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The Two-Trillion-Dollar Question: Is Southeast Asia Ready to Realize DEFA's Promise?

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After more than two years of negotiations spanning fourteen rounds of deliberations across ASEAN capitals, the region's Senior Economic Officials finally resolved all outstanding issues of

the ASEAN Digital Economy Framework Agreement (DEFA) in Manila on May 27–29, 2026.¹ The DEFA initiative was first launched during Indonesia 2023 Chairmanship, was carried forward through intensive negotiations and consensus-building efforts during Laos PDR and Malaysia chairmanship in 2024 and 2025 before concluded in the Philippines this year. It is expected to be signed at the 49th ASEAN Summit in November 2026, marks one of the most consequential milestones in ASEAN economic integration in recent memory. This, again, reflects a collective ASEAN effort to advance regional digital integration.

A Historic First

Unlike digital provisions embedded as chapters within broader trade deals, as is common in bilateral free trade agreements, DEFA addresses the full architecture of digital economic activity as a standalone framework. Its scope covers digital trade and cross-border e-commerce, data governance and privacy, digital identity and electronic payments, online safety and cybersecurity cooperation, emerging technologies including artificial intelligence, digital talent mobility, and competition policy.² It builds on existing ASEAN initiatives such as the ASEAN Single Window, cross-border payment system, data sharing, and consumer protection mechanisms, ASEAN Unique Business Identification Number, but elevates them into a coherent, legally binding whole.

Studies suggest that its successful implementation could help double ASEAN's digital economy from its current trajectory of roughly 1 trillion dollars to as much as 2 trillion dollars by 2030.³ This optimism is grounded in the region's rapidly expanding digital trade, which has grown faster than overall trade and reflects ASEAN's increasing integration into data-driven services, digitally delivered products, and cross-border e-commerce.

Yet regulatory heterogeneity, the patchwork of incompatible digital regulations across ASEAN member states, has imposed an estimated 15–20 billion dollars in annual compliance costs on businesses operating across the region.⁴ For large multinational corporations, these costs

¹ ASEAN Secretariat, "Statement of the Chairperson of the ASEAN Senior Economic Officials (SEOM) on the Conclusion of ASEAN DEFA Negotiations," May 29, 2026. <https://asean.org/statement-of-the-chairperson-of-the-asean-senior-economic-officials-seom-on-the-conclusion-of-asean-defa-negotiations/>

² Manila Times, "ASEAN Officials Conclude Digital Pact Negotiations," June 1, 2026. <https://www.manilatimes.net/2026/06/01/business/top-business/asean-officials-conclude-digital-pact-negotiations/2355187>

³ ASEAN Secretariat, "Statement of the Chairperson of the ASEAN Senior Economic Officials (SEOM) on the Conclusion of ASEAN DEFA Negotiations," May 29, 2026. <https://asean.org/statement-of-the-chairperson-of-the-asean-senior-economic-officials-seom-on-the-conclusion-of-asean-defa-negotiations/>

⁴ Information Technology Industry Council (ITI). 2025. The Digital Economy Framework Agreement: ASEAN's Anchor in a Turbulent Digital Economy. TechWonk Blog, July 17, 2025. Information Technology Industry Council (ITI)

represent a manageable friction. For MSMEs, however, they constitute a significant barrier to regional market participation. Depending on the level of ambition and implementation, OECD projects DEFA could increase intra-ASEAN trade by between 13 and 20 percent and boost overall trade by 3 to 4 percent, underscoring the economic cost of regulatory divergence as well as the potential gains from harmonization.⁵

Booming Data Centre Investment Amid Geopolitical Constraints

DEFA lands in a digital economy that is, by most measures, booming. The six largest ASEAN economies are rapidly positioning themselves as the next global hubs for digital infrastructure, with power demand for data centres projected to quadruple from 2.6 GW to 10.7 GW between 2025 and 2035.⁶ Investment in communication, data processing, and hosting services has grown nearly fivefold in the past decade, from 777 million dollars in 2015 to 4.4 billion dollars annually by 2024. In 2023 alone, 71 percent of all venture capital deals in ASEAN were digital economy-related or eleven percentage points higher than the global average.⁷

