

ASEAN Digital Community 2045

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Key Messages:

- In the face of the rapid evolution of digital transformations, ASEAN must strategise to formulate and realise a comprehensive enduring vision. This can be achieved by harnessing the swift progressions in digital technology across the three foundational pillars of the ASEAN Community: security and politics, economics, and socio-culture.
- To seamlessly transition into the digital age, ASEAN should envisage the establishment of an ASEAN Digital Community (ADC) by 2045. This visionary concept of ADC 2045 can serve as a guiding light for ASEAN's journey towards a new era, characterised by the pivotal role of digital technology in development. This vision ought to encompass four elemental pillars: data governance, value addition, digital connectivity, and digital inclusivity.

Digital transformation has profoundly reshaped not only the way we work but also the way we live. It has shifted the focus of goods and services trade, emphasising not only what is produced and traded, but also how it is traded, customised, and delivered. The rapid digital transformation within the ASEAN region has ushered in an array of risks and challenges. These challenges encompass a spectrum of concerns, ranging from the safeguarding of data privacy and fortification against cyber threats to grappling with intensified competition and addressing the ever-widening digital divide. To fully embrace the opportunities presented by the digital age, ASEAN must lay the foundation for an ASEAN Digital Community (ADC) 2045, that can serve as a vision for ASEAN in embracing a new era. This visionary pursuit must be anchored in four pivotal cornerstones: robust data governance, the infusion of value-added principles, the establishment of seamless digital connectivity, and the propagation of digital inclusivity.

1. Current State of ASEAN's Digital Landscape

Digital transformation has changed not only the way we work but also the way we live. It has shifted the focus of goods and services trade, emphasising not only what is produced and traded, but also how it is traded, customised, and delivered. By 2030, the Association of Southeast Asian Nations (ASEAN) is estimated to contribute US\$1 trillion, or about 10%, to global digital trade. Figure 1 illustrates digital trade was recorded at US\$5.2 trillion in 2021, with an estimated increase to US\$5.57trillion by 2022, and is projected to reach US\$10 trillion by 2030. ASEAN is expected to grow to US\$360 billion by 2025 (Statista, 2022). The primary driving force behind the significant surge in digital trade is the youthful demographic within ASEAN. This is evident through a remarkable rise in internet subscribers over the past 9 years, surging from 24.6 individuals per 100 in 2012 to an impressive 79.5 individuals per 100 in 2021 (Figure 2). The development of ASEAN's digital trade is also supported by rapid growth in digital payments, including mobile wallets, virtual credit cards, and wire transfers. The region's number of internet subscribers has significantly increased, making it the fastest-growing mobile wallet market globally. Digital payments have also facilitated trade, with the total transaction value projected to reach US\$226.6 billion this year.

