

The Changing Landscape and Role of ASEAN Amidst Technological and Digital Competition in the Post-Pandemic World¹

This article examines the changing role and landscape of the Association of Southeast Asian Nations (ASEAN) in the context of technological and digital competition between China and the United States in the post-COVID-19 era. The intensifying competition between these two major powers not only creates a framework of geopolitical tension but also significantly impacts ASEAN, which has become a crucial battleground. This analysis is divided into four main points, followed by a section on policy recommendations.

Firstly, the "The State of Southeast Asia 2024" survey provides insightful data on the comparative popularity and confidence that Southeast Asian countries have towards the United States and China. This comparison covers various aspects such as economy, politics, and security. The public opinion captured in this survey is valuable for analyzing the transition to the near future, indicating the direction, views, and beliefs of the citizens in these states.

Secondly, ASEAN holds a strategically important position in this global technological competition due to its location between the two technological superpowers, China and the United States. The region has a unique opportunity to access both the Pacific and Indian Oceans, which are crucial gateways for trade and technology transfer between the East and the West.

Thirdly, the technological competition between the United States and China significantly impacts ASEAN's digital and technological landscape. Addressing these challenges requires foresight and a systematic regional approach. ASEAN countries must carefully plan their operations, particularly concerning cybersecurity, data sovereignty, and the diversification of supply chains.

Fourthly, digital transformation plays a crucial role in the region's economic recovery post-COVID-19 and has driven economic growth. ASEAN's future in this competitive global

¹ This analysis also incorporates insights from Lieutenant Commander Bodin Suntud (Ph.D.), Senior Defense Technology Analyst at the Defense Technology Institute, and Mr. Wongsapat Amnuayphan, Chief Financial Officer at K.R. Power Transmission Specialist Co., Ltd. Additionally, perspectives gathered from the synthesis seminar of the Singapore group, part of the "Thailand and the ASEAN Community in the Global Political Economy" course, College of Politics and Governance, King Prajadhipok's Institute, Class 12 (TAG 12), are included.

technological landscape is inextricably linked to the rivalry between the United States and China. Leveraging opportunities and adopting a coordinated regional approach will be key to navigating this complex landscape effectively.

This article provides five policy recommendations: ASEAN governments and organizations should promote digital literacy, enhance regional cooperation, encourage innovation and modern entrepreneurship, prioritize policies that promote inclusive digital growth, and strategically engage with both the United States and China. By leveraging economic competition to attract investment and cooperation, ASEAN can avoid compromising the security of member states or provoking either superpower.

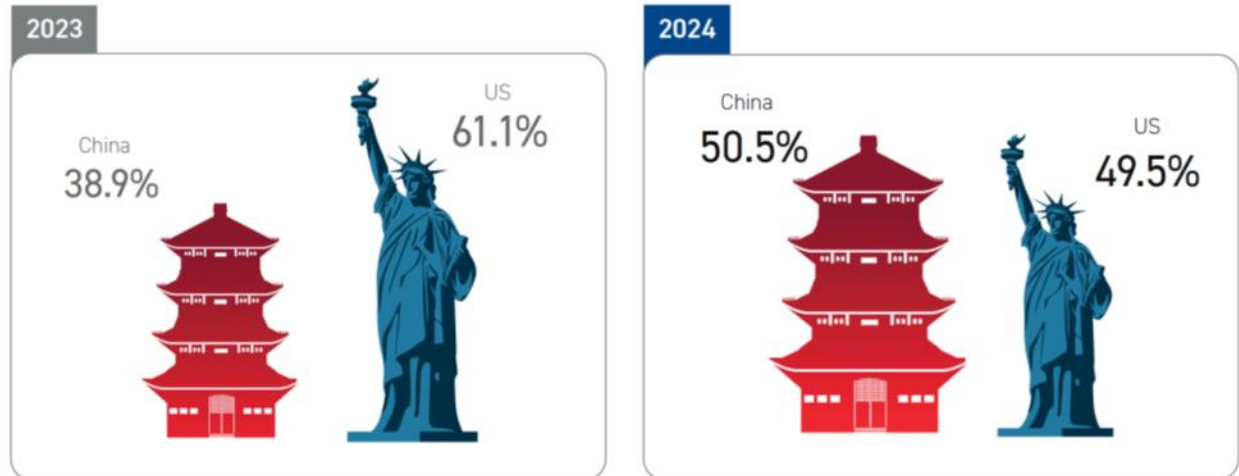
The strategic role and landscape of ASEAN in the context of post-COVID-19 technological and digital competition are crucial and timely for the future of member states and their populations. Over the past year, the global technological landscape has been heavily influenced by the intensifying competition between the United States and China. This rivalry not only creates a framework of geopolitical tension between the two superpowers but also significantly impacts Southeast Asia, which has become a key battleground in this competition. The analysis of this topic can be divided into four main points, including policy recommendations, as follows:

