

PERSPECTIVE

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Current Key Drivers of ASEAN Integration: Digital Skills and Mobilities

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The growth of the region's digital economy will help ASEAN accelerate its regional integration. Image: https://www.freepik.com/free-photo/hand-pointing-currency-blockchain-technology-background_15559147.htm. Accessed16 June 2023.

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EXECUTIVE SUMMARY

- COVID-19 and the rise of the digital economy are excellent opportunities for ASEAN to accelerate its regional integration push.
- However, the ASEAN Digital Integration Index (ADII) shows that the area of digital skills and talent is ASEAN's worst-performing indicator of the six digital integration benchmarks used to measure digital integration.
- ASEAN needs to enhance the digital skills and mobility of talents in the region.
- It can do this by leveraging the regional tech companies' abilities to scale up the integration of its workforce to a regional-wide digital economy ecosystem, and adding digital workers to the ASEAN Mutual Recognition Arrangements (MRAs) to facilitate their movement in the region. These two measures are critical in ensuring that the demand for digital talents is met.
- ASEAN also needs to facilitate intra-ASEAN student mobility and digital skill advancement early through educational platforms such as the ASEAN University Network and other student mobility programmes.



INTRODUCTION

COVID-19 has intractably accelerated the digital economy in Southeast Asia. The interaction between the health crisis and the digital economy in the region has raised consumer dependencies on digital services such as telemedicine, video conferencing platforms, financial services, and e-commerce. According to Google, Temasek, and Bain's annual E-Conomy SEA 2022 Report, ASEAN's digital economy is on course to reach US\$600 billion-US\$1 trillion by 2030, with sustained long-term projections.¹

The growth of the region's digital economy will help ASEAN accelerate its regional integration. One excellent example is integration in the financial sector through digital payment systems. Currently, the central banks of five Southeast Asian countries—Malaysia, Indonesia, the Philippines, Thailand and Singapore—have linked up their digital payment systems, improving inclusivity, cross-border economic activities and efficiency.²

Recognising the potential for both growth and regional integration, ASEAN has been boosting its digital integration activities. For instance, the ASEAN Digital Integration Framework and Action Plan (DIFAP) serves as the overall blueprint for ASEAN's digital integration efforts.³ The ASEAN Agreement on Electronic Commerce, which entered into force in 2019, attempts to harmonise principles and rules to promote e-commerce in the region and to strengthen the capacity to implement them.⁴ The COVID-19 crisis has also inspired ASEAN to double down on its agenda to accelerate digital transformation. The Bandar Seri Begawan Roadmap: An ASEAN Digital Transformation Agenda to Accelerate ASEAN's Economic Recovery and Digital Economy Integration outlines a multi-year roadmap to deepen ASEAN digital integration and connectivity against the backdrop of COVID-19.⁵

The digital economy will undoubtedly become an enabling factor in ASEAN's growth journey. However, it creates an unprecedented demand for digital workers equipped with in-demand technical skills. Singapore needs 1.2 million additional digital workers by 2025 – a 55 per cent increase from today's levels – to remain competitive.⁶ For Indonesia, an additional 600,000 digital talents annually are needed to service its digital transformation pipeline until 2030.⁷ Meanwhile, a digital talent survey conducted by a Malaysian think tank, the Social and Economic Research Initiative (SERI), found that only 4.8 per cent of Malaysian private sector respondents feel that the existing labour market can fully meet their digital talent needs.⁸

The baseline study of the ASEAN Digital Integration Index (ADII)⁹, which serves as a benchmark for ASEAN digital integration efforts, indicates that among its six digital integration components: ASEAN is currently performing the poorest in Digital Skills and Talent. This Perspective offers some analysis of the underlying causes of this dismal performance and identifies three opportunities to enhance digital skills.

