

PROMOTING AI USE FOR TRADE AND GROWTH GAINS IN THE ASEAN

DR. KATI SUOMINEN, NEXTRADE GROUP

43RD SINGAPORE ECONOMIC ROUNDTABLE, 18 NOVEMBER 2025



Purpose

I. Tracking AI adoption and gains in the ASEAN:

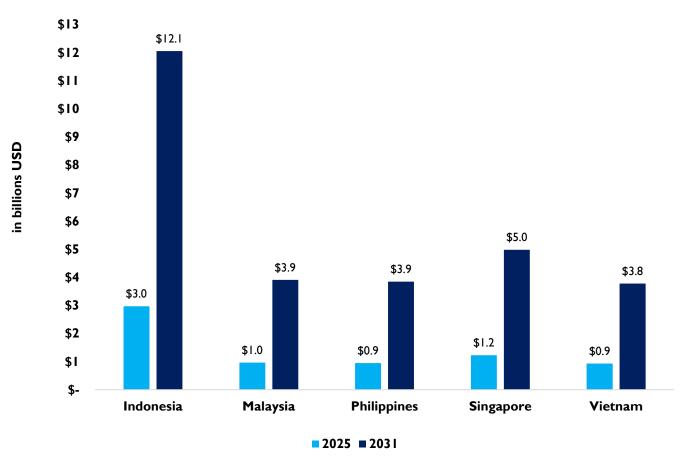
- Al startup ecosystem in the ASEAN
- SMEs' adoption of and gains from Al
- Impact of AI adoption on ASEAN trade

2. Policies to promote adoption, use and regional scalability

- ASEAN economies' Al policy readiness
- Through DEFA: driving common Al governance and "trade in Al"
- What can Singapore do in 2027?

ASEAN AI markets to soar to ~40% yoy by 2031; infrastructure expands; economic contribution >\$IT

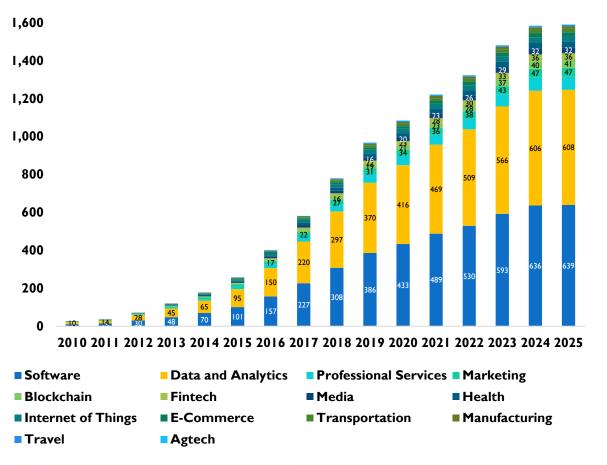
Size of ASEAN economies' AI markets, 2025 and 2031 (in billions USD)



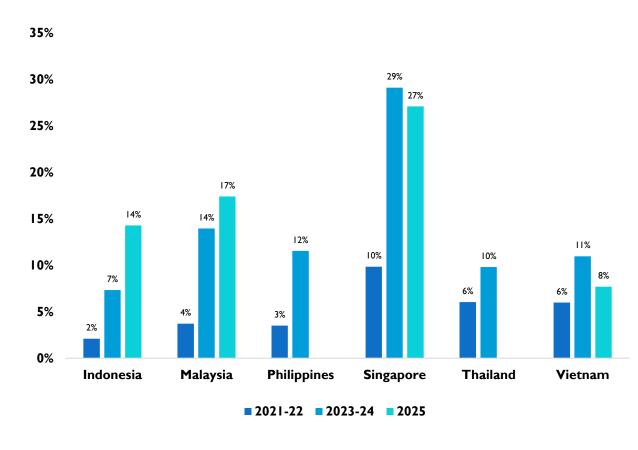
- Kearney and EDBI: Al to contribute an additional \$1 trillion to ASEAN's GDP by 2030, with 13-18% GDP gains to Indonesia, Malaysia, Singapore, and Thailand
- Oxford Economics and Cisco: Al and related technologies could create up to 28 million new jobs in Al development, data science, and automation management in ASEAN by 2028
- Google, Temasek, Bain (2025): With 4,620 MW of planned capacity, the total data center capacity in SEA is projected to grow by 180%