1. Comparing Public Preferences in ASEAN Member States between the United States and China²

The "The State of Southeast Asia 2024" survey highlights the complexity of international politics and the significance of economic and security support by comparing the popularity between the United States and China in the Southeast Asian region. A majority, over 45.5%, support prioritizing the enhancement of ASEAN's resilience and unity to counter the pressures from the competition between the United States and China. Following this, 29.1% of respondents favor ASEAN's traditional stance of non-alignment between the two superpowers. The smallest portion, 8.0%, believes ASEAN should choose a side, viewing neutrality as impractical.

² Institute of Southeast Asian Studies. (2024). The State of Southeast Asia: 2024 Survey Report. Retrieved from <https://www.iseas.edu.sg/wp-content/uploads/2024/03/The-State-of-SEA-2024.pdf>

However, the follow-up question of choosing between China and the United States reveals a notable increase in China's popularity, rising from 38.9% in 2023 to 50.5% in 2024, surpassing the United States. This trend is illustrated in the diagram below.



Q32 If ASEAN were forced to align itself with one of the strategic rivals, which should it choose?

Country	China		The United States	
	2023	2024	2023	2024
ASEAN	38.9%	50.5%	61.1%	49.5%
BN	55.0%	70.1%	45.0%	29.9%
KH	26.9%	45.0%	73.1%	55.0%
ID	53.7%	73.2%	46.3%	26.8%
LA	41.1%	70.6%	58.9%	29.4%
MY	54.8%	75.1%	45.2%	24.9%
MM	32.2%	42.3%	67.8%	57.7%
PH	21.2%	16.7%	78.8%	83.3%
SG	38.9%	38.5%	61.1%	61.5%
TH	43.1%	52.2%	56.9%	47.8%
VN	22.1%	21.0%	77.9%	79.0%

Summary of China's Position

1. Belt and Road Initiative (BRI): China's popularity has increased due to the BRI, which focuses on developing infrastructure in Southeast Asia. Countries benefit from investments in roads, railways, and ports, enhancing trade and investment connectivity between China and the region. The countries showing the highest favorability towards China include Malaysia (75.1%), Indonesia (73.2%), Laos (70.6%), Brunei (70.1%), and Thailand (52.2%).

2. Trade and Economy: China is a major trading partner for many ASEAN countries. The rise in investment and trade with China has increased economic confidence and reliance on China. Countries like Indonesia and Malaysia benefit from direct Chinese investments, including the development of manufacturing sectors and infrastructure supported by China.

3. Political and Security Support: China has built strong relationships with governments through political and security support, fostering long-term confidence.

Summary of the United States' Position

1. Security Relations: The United States remains highly favored in countries concerned with security, such as the Philippines (83.3%), Vietnam (79.0%), Singapore (61.5%), Myanmar (57.7%), and Cambodia (55.0%). The Philippines' confidence in the U.S. has increased due to military support and cooperation in defending against Chinese aggression in the South China Sea.

2. Economic and Trade Support: The U.S. plays a significant role in supporting ASEAN economies through trade, investment, and technical and financial assistance. Despite a decline in popularity, the U.S. maintains a crucial role in the region.

3. Political Challenges and International Relations: The decline in U.S. popularity may be partly due to domestic policies and political changes, affecting ASEAN countries' confidence.

It is evident that China has used the BRI to strengthen economic relations with countries in the region, while the United States continues to play a crucial role in providing security and trade support to ASEAN countries. The shifts in the popularity of these two countries may influence policy decisions and international relations in the region in the future. These trends reflect ASEAN's efforts to develop flexible strategies to respond to rapidly changing challenges.

Strengthening resilience and unity, maintaining strategic balance, and forming new alliances are ASEAN's approaches to preparing for an uncertain future. These responses not only address current situations but also lay the foundation for sustainable and stable development in the future.

2. ASEAN's Strategic Location in Technological Competition



Southeast Asia finds itself in an ambiguous situation due to the confrontation between China and the United States. The region appears to be striving to maintain a neutral stance by seeking to integrate China into the regional structure through constructive engagement. At the same time, Southeast Asian states feel that their security is dependent on the U.S. presence in the region. This delicate balance, which seemed achievable during the 1990s, has become increasingly difficult to maintain in the current context.

