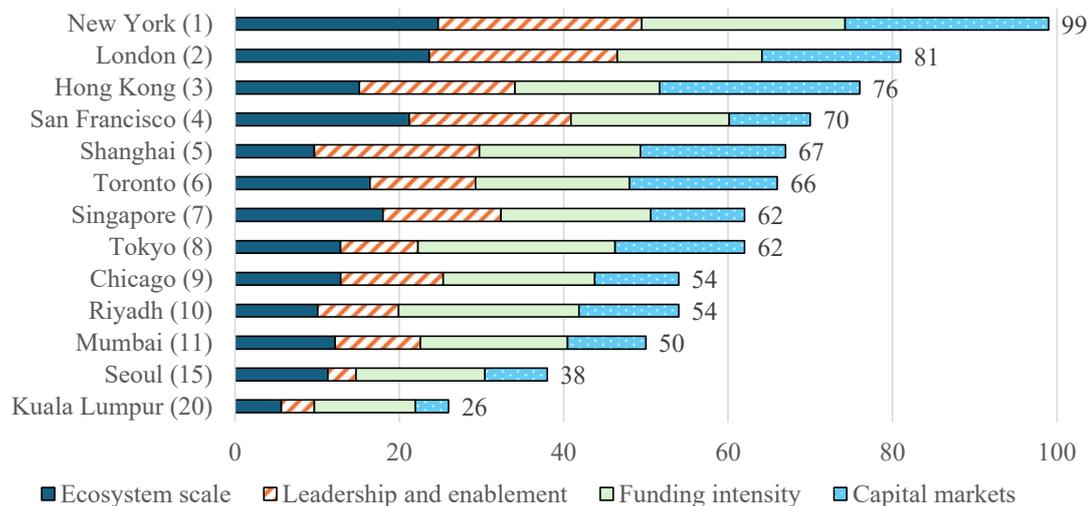
⁹ It should be noted that the IMF pointed out some limitations of AIPI, including the use of simple average with equal weighting of different indicators which may not be equally relevant, sensitivity to outlier bias, etc.

Box 4.1 (Cont'd)

The above discussion shows that Asia is well positioned to adopt and capitalise on AI. Indeed, the Global AI Competitiveness Index (GAICI) released by Deep Knowledge Group⁽¹⁰⁾ in late January 2026 shows that while the US is regarded as the most AI competitive country, four out of the global top ten are from Asia: China (2nd), Singapore (4th), Japan (6th), and Korea (10th), taking into account the corporate and industrial, research innovation, human capital, policy, governance and regulation, and financial perspectives.

At the city level, the GAICI report has a Global AI for Finance Competitiveness Index to gauge financial city hubs' applied AI capability in finance based on four pillars, viz. ecosystem scale, leadership and enablement (institutional framework supporting AI adoption in finance), funding intensity, and capital markets (**Chart 3**). Hong Kong ranks 3rd globally, just behind New York and London, and tops in Asia, showcasing its AI-for-finance advantage with the capital-markets gateway role as an international financial centre. It is also worth noting that seven out of the global top 20 financial hubs are from Asia: Hong Kong (3rd), Shanghai (5th), Singapore (7th), Tokyo (8th), Mumbai (11th), Seoul (15th), and Kuala Lumpur (20th).

Chart 3: Global AI for Finance Competitiveness Index



Note: Figures in brackets denote global rank. The report only shows the rankings of the top 20 hubs.
Source: Deep Knowledge Group.

The above analysis shows that apart from serving as strong trading hubs of AI-related goods and services, the selected Asian economies are well positioned to unleash the potential of AI on multiple fronts. AI is a core enabler of the digital economy. By automating routine tasks, augmenting human decision-making and enabling personalised digital services at scale, AI can drive productivity growth across different economic sectors. With Hong Kong adopting a dual strategy of developing AI as a core industry and empowering other industries through AI, Hong Kong's journey in digitalisation is set to accelerate further in the foreseeable future. To fully realise the augmented growth potential, it is imperative for Hong Kong to continue investing in upskilling and reskilling programmes, empowering our workforce to thrive in the evolving digital economy and stay ahead in the global AI race.

¹⁰ Deep Knowledge Group: <https://www.dkv.global/ai-index>.