> 1,600 AI startups led by Singapore in diverse verticals – software, manufacturing, healthcare, etc.; AI startups make up a growing share of startup ecosystem

Al-driven startups by sector in 2010, 2020, and 2025 by year and industry



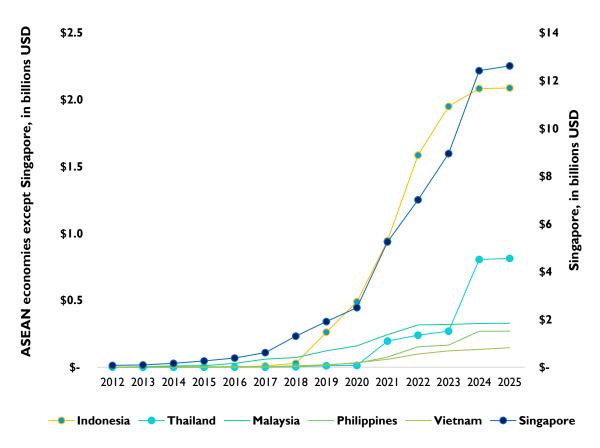
Al-driven startups as % of all startups in 2021-25, by economy



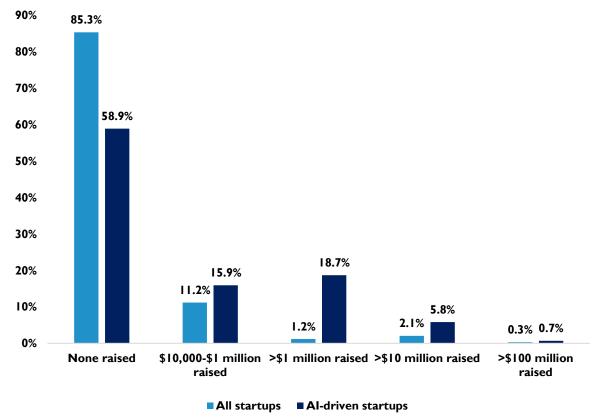


Al startup ecosystem is scaling fast, with >\$16 billion raised (similar to Korea); Al startups are better funded than typical startups

Cumulative investments in Al startups in various ASEAN economies, 2012-25



Share of Al-driven startups with \$1 million or more, \$10 million or more, and \$100 million or more raised in the ASEAN