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ASEAN DIGITAL INTEGRATION: SKILL AND TALENT PILLAR REMAINS DISMAL

ASEAN has made efforts to monitor integration initiatives across the region through the ASEAN Digital Integration Index (ADII) which provides an evidence-based analysis of the state of implementation in priority areas of the ASEAN Digital Integration Framework (DIF) for member countries. The report categorises digital integration initiatives according to six pillars, namely (i) Digital Trade and Logistics; (ii) Data Protection and Cybersecurity; (iii) Digital Payments and Identities; (iv) Digital Skills and Talent; (v) Innovation and Entrepreneurship; and (vi) Institutional and Infrastructural Readiness. An overview of the ADII pillar scores for the region ranked by level of integration can be found below:

Table 1: ADII Pillar Scores

ADII Pillars	Score (out of 100)	Rank
Institutional and Infrastructural Readiness	62.85	1
Data Protection and Cybersecurity	62.81	2
Digital Payments and Identities	58.84	3
Digital Trade and Logistics	55.27	4
Innovation and Entrepreneurship	49.32	5
Digital Skills and Talent	48.21	6

Source: ADII

While all elements of digital integration are vital to regional integration efforts, the ADII report highlights the need to prioritise human capital development with regards to digital skills (and innovation), given that a digitally trained workforce would form the backbone for regional digitalisation. Moreover, knowledge-intensive sectors within the growing digitally-driven industry – such as ICT and e-commerce – not only require skilled labour to manage and continually innovate increasingly complex digital tools, but also entail ordinary consumers having the requisite digital skills to competently utilise and tap into digital platforms and technologies for their business needs and day-to-day activities.¹⁰

The urgency of developing a digital talent base is underscored by the fact that the 'Digital Skills and Talents' pillar fares the worst in the ADII assessment. Below is a breakdown of the indicators used to compute the scores of the Digital Skills and Talent pillar. Each indicator is scored against 20 with a total score of 100 for the entire pillar.



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Chart 1: Breakdown of indicators for Digital Skills and Talent



Source: ADII

The report noted that the indicator for Science, Technology, Engineering and Mathematics (STEM) graduates is low; its score of 5.82 is less than half of that for university graduates with business-relevant skillsets (12.67). However, the indicator for the overall population with digital skills fares best (13.11), with the report noting that the general population already exhibits adequate digital skills (e.g. basic computer skills and digital reading), likely self-taught through day-to-day activities and work requirements. Meanwhile, the proportion of employment in knowledge-intensive services is the lowest (4.48), and the level of multi-stakeholder collaboration in research and development is still unsatisfactory (12.13).

It is challenging to compare the performance of digital skills and talents highlighted by the ADII with other economies because of different methodological assessments. Be that as it may, the talent indicator in the World Digital Competitiveness Ranking 2022 by the International Institute for Management Development (IMD) can serve as a benchmark to compare ASEAN countries with other major economies in Asia and the Pacific (Table 2).¹¹



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Table 2 ASEAN Countries and Asia and the Pacific Economies' Talent Ranking 2022

Countries	Talent Ranking (63 global countries) **	
ASEAN Countries*		
Indonesia	51	
Malaysia	33	
Philippines	54	
Singapore	12	
Thailand	45	
Asia and the Pacific Economies		
China	40	
Hong Kong SAR	14	
India	52	
Japan	41	
Republic of Korea	38	
Taiwan (ROC)	19	

Source: The World Digital Competitiveness Ranking 2022 by the International Institute for Management Development (IMD)

*Brunei, Cambodia, Laos, Myanmar, and Vietnam were not assessed in the ranking

** The talent ranking was assessed by the indicators of talent readiness, investment and development, and appeal to the global community.

According to the ranking, four ASEAN countries—Malaysia, Thailand, Indonesia, and the Philippines—appear in the bottom 50 per cent (out of 63 countries assessed). Singapore is the only regional country that ends up in the top 20 per cent of the list. Leaving Singapore aside, Indonesia, Malaysia, the Philippines do not fare much worse than other developing economies such as China and India. Even Japan only fares marginally better than China. This indicates that ASEAN digital talents are still competitive enough to attract digital economy investments. Developing digital skills is a common focus area for various ASEAN digital and connectivity initiatives.¹² The ADII report makes two key recommendations for boosting the digital talent base: (1) Prioritisation of the development of digital capabilities and formal employment opportunities to enhance digitalisation. Its proposals include channelling educational resources towards STEM courses and ensuring inclusive access to digital upskilling initiatives, and (2) Collaboration with the private sector to identify, develop and grow relevant digital skillsets.



