PANCASILA: Jurnal Keindonesiaan

Volume 5 Issue 1, October 2025
P-ISSN: 2797-3921, E-ISSN: 2797-3018
DOI: /10.52738/pjk.v5i2.848

Pancasila and Technogeopolitics: Integrating National Values into Foreign and Technology Policy

Aditya Permana[1], Ardian Prasetyo[2]

[1]*Bina Nusantara University, Indonesia. E-mail: adityapermana84@binus.ac.id*
[2]*Agency for Fostering Pancasila Ideology, Indonesia. E-mail: ardian.prasetyo@bpip.go.id*

Abstract: This paper investigates Indonesia's challenges in the global techno-geopolitical order and the role of Pancasila as a normative foundation for foreign and technology policy. Existing analyses often reduce Indonesia's strategy to pragmatic hedging amid U.S.-China rivalry. This study advances the debate by highlighting the tension between the rhetorical and substantive use of Pancasila. As rhetoric, Pancasila legitimizes existing choices (e.g. "hedging") without addressing structural dependency. As substance, it provides an ethical paradigm that integrates justice, humanity, and sovereignty into digital governance. The paper demonstrates how Indonesia can move beyond pragmatist adaptation (Western liberal universalism, Chinese techno-statism, and competing Global South approaches, e.g. Brazil's rights-based model and India's growth-based strategy) toward normative entrepreneurship. The paper prescribes three steps: (1) operationalizing Pancasila values into measurable benchmarks, (2) reframing hedging as normative entrepreneurship, and (3) aligning domestic digital strategies with ethical commitments. The core contribution is to show that Indonesia's global relevance hinges not merely on strategy, but on transforming Pancasila into a "substantive compass" for techno-diplomatic engagement, or as an approach that offers a distinct normative alternative in international debates on digital order.

Keywords: Pancasila; Technogeopolitics; Indonesia Foreign Policy; Indonesian Technology Policy; Techno-nationalism; Wawasan Nusantara.

1. Introduction

The rise of advanced technologies has become a decisive factor in reshaping the global order of the twenty-first century. No longer a neutral instrument of economic development, technology now functions as a strategic tool of power in the contest for geopolitical dominance (Wong, 2022). This dynamic, that often described as *techno-geopolitics*, is most visible in the United States-China rivalry, particularly in the semiconductor sector, which underpins future economic competitiveness and military capability. While the U.S. seeks to preserve its edge through restrictive measures and technological alliances (Yoon, 2023), China pursues self-reliance through initiatives such as Made in China 2025 (Luo & Van Aasche, 2023). This rivalry reshapes global supply chains and highlights how technology is deeply intertwined with questions of sovereignty and power (Weiss, 2015; Sloan, 2021). Contemporary analysis frames this contest as a clash of techno-nationalist models, where both superpowers leverage state power to secure technological supremacy and shape the foundational norms of the global digital order (Wu & Ruan, 2023).

For Indonesia, a developing state situated strategically in the Indo-Pacific, this competition generates both opportunities and vulnerabilities. Although it vows to be part of an Asian semiconductor hub as one of the key aspects of "Golden Indonesia 2045" vision, Indonesia's dependence on imported semiconductors and foreign digital infrastructure creates exposure to external pressures. At the same time, participation in cross-border digital projects places Indonesia at the intersection of competing global

Aditya Permana, Ardian Prasetyo "Pancasila Amidst Technogeopolitics: Strengthening the Integration of Pancasila Values in Foreign Policy and National Technology Policy" Pancasila: Jurnal Keindonesiaan, Vol. 05, No.01 (2025).
Receipt 26 June 2025; Received revised in 26 September 2025; Accepted September 29, 2025.

agendas. The central dilemma, therefore, lies in reconciling the pursuit of technological sovereignty with the realities of integration into global technological flows.