ASEAN holds a geographically and politically significant position in the global technological competition, situated between the two technological superpowers, China and the United States. This unique position significantly impacts the region's involvement in the

technological rivalry between these superpowers. Geographically, both by land and sea, ASEAN is located at the crossroads of major maritime routes, providing crucial access to both the Pacific and Indian Oceans, making it a gateway for trade and technology transfer between the East and the West. Politically, ASEAN's diversity, with its members at different stages of economic development and varying political systems, presents a complex landscape that both China and the U.S. are trying to navigate and influence (Acharya, 2017).³

ASEAN countries have actively leveraged their strategic positions to attract investment and technological cooperation from both China and the United States. For instance, Singapore, ASEAN's leading economy, has positioned itself as a regional hub for technology and innovation, drawing substantial investments from Chinese and American tech giants like Alibaba and Google (Menon, 2019)⁴. Similarly, Indonesia and Thailand, with their large markets and growing digital economies, have seen investments from Chinese companies such as Huawei and state-owned enterprises, as well as American companies like Facebook and X, entering their technology sectors (Anwar, 2020).⁵ In each ASEAN country, China has partially blocked technologies from some of these American companies.

Additionally, the ASEAN Digital Integration Framework Action Plan (DIFAP) 2025, which focuses on enhancing digital connectivity and economic integration, exemplifies the region's efforts to leverage its strategic position by fostering an environment conducive to investment and technological cooperation (ASEAN, 2019).⁶



However, the region's strategic position also presents challenges, as ASEAN countries must navigate the complexities of technological competition between China and the United States. ASEAN must balance economic and security interests while maintaining regional sovereignty, requiring sophisticated diplomacy and genuine strategic foresight.

In conclusion, ASEAN's strategic position between China and the United States offers both opportunities and challenges in the technological competition. By leveraging geographic and political advantages, ASEAN countries attract investment and cooperation from both superpowers, contributing to the region's technological development and economic growth. At the same time, maintaining a balanced foreign policy approach through various means—such as foreign procurement, economic or security partnerships, and political, social, and cultural exchanges—will be continuously monitored and interpreted by open sources to determine which side a country leans towards more.

3. Impact of the Technological Competition between the United States and China on ASEAN

The ongoing technological competition between the United States and China has significantly impacted ASEAN's digital and technological landscape. This competition, often characterized by advancements in artificial intelligence, 5 G technology, and cybersecurity measures, influences both military and civilian sectors. Both countries exert influence on the strategic decisions and policy-making of ASEAN nations in their pursuit of digital and technological development.

The technological rivalry between the United States and China has accelerated digital transformation in ASEAN, with both superpowers seeking to expand their influence in the region through investments, partnerships, and the export of technology infrastructure and services. For example, China's Belt and Road Initiative (BRI) includes the Digital Silk Road component, which focuses on enhancing digital connectivity in ASEAN countries through the development of digital infrastructure such as 5G networks and smart cities (Huang, 2020).⁷ In contrast, the United States

⁷ Huang, Y. (2020). The Digital Silk Road and the Sustainable Development Goals. *Telecommunications Policy*, 44(6).

promotes its Indo-Pacific Strategy, which encompasses efforts to enhance digital connectivity and cybersecurity cooperation with ASEAN countries (Sacks, 2019).⁸

However, this competition also presents challenges for ASEAN countries as they navigate the intense rivalry. One major issue is cybersecurity, as adopting advanced technologies from either the U.S. or China may expose ASEAN countries to cyber threats and espionage activities. Ensuring data sovereignty is another challenge, as countries in the region may benefit from foreign technology investments while needing to protect sensitive information and maintain control over their digital assets (Tan, 2021).⁹

Furthermore, the technological competition between the United States and China

ผลกระทบของการแข่งขันเทคโนโลยี: การแข่งขันด้านเทคโนโลยีที่กำลังดำเนินอยู่ระหว่างสหรัฐอเมริกาและจีน
 ปัญหาประตัญญู เทคโนโลยี 5G และมาตรการความปลอดภัยไซเบอร์

การแข่งขันเทคโนโลยีระหว่างสหรัฐอเมริกาและจีนได้เร่งการเปลี่ยนแปลงทางดิจิทัลในอาเซียน โดยทั้งสองมหาอำนาจต่างพยายามขยายอิทธิพลในภูมิภาคผ่านการลงทุน ความร่วมมือ และการส่งออกโครงสร้างพื้นฐานและบริการด้านเทคโนโลยี