MANAGING DIGITAL TALENTS AND SKILLS

To manage this challenge, there are at least three opportunities that can be exploited by ASEAN.

Leveraging the Growth of Regional Technology Companies

ASEAN can explore leveraging the rise of regional technology companies to integrate the workforce into digital platforms. Not only are these companies able to facilitate digital access for users and service providers, they also have the resources to provide skills training, thus accommodating new entrants into the digital workforce.

The three largest digital companies in the region – GoTo, Grab and SEA – valued at over US\$10 billion,¹³ have initiated a variety of digital enhancement skills for different purposes but with the ultimate aim of increasing the digitally-ready citizenry and integrating more people into the digital workforce and ecosystem. Their tech-oriented workplace requires individuals to have intermediate or work-related digital skills in critically assessing data and developing original digital content. Such skills include digital marketing, digital graphic design, and the increasingly important skills of data management and business analysis.

Grab is making inroads in improving basic digital skills, with "improving digital inclusion and digital literacy in Southeast Asia" as one of its key goals to be achieved by 2025 under their "GrabforGood" social impact programme.¹⁴ Microsoft, in turn, embarked on a regional skills training and digital literacy partnership in 2019, providing Grab drivers and merchant-partners the opportunity to tap on a Microsoft Digital Literacy certification programme¹⁵ via GrabAcademy, Grab's online training platform. In 2021, over 780,000 partners benefitted from this scheme.¹⁶

Grab is also focused on improving digital literacy among the general public. In Singapore, it partnered with the Infocomm Media Development Authority (IMDA) to facilitate the running of more than a hundred digital clinics for senior citizens to foster greater digital literacy, with a targeted reach of 10,000 senior citizens within a year.¹⁷ In Indonesia, the company supported the government's digital literacy campaign by running two programmes for merchant-partners and the general public to foster both basic (through 'Siberkreasi') and intermediate digital skills (through the 'Digital Talent Scholarship'). The programmes have helped upskill more than 12,000 MSMEs to date.¹⁸

Similarly, GoTo places considerable focus on talent development programmes such as its GO-Academy talent incubator¹⁹ as well as its Generasi GIGIH programme²⁰ under its non-profit Yayasan Anak Bangsa Bisa. Through engineering bootcamps, tech competitions, and internship opportunities, GoTo focuses on harnessing young digital talent and integrating them into the larger Indonesian tech ecosystem. Not to be outdone, Grab and Microsoft partnered with selected regional universities to train students with in-demand technical skills through provision of Microsoft's industry-recognised certification programme as well as applied learning opportunities through Grab-facilitated industry-relevant projects, competitions and internship stints.²¹ Grab also runs other talent development programmes across the region such

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as the Grab Unicorn Apprentice programme in Vietnam, as well as the Grab Campus Apprenticeship programme in Indonesia.²²

The regional tech companies' roles in integrating people with digital platforms and scaling up initiatives for digital education have been quite promising. It demonstrates that the burden of providing formal and informal digital education can be shared by governments with private sector players who have the ability to mobilise at scale. However, policies must ensure the enabling conditions for the private sector to pursue workforce training sustainably. The recent mass layoffs of digital workers in the region have shown that the regional tech companies are still operating under capital spending, and thus global disruptions like rising interest rates amid high inflation easily necessitate them to restructure their workforce.²³

Adding Digital Workers to the ASEAN Mutual Recognition Arrangements

The key to successful digital integration is to ensure an adequate supply of digital workers to grow a digital ecosystem in the region. At this time when ASEAN governments are shaping their digitalisation roadmaps, ensuring the mobility of digital workers is critical for meeting the demand and distribution of digital talents across the region.