Artificial intelligence is the most consequential driver of this boom. Cloud hyperscale's and AI infrastructure providers are racing to establish capacity across the region. Malaysia has emerged as a data centre powerhouse in the Asia-Pacific region, driven by a global surge in demand and an established data centre sector.⁸ Between 2021 and 2025, Malaysia approved data centre investment from AWS, Microsoft, and Google amounted to 35,58 billion dollars (RM144.4 billion).⁹ Thailand's Board of Investment reported a 67 percent surge in investment applications in 2025, largely from data centre and cloud service projects worth approximately 24 billion dollars.¹⁰ In the first quarter of 2026, Viet Nam announced a 2.1 billion dollars AI data centre

⁵ OECD (2026). ASEAN Digital Trade Review. https://www.oecd.org/en/publications/digital-trade-review-of-the-association-of-southeast-asian-nations_abd6f44a-en.html

⁶ ASEAN Exchanges, "AI & Compute Infrastructure: Building ASEAN's Digital Backbone." <https://www.aseanexchanges.org/content/ai-compute-infrastructure-building-aseans-digital-backbone/>

⁷ World Economic Forum, "Why ASEAN's New Digital Economy Framework Agreement Is a Game-Changer." <https://www.weforum.org/stories/2025/05/asean-digital-economy-framework-agreement-a-gamechanger/>

⁸ Malaysia Investment Development Authority, "How Malaysia is setting itself up as an AI hub," 9 December 2024. <https://www.mida.gov.my/mida-news/how-malaysia-is-setting-itself-up-as-an-ai-hub/>

⁹ Bank Negara Malaysia, "From Bytes to Bucks: The Economics of Data Centres in Malaysia," Quarterly Bulletin, Third Quarter 2025. https://www.bnm.gov.my/documents/20124/19910400/qb25q3_en_box1.pdf

¹⁰ The Nation, "Data centres drive BOI surge as 2025 investment value hits Bt1.876trn," 26 January 2026. <https://www.nationthailand.com/business/investment/40061707>

project in Ho Chi Minh City.¹¹ Indonesia has attracted similar-scale investments, though concentrated around Greater Jakarta due to uneven power grid reliability.¹²

Yet this ecosystem is maturing in an increasingly fragile geopolitical environment. The US-China tech rivalry has turned digital infrastructure, from semiconductor supply chains to cloud platforms and AI training data, into a contested domain. Data localisation requirements are proliferating as governments invoke digital sovereignty, while stricter regulatory frameworks are reshaping where companies can build, what data they can move, and which technology stacks they can rely on. ASEAN's ability to position itself as a stable, rules-based digital jurisdiction, which DEFA is designed to enable, is therefore not merely an economic aspiration but a strategic one.

This is particularly evident in submarine cable systems. ASEAN's emphasis on cooperation, resilience, and interoperability can help preserve strategic autonomy while ensuring the reliability of the infrastructure underpinning regional digital integration. By strengthening cooperation on cable protection, repair coordination, and information sharing, ASEAN can reduce vulnerabilities to geopolitical tensions and infrastructure disruptions while maintaining open and trusted connectivity.

Ultimately, ASEAN's digital economy opportunity will be defined not only by the scale of investment flowing into the region, but also by its ability to align governance, regulation, and talent development. Without these foundations, infrastructure expansion alone may deepen dependence on external technologies rather than strengthen regional digital sovereignty and long-term competitiveness.

Implementation as Strategic Imperative: Turning ASEAN's Digital Ambitions into Reality

As digital trade, cross-border platforms, digital payments, and data flows become more integrated across ASEAN, DEFA could help create new opportunities for Southeast Asian entrepreneurs, creators, freelancers, and MSMEs to access regional markets and generate higher-value digital employment. Yet governments across Southeast Asia have often demonstrated the ability to articulate ambitious digital strategies, without consistently delivering implementation.

¹¹ Vietnam Investment Review, "AIC to Build US\$2.1bn AI Data Centre in Ho Chi Minh City," 12 March 2026. <https://vir.com.vn/aic-to-build-21bn-ai-data-centre-in-ho-chi-minh-city-150096.html>

¹² GlobalNewsWire, "Southeast Asia Data Center Landscape Report 2025–2030," July 1, 2025. <https://www.globenewswire.com/news-release/2025/07/01/3108427/0/en/Southeast-Asia-Data-Center-Landscape-Report-2025-2030>

The true test of DEFA is not finished after signing but the capacity of ASEAN member states to translate commitments into tangible reforms.