China's Digital Silk Road and Malaysia's Technological Neutrality
 Like other nations in Asia and Africa, Malaysia has shown considerable agency in navigating the tech war between the United States and China.
 By Iliara Carrozza and Giacomo Bruni
 August 22, 2023

ASEAN Economies in the Tech Supply Chain Sweet Spot?
 PUBLISHED 12 JAN 2024
 KRISTINA FONG SIEW LENG
 Ongoing trade Sino-U.S. tensions and the need to redirect FDI away from China may present a golden opportunity for economies in Southeast Asia.

impacts the diversification of supply chains within ASEAN. The region has become a crucial hub for global supply chains, particularly in the technology sector. However, this competition has led to disruptions and restructuring of supply chains, compelling ASEAN countries to seek ways

⁸ Sacks, D. (2019). China's Emerging Cybersecurity and Data Sovereignty Policies. Council on Foreign Relations. Retrieved from Council on Foreign Relations website

⁹ Tan, S. S. (2021). Navigating the US-China Rivalry: ASEAN's Role in the Digital Economy. ISEAS Perspective, 2021(38).

to diversify their sources of technology and reduce dependency on any single superpower (Loh, 2020).¹⁰

In conclusion, the technological competition between the United States and China has accelerated digital transformation and offers potential for economic growth. ASEAN countries must navigate complex issues such as cybersecurity, data sovereignty, and supply chain diversification. Strategic policy formulation and regional cooperation will be crucial for ASEAN to capitalize on opportunities and mitigate the challenges posed by this global competition.

4. The Digital Economy in the Post-COVID Era

The digital transformation in ASEAN has played a crucial role in the region's economic recovery following the COVID-19 pandemic. As countries worldwide faced the impacts of the pandemic, ASEAN fully leveraged digital technologies in education, work, medical appointments, and patient care. This not only mitigated the pandemic's effects but also established a digitally-driven infrastructure and operational system that promises long-term growth.

The pandemic accelerated the adoption of digital technologies in ASEAN, with significant increases in e-commerce, digital payments, food delivery services, and remote work technologies. According to a report by Google, Temasek, and Bain & Company (2020)¹¹, Southeast Asia's digital economy is projected to grow to \$300 billion by 2025, with the pandemic acting as a catalyst for this growth.

Governments in the region have implemented various measures to support the digital economy. For instance, Singapore's Digital Economy Framework¹² aims to double the digital sector's contribution to the GDP by 2025 (Ministry of Communications and Information,

¹⁰ Loh, D. (2020). ASEAN's Strategy for Technology Supply Chain Diversification in the US-China Trade War. The Diplomat. Retrieved from The Diplomat website

¹¹ Google, Temasek, & Bain & Company. (2020). economy SEA 2020: Lightspeed and Resilient - Southeast Asia's Digital Decade in Motion.

¹² สิงคโปร์มีความสำคัญทางยุทธศาสตร์ของอาเซียน บทบาทของสิงคโปร์ในฐานะศูนย์กลางสำคัญสำหรับบริษัทเทคโนโลยีจากทั้งตะวันออกและตะวันตก เป็นตัวอย่างของความสำคัญทางยุทธศาสตร์ของอาเซียนในการแข่งขันเทคโนโลยีระหว่างจีนกับสหรัฐฯ ด้วยรัฐบาลที่มั่นคง, กำลังคนวิศวกรรมที่มีความสามารถ, และโครงสร้างพื้นฐานเทคโนโลยีที่ทันสมัย, สิงคโปร์ทำหน้าที่เป็นประตูเศรษฐกิจดิจิทัลที่กำลังเติบโตของเอเชียตะวันออกเฉียงใต้ ความพยายามของเมืองรัฐในการรักษาความเป็นกลาง ซึ่งแสดงให้เห็นจากความร่วมมือทางเศรษฐกิจและความสัมพันธ์ทางทหารกับทั้งสองมหาอำนาจ ได้เน้นย้ำถึงเส้นทางที่อาเซียนอาจใช้ประโยชน์จากตำแหน่งของตนเพื่อการพัฒนาและความมั่นคงในภูมิภาค

Singapore, 2020).¹³ Similarly, Indonesia has launched the "Making Indonesia 4.0" roadmap to integrate digital technologies into key sectors such as manufacturing and agriculture (Ministry of Industry, Indonesia, 2018).¹⁴

The technological competition between the United States and China also influences ASEAN's digital economy. This rivalry has led to increased investments from both countries in the region's technology sector. However, there are concerns about data privacy and cybersecurity, prompting ASEAN countries to strengthen their digital infrastructure and regulatory frameworks (Sacks, 2019).¹⁵

Digital transformation is a key component of ASEAN's post-pandemic recovery, driving economic growth and increasing resilience. The technological competition between the United States and China necessitates careful strategic planning by ASEAN, particularly in decisions made by governments or major telecommunications providers regarding digital infrastructure reliance, whether on Chinese or American technology. For instance, Thailand relies on large private companies like AIS and True, while Vietnam uses state enterprises such as Viettel.