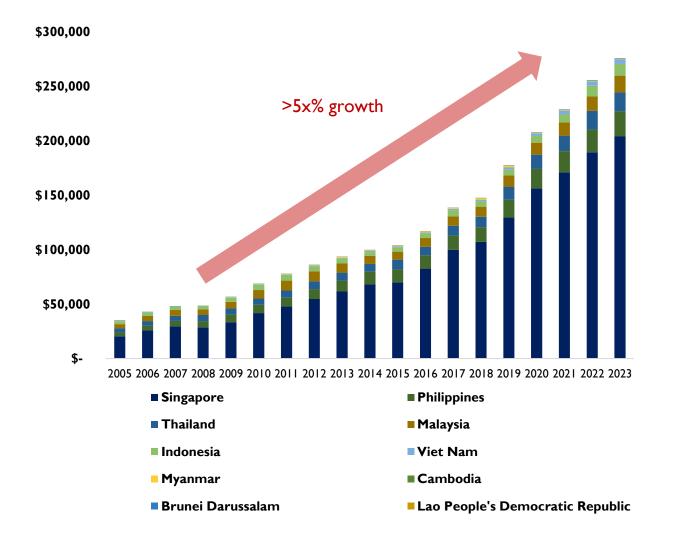


Source: Nextrade Group on the basis of OECD.AI, 2025. https://oecd.ai/

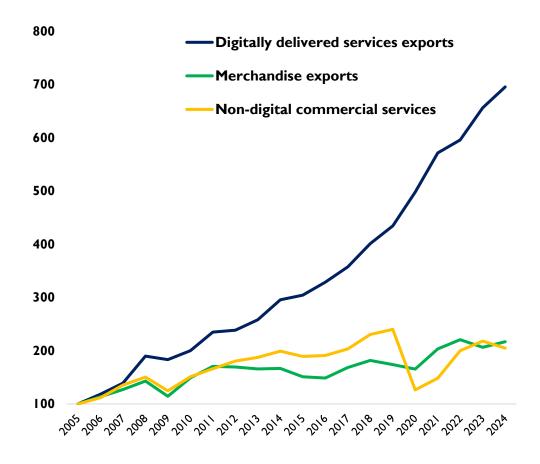


Nextrade econometrics: Al ecosystem doubles \rightarrow 14% growth in digital trade. Al has played and will play a role in ASEAN's digital services export revolution....

Digitally deliverable services exports in East and Southeast Asian countries (millions USD) 2005-24

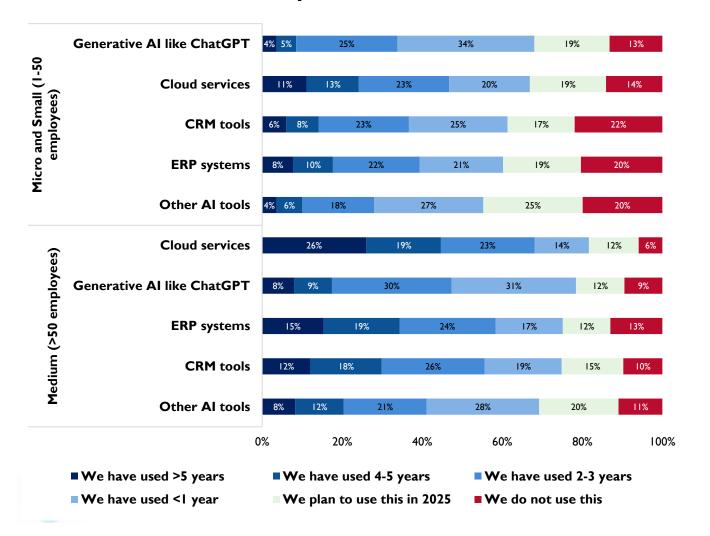


Growth of East and Southeast Asian digital services, non-digital commercial services, and merchandise exports in 2005-24

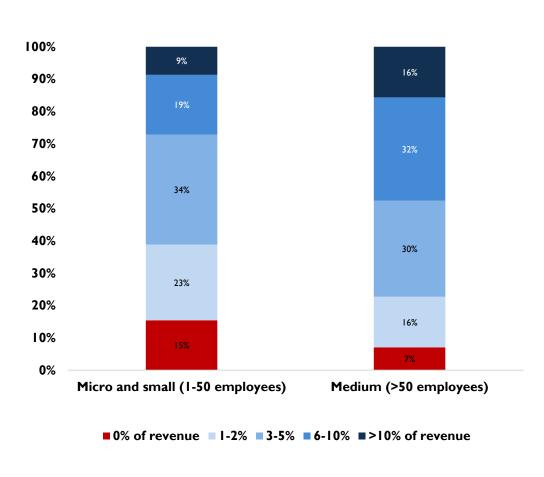


SMEs are also adopting AI: 69% of micro and small and 79% of medium firms already use generative AI, with significant adoption rates in the past three years; >60% of users invest 3% or more of revenue