Existing scholarship on techno-geopolitics has largely examined the structural rivalry between the U.S. and China or the economic consequences of supply chain disruptions (e.g., Wong, 2022; Yoon, 2023). Less attention has been paid to how developing countries articulate normative and ethical responses to these dynamics, particularly when their political philosophies differ from dominant techno-nationalist models. Within the Indonesian context, while Pancasila has often been invoked symbolically in foreign policy (Hadiz, 2004), its potential as a normative framework for technology governance and diplomacy remains underexplored.

This paper addresses this gap by examining how Pancasila functions as a normative paradigm in Indonesia's engagement with global techno-geopolitics. Specifically, it asks: (1) What challenges does Indonesia face in positioning itself within the global techno-geopolitical order? and (2) How can Pancasila serve as a normative foundation for Indonesia's foreign technology policy? By reframing Pancasila as a living ethical framework rather than a static ideological reference, this study highlights its relevance for navigating technological competition, digital sovereignty, and the pursuit of a more just digital order.

The contribution of this paper is twofold. Theoretically, it advances an alternative perspective in international relations by bridging normative approaches with Indonesia's local epistemology. Practically, it offers a values-based policy orientation that could strengthen Indonesia's position in technology diplomacy and promote more inclusive digital governance. In doing so, this paper narrows its scope to the intersection of technogeopolitics and normative foreign policy, without attempting to cover all related dimensions such as cybersecurity or innovation systems.

Ultimately, the argument advanced here is that Pancasila provides Indonesia with a distinctive normative resource to navigate the complexities of techno-geopolitics (U.S. with neoliberal vision of technological hegemony vs China's techno-nationalism). Amid intensifying U.S.-China competition and growing asymmetries in global technology governance, grounding technology policy and diplomacy in Pancasila's principles of humanity, social justice, and sovereignty may enable Indonesia not merely to adapt, but also to articulate an ethical alternative in shaping the digital order.

Research on the relationship between technology and global politics has advanced significantly over the past two decades. The concept of techno-geopolitics represents the convergence between classical geopolitical studies and contemporary dynamics in the control of strategic technologies. According to Capri (2020), techno-geopolitics refers to interstate contestation centered on control over cutting-edge technologies such as artificial intelligence, 5G, semiconductors, and cloud computing. In this context, states compete not only on military and economic grounds but also on technological capabilities, where digital infrastructure, data, and innovation become new arenas of influence (Capri, 2024).

The literature on "techno-nationalism" further strengthens the argument that technology has become a central element in shaping the new international order. Norris (2016) demonstrates that countries such as China, the U.S., and the European Union increasingly integrate industrial policies with foreign strategies to secure their national interests in technology (Norris, 2016). Simultaneously, Gill & Law (1988) emphasized that the diffusion of power in the global economy is now inseparable from technological power, where state-capitalist countries leverage their influence to shape global digital and economic architectures according to their interests (Gill & Law, 1988).

Techno-geopolitics represents a fundamental shift in how states build and maintain power within the international system. Scholars largely agree that technogeopolitics

constitutes a new geopolitical paradigm that positions technology, especially strategic technologies, as the primary instruments in global power competition (Malik, 2012; Wong, 2022; Zhang, Zhang, Daim, & Bakry, 2025). Technology is no longer seen as a neutral entity or merely an economic tool but as a strategic resource reshaping the international order, global supply chains, and states' capacity to uphold sovereignty (Danilin, 2021; Yoon, 2023). The literature consistently affirms that technological superiority and control over digital infrastructure now determine a state's structural power, national innovation, and geopolitical standing in the international system (Luo & Van Aasche, 2023).

However, despite shared recognition of technology as a source of geopolitical power, there are differences in focus and approach among studies. Wong (2021), for example, highlights the digital statecraft dimension as a novel practice in diplomacy and national security. Through a study of U.S.-China relations, he underscores how regulation of digital platforms like TikTok and WeChat, as well as issues of digital espionage, have become new arenas of interstate contestation (Wong, 2022). Meanwhile, Luo and Van Assche (2023) focus on the element of uncertainty, i.e. the geopolitical unpredictability arising from major powers' technology policies, which may disrupt global economic and business stability. This perspective adds a layer of instability as a defining characteristic of the contemporary technogeopolitical era (Luo & Van Aasche, 2023).