One of the key features of ASEAN economic integration is the free movement of skilled workers under Mutual Recognition Arrangements (MRAs), a set of policies that enable the qualifications of service suppliers recognised by authorities in their home country to be mutually recognised by other countries who are signatories to the MRA. ASEAN MRAs can arguably help to facilitate an increase in the number of skilled workers across ASEAN countries so that industries across the region can efficiently find the appropriate talents quickly.²⁴ Currently, the arrangements only recognise eight categories of highly skilled occupations such as engineers, nurses, architects, surveyors, dentists, medical practitioners, tourism professionals, and accountants but not digitally skilled talents. However, the implementation of ASEAN MRAs has been hampered by domestic rules and regulations on employment and licensing requirements.²⁵

ASEAN countries like Singapore and Thailand have begun to pursue their own labour immigration policies. For instance, Singapore's Overseas Network and Expertise Pass and Thailand's Long Term Resident (LTR) visa for highly skilled professionals are intended to pull global and high-income top talents into specialised industries. To an extent, it is the slow implementation of ASEAN MRAs that pushes these countries to pursue their labour policies rather wait upon the ASEAN-led mechanism.

To be sure, the full operationalisation of the ASEAN MRAs is politically challenging. Employers often raise their demanded educational credentials and validity, due to the fact that their confidence in the region's educational quality is low.²⁶ There are also considerable gaps among ASEAN countries in assuring standardised educational quality across the region. In addition, the ASEAN MRAs have faltered because the regional governments often raise new barriers in response to pressure from domestic lobbies to protect domestic employment and wages.

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But it should be noted that the rise of the digital economy has created uniform demand for digital workforce with similar skillsets. Given the rising demand in digital workforce across the region, adding digital workers might look politically feasible in the future. Having digital workforce on the ASEAN MRAs will also facilitate cross-pollination of knowledge, information, and inventions across the region. The challenge remains on the effective operationalisation of the arrangements.

Facilitating Intra-ASEAN Students and Young Workforces' Mobility Early

While it is true that ensuring the digital skills of the young workforce is vital for the region to fully tap into the digital economy, ensuring the mobility of young talents is relevant too. Giving them the opportunity to travel across the region for work-study practices, internships, apprenticeships, and traineeship will ensure that businesses and industries can absorb them quickly.

Currently, ASEAN countries' workforce demographics vary greatly. Singapore, Brunei, Thailand, and Vietnam are starting to face an aging population. By 2050, more than 25 per cent of the population in those countries will be over 60 years old.²⁷ Meanwhile, Cambodia, Laos, Myanmar and Indonesia are entering a period of demographic bonus where the number in productive age groups is currently greater than the number in non-productive age groups. Getting young members of the workforce to move easily across borders to fill labour gaps cannot but be beneficial.

ASEAN has an opportunity to revive its various educational programmes under its Socio-Cultural Community Blueprint which still lacks a strategic mandate to optimise greater mobility of people within the region. One such opportunity is through the ASEAN University Network (AUN) whose current scope is to provide a network of cooperation among universities and to harmonise higher-education outcomes in the region. The Network's role can be strengthened and expanded by utilising ASEAN Dialogue Partners' Assistance, the private sector, and ASEAN countries' contribution to facilitate student internship and traineeship in emerging digital industries. Other initiatives under the ASEAN umbrella such as the ASEAN Foundation can serve as a platform for industries and young talents to explore digital industries and operations.

Exposing young talents to opportunities to work regionally at an early stage is key to build a stronger regional economy. No single ASEAN economy can efficiently rely on its domestic workforce to tap the digital economy maximally. There are double benefits to be gained if ASEAN can facilitate the mobility of the young workforce early in their career. First, ASEAN has an opportunity to harmonise human capital standards needed by the regional digital economy. Young members of the workforce should be exposed to regional job market requirements that can help them make a career jump in the future. Second, ASEAN countries can ensure their digital talent gaps are met and their young utilised efficiently across national borders.



COVID-19 and the rise of the digital economy have provided an excellent opportunity for ASEAN to accelerate its regional integration push. The ecosystem of the digital economy can be sustained in the long run if the demand for digital skills and talent can be met. There are three key opportunities for ASEAN. First, ASEAN can collaborate with regional technology companies on digital education efforts to scale up the integration of the digital workforce regionally. Second, ASEAN must consider adding digital workers to the ASEAN MRAs to facilitate the mobility of professionals in the region and to make sure that its policies are operationalised. Third, ASEAN needs to facilitate intra-ASEAN student mobility and digital skill advancement early through educational platforms such as the AUN and other student mobility programmes.

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