Digital services and AI adoption, by firm size and years used

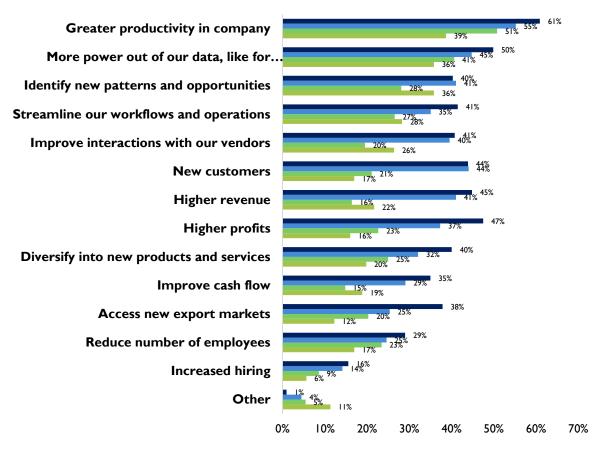


SMEs' investment in AI as a share of revenue, by firm size



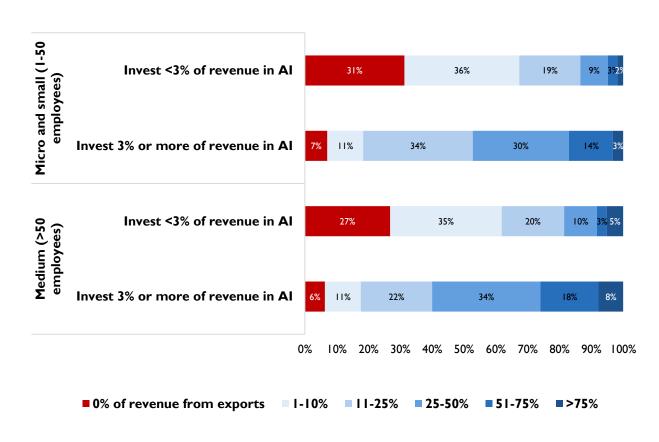
Al superusers turn adoption into a measurable advantage – higher productivity, revenue growth, exports

Share of firms reporting gains in AI, by level of investment in AI and firm size

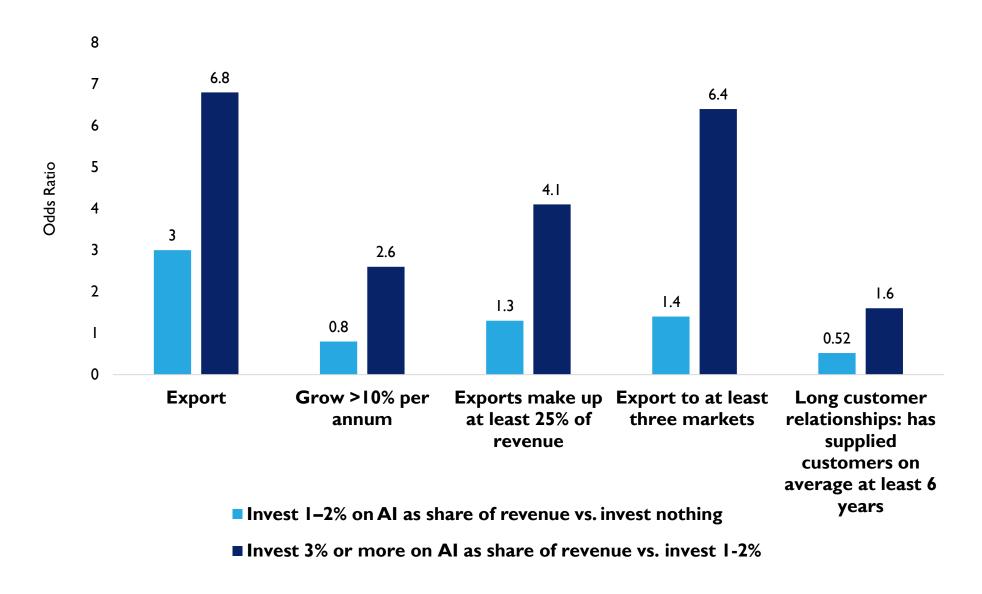


- Medium (>50 employees) Invest 3% or more of revenue in AI
- Micro and small (1-50 empolyees) Invest 3% or more of revenue in Al
- Medium (>50 employees) Invest <3% of revenue in AI
- Micro and small (1-50 empolyees) Invest <3% of revenue in Al