The future of ASEAN in the global technological competition is inextricably linked to the rivalry between the United States and China. As these two superpowers compete for technological leadership, ASEAN finds itself in a unique position to leverage this competition for its own growth and development. However, navigating this complex landscape requires forward-thinking.

ASEAN's role in the global technological competition is likely to expand significantly in the coming years. With a young, tech-savvy population and a growing middle class, the region is becoming a hub for digital innovation and entrepreneurship. The technological rivalry between the U.S. and China amplifies this potential, as both countries seek ASEAN as a strategic partner in technology development and adoption. This competition may cause global technological competition to diverge, creating competing standards and technologies or differing agreements between Chinese or American enterprises and local authorities, leading to varying choices

¹³ Ministry of Communications and Information, Singapore. (2020). Digital Economy Framework for Action.

¹⁴ Ministry of Industry, Indonesia. (2018). Making Indonesia 4.0.

¹⁵ Sacks, D. (2019). The U.S.-China Tech War Is Being Fought in Central Europe. Council on Foreign Relations.

among ASEAN countries. This could present ASEAN with difficult decisions between aligning with one superpower or charting an independent path. Additionally, rapid technological changes could exacerbate existing inequalities within and between ASEAN countries, deepening the digital divide.

5. Policy Recommendations

To effectively manage the risks and benefits of the global technological competition between the United States and China, ASEAN countries should consider the following policy recommendations:

5.1 Promote Digital Skills: Governments should significantly invest in educational and training programs to equip the workforce with necessary digital skills. This will not only help reduce the digital divide but also enable the region to participate more actively in the global digital economy.

Implementation Example: Educational institutions and the government can utilize Massive Open Online Courses (MOOCs) as an accessible or low-cost online learning platform, encouraging students and adults to engage in various topics together.

5.2 Encourage Innovation and Modern Entrepreneurship: ASEAN should foster an environment and ecosystem that promotes the emergence of startups and innovation by providing access to capital, mentorship, and legal support. This will drive technological advancement and diversify the region's economic risks.

Implementation Example: Organize continuous Virtual Hackathons on various topics to promote innovation and technological problem-solving in the region and create platforms for the utilization and commercialization of research.

5.3 Ensure Inclusive Digital Growth: ASEAN should prioritize policies that promote inclusive digital growth, ensuring that the benefits of technological advancements are widely shared across society. This includes addressing issues such as digital access, affordability, and the digital gender gap.

Implementation Example: Implement Digital Inclusion Programs aimed at educating vulnerable groups about digital threats, such as the elderly, remote communities, and border areas at risk of human trafficking and digital threats.

5.4 Engage Strategically with External Powers: ASEAN should strategically engage with both the United States and China, leveraging economic competition to attract investment and cooperation while maintaining elements of independence. This might involve negotiating trade agreements, technology transfers, and collaboration in mutually beneficial areas while reserving activities that pose risks to national security.

Implementation Example: Host an International Conference on Diplomacy and Technology to gather scholars, experts, and diplomats from ASEAN, the United States, and China to exchange knowledge and new research in diplomacy and technology.

In conclusion, the aftermath of COVID-19, ASEAN stands as a pivotal arena in the escalating technological and digital rivalry between China and the United States. The "State of Southeast Asia 2024" survey uncovers a nuanced public opinion landscape, reflecting a growing preference for China's economic influence while maintaining traditional non-alignment. ASEAN's unique geopolitical positioning, bridging the Pacific and Indian Oceans, makes it a crucial player in global supply chains and a battleground for tech supremacy. This dual-edged sword brings opportunities for investment and innovation but also poses significant challenges in cybersecurity, data sovereignty, and strategic independence. Digital transformation, accelerated by the pandemic, has catalyzed regional economic recovery and growth, supported by proactive governmental policies. To navigate these turbulent waters, ASEAN must enhance digital literacy, foster a robust innovation ecosystem, ensure inclusive digital growth, and engage strategically with both superpowers. ASEAN's future hinges on its ability to adeptly balance these competing influences, leveraging its strategic advantages to achieve sustainable development while deftly managing the intricate dynamics of global technological competition.