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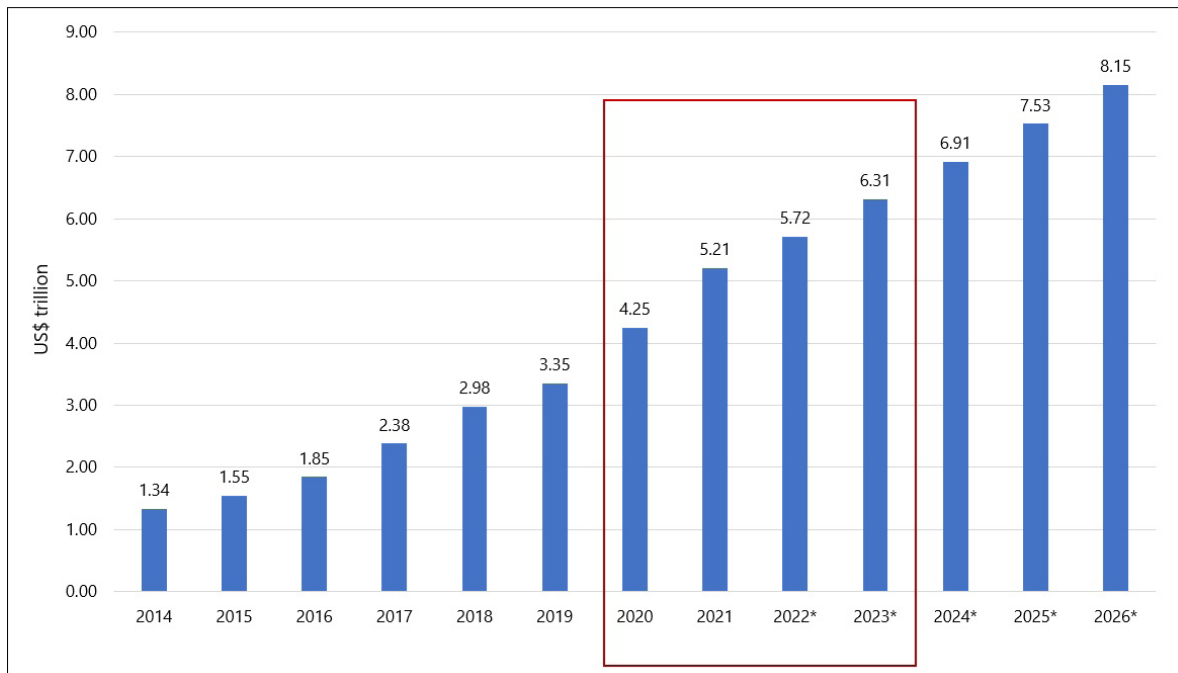
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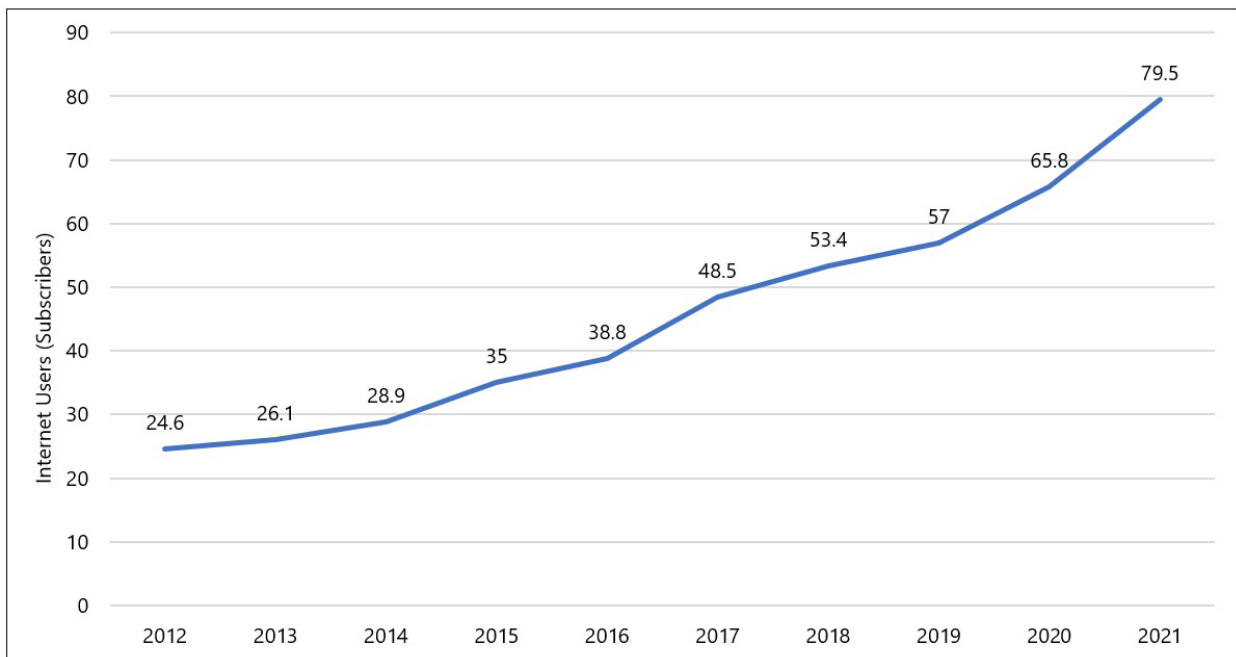
Figure 1: Global Retail E-Commerce Sales, 2014–2026*



Note: * = estimation.

Source: Statista (2022), *Retail E-Commerce Sales Worldwide from 2014 to 2025*. Statista. Available at: <https://www.statista.com/statistics/379046/worldwide-retail-e-commerce-sales/> (accessed 26 May 2023).

Figure 2: Access to Internet Services in ASEAN, 2012–2021



Notes:

1. The figures for the number of internet users are presented per 100 individuals.

2. The ASEAN figure for 2020–2021 is an estimation due to the unavailability of data for certain ASEAN Member States.

3. The ASEAN figure for 2021 is based on the latest available data for some ASEAN Member States. For Brunei Darussalam and Myanmar, calculations were based on internet service provider subscription numbers. Consequently, the potential exists for an individual to be counted multiple times if they have subscribed to multiple providers.

Source: Statista (2022), *Retail E-Commerce Sales Worldwide from 2014 to 2025*. Statista. Available at: <https://www.statista.com/statistics/379046/worldwide-retail-e-commerce-sales/> (accessed 26 May 2023).

2. Key Challenges on the Path to ASEAN Digital Community 2045

The rapid digital transformation in ASEAN has brought forth various risks and challenges. These challenges encompass data privacy, cyber security, competition, and the digital divide (Ing, Grossman, and Christian, 2022). These risks and challenges are most prominently evident in the realm of economic development, pursued both individually and collectively by ASEAN. It is foreseeable that ASEAN might encounter analogous risks and challenges as the group extends its efforts into the political-security and socio-cultural spheres.

The swift accumulation of digital data and the establishment of a global information infrastructure within the digital economy give rise to concerns regarding the privacy of data and the protection of personal information (Kolbanev et al., 2020). The widespread proliferation of personal computers and the accessibility of international networks have led to an increase in security risks and breaches, emphasising the need for robust cyber security measures (Oppitz and Tomsu, 2018). The convergence of competition law with the safeguarding of privacy in the realm of big data and social media presents a significant challenge for competition authorities worldwide. Furthermore, the digital divide, characterised by inequalities in access to and utilisation of digital technologies, stands as a significant barrier to reducing disparities between regions, nations, and socio-economic strata.