Export revenue as a share of total revenue, by Al investment level and firm size



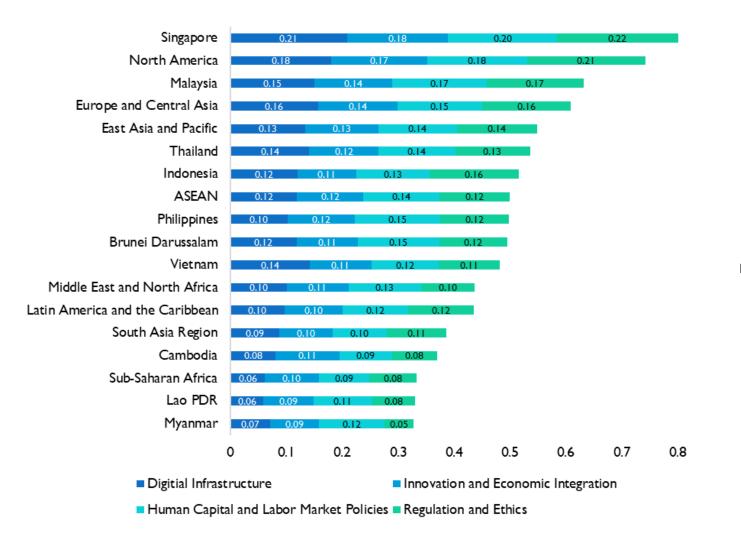
Al "superuser" firms are likelier to export, diversify and have durable client relationships than peers that invest only a little (controlling for other things like firm size and sector)



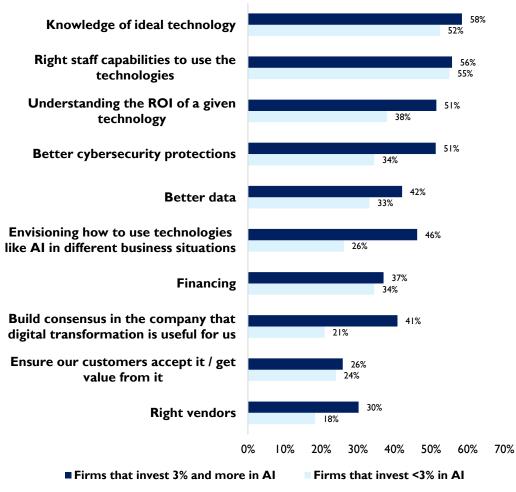
ASEAN AI Policy readiness

Singapore and Malaysia outperform on global AI indices, but major disparities remain; firms need human capital, cybersecurity, understanding of use cases to leverage AI

IMF AI Preparedness Index, ASEAN economies in a comparative perspective (max. I)



% of firms that need AI and digital capabilities



We can think of AI as a value chain: DEFA can promote "Trade in AI": AI inputs, aligning policies, and scaling AI startups

		<u>Develor</u> and use			<u>Trade in</u> <u>Al</u>			
Inputs for Al development	DEFA enablers	Actors	DEFA enablers	Export	Actors	DEFA enablers		
ICT infrastructure and devices	Free trade in IT goods	Startups,	Al assurance		Al startups and businesses	Common Al standards		
Data	Crossborder data flows	researchers innovating with Al	Al sandboxes		commercialize and regionalize innovations	Cooperation for commercialization		
Services	National treatment for foreign services		Text and data mining exceptions			Common Al skills certificates		
Capital / FDI	National treatment for investors	Businesses, government agencies using Al	Data privacy exemptions		Businesses export Al-enabled products, services, and	Crossborder data flows		
Human capital	Freer movement of talent		Al skilling		digital services	Protecting source code, IP, copyright		