Compounding the implementation challenge is a governance deficit as the region faces rising levels of online fraud, phishing attacks, account takeovers, and cross-border financial scams, while fragmented payment systems and differing regulatory requirements complicate seamless regional transactions. South East Asia handled over 2,400 cross-border online fraud cases between 2020 and 2023 alone.¹³ Indonesia's Financial Services Authority (*OJK*) recorded losses of approximately 367 million dollars from digital scams between late 2024 and late 2025.¹⁴ 73 percent of Malaysian adults reported being targeted by online scam, with a record of 47,854 online fraud cases in 2025, reached a staggering \$700 million dollars.¹⁵ The Philippines also experienced a higher incidence of digital fraud exposure than the global average in 2025,¹⁶ with 70 percent of Filipinos encountering fraud attempts.¹⁷ Indonesian police recently arrested more than 300 foreign nationals in a single operation targeting an online gambling network in Jakarta.¹⁸ Meanwhile, 45 percent of Indonesian adults report lifetime victimisation from digital scams, with 68 percent of victims losing money.¹⁹ An estimated 120,000 people in Myanmar are being forced to work in online scam operations, along with another 100,000 in Cambodia.²⁰ These figures are not merely social problems; they are signals to foreign investors and digital businesses about the reliability of the region's digital governance environment.

The implementation challenge extends beyond public-sector governance. On many indicators, the region's digital transformation and readiness continue to advance rapidly. Unfortunately,

¹³ Modern Diplomacy, "God, Greed, and Governance: Inside ASEAN's Battle with Illicit Gambling and Transnational Crime," July 29, 2025. <https://moderndiplomacy.eu/2025/07/29/god-greed-and-governance-inside-aseans-battle-with-illicit-gambling-and-transnational-crime/>

¹⁴ ANTARA News, "Indonesia Calls for Joint Action Against Online Scams, Data Theft," October 15, 2025. <https://en.antaranews.com/amp/news/386269/indonesia-calls-for-joint-action-against-online-scams-data-theft>.

¹⁵ United Nations Office on Drugs and Crime, "Emerging Threats at the Intersection of Financial Crime and Technology in Southeast Asia," December 2025. <https://www.unodc.org/roseap/en/malaysia/2025/12/financial-crime/story.html>

¹⁶ BusinessWorld, "More Than 70% Filipinos Hit by Fraud Attempts in 2025," 20 May 2026. <https://www.bworldonline.com/the-nation/2026/05/20/751134/more-than-70-filipinos-hit-by-fraud-attempts-in-2025/>

¹⁷ The Philippine Star, "Online Scam Risk in Philippines Above Global Average," 24 May 2026. <https://www.philstar.com/business/2026/05/24/2530021/online-scam-risk-philippines-above-global-average>

¹⁸ NBC News, "Indonesia Police Arrest 321 Foreigners in Online Gambling Crackdown," May 2026. <https://www.nbcnews.com/world/indonesia/indonesia-online-gambling-crackdown-rcna344409>

¹⁹ GSMA, "Indonesia Must Accelerate Targeted Digital Investment," December 10, 2025. <https://www.gsma.com/newsroom/all-documents/indonesia-must-accelerate-targeted-digital-investment-to-move-into-apacs-leading-tier-of-digital-nations-says-gsma/>.

²⁰ Office of the United Nations High Commissioner for Human Rights, Online Scam Operations and Trafficking into Forced Criminality in Southeast Asia: Recommendations for a Human Rights Response, August 2023. https://bangkok.ohchr.org/sites/default/files/wp_files/2023/08/ONLINE-SCAM-OPERATIONS-2582023.pdf

progress in digital governance has somehow still not kept with the pace of technological adoption. The governance frameworks underpinning this transformation do not necessarily advance at the same pace,²¹ with many initiatives relying on soft-law principles and voluntary compliance mechanisms that are not always matched by effective enforcement. The next phase of Southeast Asia's digital transformation will therefore depend not only on expanding connectivity and digital skills, but also on strengthening its governance supporting transparency, accountability, and trust across the digital economy.

Based on the recent ASEAN Barometer Survey findings, businesses' expectation for DEFA are high.²² While digital adoption among ASEAN businesses remains relatively modest, it continues to be constrained by high implementation costs, limited technical know-how, uncertain returns on investment, and gaps in digital and IT literacy. The survey also found that nearly 59 percent of SMEs respondents view the agreement as an important gateway to regional markets, while almost half of surveyed firms identified regulatory harmonization, stronger data protection and fraud prevention, and simpler cross-border taxation and customs procedures as key priorities. For many businesses, DEFA is not merely a trade agreement but a practical mechanism for reducing compliance costs, improving regulatory certainty, and lowering barriers to participating in ASEAN's rapidly expanding digital economy.