The key challenges in developing ASEAN's digitally integrated community can be distilled into four distinct categories: connectivity, productivity, data, and the digital divide.

First, ASEAN's digital economy faces regulatory gaps and inconsistencies in areas such as data protection, e-commerce, privacy laws, and cybersecurity. Policies in these areas were not designed to keep pace with the rapid advancements in the digital landscape, potentially impeding the progress of ASEAN's digital economy. The widespread sharing of private information with service providers raises concerns about data usage and potential misuse. ASEAN's data protection regulations display disparities in development, with some countries lagging in the implementation of cybersecurity measures. Technological advancements have led to increased market concentration, reduced competition, and obstacles for micro, small, and medium-sized enterprises (MSMEs) and start-ups in achieving competitiveness.

Second, challenges arise in ASEAN's efforts to develop its digital economy due to productivity levels and value-added sectors. The enhancement of productivity is identified as one of the significant benefits of digital integration in the economy (World Economic Forum, 2021). Research indicates that digitalisation aids MSME owners in improving their businesses. Nevertheless, the lacklustre implementation of digitalisation policies in ASEAN Member States has hindered the growth of value-added sectors. Despite ASEAN's increasing growth in trade, finance, and investment sectors through digitalisation, there remains a pressing need to extend the scope of digital transformation to encompass other sectors.

Third, digital transformation in ASEAN encounters challenges stemming from the absence of both digital and physical infrastructure, along with connectivity issues characterised by significant disparities in internet speed, usage, and technology production amongst ASEAN Member States. A robust digital ecosystem is pivotal for a successful digital transformation and the overall economic well-being of the region. Challenges are also evident in payment systems, limited financial knowledge, and cybersecurity concerns, all of which impede the seamless integration of digital payments. Moreover, logistical hurdles such as infrastructure gaps and the lack of standardised practices hamper the growth of connectivity.

Lastly, the digital gap remains a pressing concern in ASEAN's digital transformation, resulting in uneven digital development. This 'digital divide' is evident across workers, firms, and organisations, accentuating the gap between skilled and unskilled individuals, which in turn affects employment, income, and social outcomes. The mismatch between the demand for advanced digital skills and the proficiency of the ASEAN workforce leads to economic inefficiencies and hampers innovation. Bridging these digital gaps is crucial for addressing regional issues and fostering innovation.

3. Way Forward: ASEAN Digital Community 2045

As digital transformations continue to evolve at an exponential pace, ASEAN needs to establish and achieve a long-term vision by leveraging the rapid advancements in digital technology across the three pillars of the ASEAN Community. The ASEAN Digital Integration Index (ADII) Report in 2021 indicates that while ASEAN is making efforts toward digital integration, digital transformation goes beyond trade alone. There is ample room for improvement in promoting innovation, entrepreneurship, and capacity building.

Furthermore, digital transformation will significantly impact other crucial areas such as security, politics, and socio-cultural aspects, which ASEAN should proactively embrace. The blueprints for the ASEAN Economic Community (AEC) in 2015 and AEC 2025 have marked substantial progress in advancing regional economic development. To wholeheartedly embrace the digital era, ASEAN must infuse the essence of the AEC into regional economic integration and pave the way for the establishment of an ASEAN Digital Community (ADC) by 2045. Prioritising the development of a digital ecosystem within the AEC is crucial for advancing digitalisation across all pillars of ASEAN. The ADC 2045 can serve as a visionary framework for ASEAN as it embraces a new economic era where digital technology plays a central role in development.

The ADC 2045 should encompass four fundamental elements:

1. Data Governance

ASEAN must undergo regulatory transformation to modernise its outdated policies and frameworks to keep pace with the rapidly evolving digital era. Despite progress in regulating the digital economy, there is a need for further efforts to effectively regulate the ASEAN digital ecosystem. Shaping data protection regulations, prioritising digital governance, and establishing unified and standardised regulations across all ASEAN Member States are crucial steps to increase legal clarity, promote interoperability, foster innovation, and encourage investment.

2. Value added

The optimal use of digital technology will revolutionise business models and support development across all sectors, which eventually increases value added. ASEAN ought to maximise the integration of digital transformation across all sectors, thereby enhancing the quality of products and services across the board.

3. Digital connectivity

Establishing robust digital and physical infrastructure is essential for unlocking ASEAN's economic potential. This includes ensuring connectivity, and promoting digitalisation, innovation, and economic growth. Physical infrastructure includes reliable roads, ports, railways, airports, power plants, and logistics hubs, while digital infrastructure includes broadband access, hardware, software, data centres, and modern networks.

4. Digital Inclusivity

As the digital era reshapes societies, it is crucial to narrow the digital divide, amplifying the participation of MSMEs, and mitigating regional disparities. Within ASEAN, digital technology has the potential to enhance productivity, stimulate trade, and generate employment opportunities.

Central to this endeavour is addressing the skills deficit, particularly amongst MSMEs, to facilitate convergence and propel towards a future of equitable growth and an inclusive digital economy.

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