Lots of AI FDI in place: Global tech giants are betting big on ASEAN AI, with >\$40 billion invested

Company	Amount invested (USD)	Economy	Investment focus	Users
Amazon AWS	\$8.9 billion over 2024-28	Singapore	Cloud infrastructure, flagship AI program	Public sector, enterprises (Grab, MPA, Singlife), community AI skills
Amazon AWS	\$5 billion over 15 years	Thailand	New AWS Region, cloud infrastructure, reskilling	Developers, startups, public sector, students, MSMEs
Google	\$2 billion over 2024-30	Malaysia	Data center + Google Cloud region; Al literacy & sovereign cloud services	MSMEs, public sector, students, developers
Google	\$1 billion	Thailand	Data center + Cloud region in Chonburi/Bangkok	Enterprises, startups, government agencies, fintech
Intel Corp Manufacturing	\$7 billion	Malaysia	Al/hardware infrastructure, semiconductors	Regional manufacturing workforce; supply chain companies
Microsoft	\$2.2 billion over 2024-28	Malaysia	Cloud + AI infrastructure, National Innovation Center, skilling 200,000 in AI and digital skills	Developers, SMEs, government, and the security sector
Microsoft	\$1.7 billion over 2024-28	Indonesia	Cloud + AI infrastructure, skilling 840,000 in AI, developer support	Workforce, development communities, government (Golden Indonesia 2045)
Open AI	\$1 billion	Singapore	APAC hub; language/AI resource development; enterprise piloting	Al Singapore; Grab staff and operations
Oracle	\$6.5 billion announced Oct 2024	Malaysia	Public cloud region, AI and analytics capabilities	Government, financial services, airlines, hospitality
Qualcomm	Amount not disclosed	Vietnam	Al research and development center	Al researchers, startups, tech firms
YTL Power + NVIDIA	\$4.3 billion	Malaysia	Al supercomputer + green data center park	Research institutes, enterprises, and government

ASEAN has the building blocks for an AI economy, but uneven adoption limits scalability

	Brunei	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
Al assurance framework and certification programs										
Promotion of AI innovation										
Mechanisms for SME and workforce AI skills and development										
Data flow to enhance AI adoption										
Text and data mining exceptions										
Comprehensive government strategy to promote cloud capacity and cloud first policies										
Open government data policy										
Government programs and policies to support Al startups										
Al adoption strategy with public sector										
Public funding for AI research and academic innovation										
		In	place		In pr	ogress		No ado	pted	

Heading to 2027 Singapore ASEAN Chairmanship: DEFA AI Playbook for the era of Agentic AI



Responsible Use of Al

- Promote firms' adoption of international standards like ISO/IEC 23894 (for AI risk management) and ISO/IEC 42001 (for AI Management Systems), and certification.
- Endorse assurance mechanisms and scaling of Singapore's Global Al Assurance Sandbox and Al Verify
- Promote corporate governance of AI, including red-teaming



Innovation: Data and Copyright rules

- Build national and regional Al and data privacy sandboxes and regulatory testbeds
- Promote text and data mining exemptions in copyright laws
- Promote exemptions to data privacy laws to promote data for AI development
- Make non-sensitive public and private datasets available for AI R&D
- Promote fluid cross-border data flows and open government data policies
- Promote regional funding for Al research



Inclusion: AI Skilling

- Promote common Al skilling and certifications
- Mutual recognition of Alrelated skills credentials
- Skill public servants to adopt Al and cloud and consider Al use case



Internationalization: Build a regional AI ecosystem

- Promote common, interoperable certification of firms' adoption of international AI standards.
- Develop regional data-sharing platforms to enable interoperable Al systems.
- Promote market access and source code protection for Al-driven firms.
- Adopt and enforce digital policies that underpin Al use, such as fair use copyright rules, robust cybersecurity policies and practices, and data privacy regulations