Building DEFA from the Ground Up: Lessons from Regional Payment Connectivity

The region possesses a success story that deserves more prominent attention in cross-border QR payments. The foundation for regional payment connectivity was laid in 2019 when ASEAN central banks adopted the ASEAN Payments Policy Framework for Cross-Border Real-Time Retail Payments, promoting bilateral interoperability arrangements across the region. ASEAN's payment integration has evolved through a gradual pathway in which successful bilateral linkages serve as building blocks for broader multilateral cooperation, consistent with the region's flexible and consensus-based approach to economic integration. Momentum accelerated following the G20 Roadmap for Enhancing Cross-Border Payments launched by the Financial Stability Board (FSB) in 2020, which elevated the efficiency of cross-border payments as a global policy priority. Building on these developments, Indonesia, Malaysia, the Philippines, Singapore, and Thailand signed the Regional Payment Connectivity (RPC) initiative in 2022, establishing one of the most ambitious efforts to integrate retail payment systems in the emerging economies.

²¹ Kementerian Komunikasi dan Digital Republik Indonesia (Komdigi). Indeks Masyarakat Digital Indonesia (IMDI) 2025. Jakarta: Badan Pengembangan Sumber Daya Manusia Komunikasi dan Digital, 2025.

²² ASEAN Business Advisory Council (ASEAN-BAC), CSIS Indonesia, and JETRO. ASEAN Business Barometer 2026.

Encouragingly, the expansion of cross-border QR payments across ASEAN has progressed relatively smoothly under the leadership of regional central banks and within the framework of ASEAN financial cooperation. As interoperability continues to expand, a region-wide QR payment network covering all ASEAN member states may become a reality in the foreseeable future. Indonesia's QR cross-border connectivity with Malaysia, Singapore, Thailand, and Japan is operational, with a China-Indonesia QR payment linkage launched in May 2026 connecting QRIS to over 1.4 billion Chinese consumers through Alipay+ and UnionPay.²³ Cross-border QR transactions across Malaysia, Singapore, and Thailand reached approximately 105 million dollars in cumulative value by mid-2025.²⁴

The success of payment connectivity can be an important lesson as ASEAN moves toward implementing DEFA. While an ASEAN-wide multilateral framework is widely viewed as the preferred end goal, achieving it requires substantial alignment of technical standards, business rules, and operational processes. We could learn that ASEAN's governance challenge is not an inability to cooperate, but rather the absence of equally robust institutions and implementation mechanisms in other areas of the digital economy. Therefore, clear regulatory leadership and sustained institutional cooperation are essential for translating regional commitments into tangible outcomes.

Fortunately, ASEAN roadmap for a fully integrated QR payment ecosystem by 2030 aligns closely with DEFA's implementation timeline, suggesting that payment connectivity could become one of the earliest and most tangible demonstrations of the agreement's value. This progress demonstrates what DEFA's electronic payments pillar is intended to institutionalize at scale, namely interoperable and inclusive digital infrastructure that reduces barriers for MSMEs, promotes local currency settlement, and strengthens regional economic sovereignty.

From Negotiation to Transformation

The conclusion of DEFA negotiations in Manila is a genuine milestone. But milestones are only meaningful when they mark progress toward a destination, not rest stops on the way to one. The two-trillion-dollar promise is real, but it is conditional. It is conditional on ratification, on

²³ AFP, "Indonesia–China Launch Cross-Border Payments Connectivity, Connecting Millions of Merchants via Ant International's Alipay+," May 7, 2026. <https://www.afp.com/en/infos/indonesia-china-launch-cross-border-payments-connectivity-connecting-millions-merchants-ant>

²⁴ ASEAN Briefing, "Indonesia's QRIS Expansion Across APEC and What It Means for Businesses," March 23, 2026. <https://www.aseanbriefing.com/news/indonesias-qr-is-expansion-across-apec-and-what-it-means-for-businesses/>.

harmonized implementation, on consistent enforcement, and above all on member states treating DEFA not as a diplomatic achievement to be announced, but as a governance commitment to be fulfilled. Ultimately, the real question is not whether ASEAN can reach a two-trillion-dollar digital economy, but whether member states can undertake the reforms necessary to make that outcome possible. The negotiations are complete, but the real work of implementation is only just beginning.

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