Zhang et al. (2025) propose a more conceptual approach by emphasizing the role of knowledge and technology as geo-power, expanding traditional geopolitical understanding into the epistemic realm. They argue that control over knowledge and innovation influences not only national policy but also the reconstruction of global political economy (Zhang, Zhang, Daim, & Bakry, 2025). In contrast, Danilin (2022) and Yoon (2023) adopt a sectoral approach, emphasizing how mastery of technologies such as semiconductors and global value chains serve as strategic media to reshape alliances, control supply, and influence regional stability (Danilin, 2021; Yoon, 2023).

In a more classical vein, Liubimova (2025) revitalizes spatial geopolitics by demonstrating how technology enables states to alter physical geography and information flows, expanding their capacity to digitally and territorially reorganize zones of control (Liubimova, 2025). In contemporary setting, a regional perspective is presented by Mashayekh (2025), who highlights "techno-regionalism", i.e. the rise of technology alliances based on regional proximity as a response to the decline of techno-globalism. He shows that technogeopolitics forms new axes of power grounded in institutional and cognitive proximity, not merely spatial dimensions (Mashayekh, 2025).

Finally, Malik (2012) provides a comprehensive synthesis, arguing that techno-geopolitics is a critical dimension of global techno-politics, wherein technology is strategically employed to reshape international power structures, influence norms, and navigate strategic domains such as cyberspace, outer space, and energy. This article contribute the understanding that techno-geopolitics is not only a structural phenomenon but also a normative and ideological arena in the contestation for hegemony (Malik, 2012).

Thus, this literature review demonstrates that technogeopolitics is a multidimensional field, that intersecting classical geopolitics, technological innovation, and geoeconomics, that continues to evolve alongside globalization's fragmentation, institutional transformations, and intensifying interstate rivalries. The convergence of scholarly thought confirms the importance of technology as a new element of power, while its divergence reflects the complexity of theoretical approaches and strategic practices in understanding the role of technology in contemporary global politics.

In the field of international relations, responses to these developments are diverse. Realism, for instance, continues to emphasize the importance of states' material capabilities

in explaining actor behavior within an anarchic system, yet it has begun to incorporate technology as a significant source of power (Sloan, 2021; Diesen, 2021). Meanwhile, critical theory and postcolonial approaches offer more structural and normative readings of technological hegemony. Scholars such as Robert Cox (1981) and Arturo Escobar (2008) highlight how global technologies often reproduce inequalities between developed and developing countries, while marginalizing local knowledge in development processes (Cox, 1981; Escobar, 2008).

Nonetheless, the literature explicitly linking local ideologies such as Pancasila with techno-geopolitics remains very limited. Studies on Pancasila generally focus on its role in shaping national identity, democratic development, or as a foundation for political ethics within domestic contexts or the traditional geopolitical concept of the Indonesian archipelagic insight (Wawasan Nusantara).

Most Indonesian geopolitical studies that explicitly reference Pancasila continue to emphasize traditional geopolitics, focusing on geographic position and territorial sovereignty grounded in Wawasan Nusantara and the third principle of Pancasila concerning the Unity of Indonesia (Akmaliza, et al., 2020; Soepandji & Pulungan, 2022). However, current global dynamics demonstrate the necessity to broaden the understanding of geopolitics by incorporating the dimension of technogeopolitics, where digital technology, communication, and defense serve as primary instruments in the contestation of global influence (Rosmawandi, 2022; Wikrama & Kusuma Dewi, 2024). Despite this, techno-geopolitics remains underexplored in Indonesian scholarship, even though maritime territory management increasingly relies on advanced technologies such as satellite monitoring systems and submarine communication networks (Wikrama & Kusuma Dewi, 2024). The global rivalry between the U.S. and China also centers on high technologies like 5G and semiconductor supply chains, which impact sovereignty and national security (Rosmawandi, 2022).

On the other hand, most literature on Indonesia's position in the U.S.-China rivalry continues to employ conventional geopolitical perspectives focusing on geographic, economic, and foreign policy aspects without extensively exploring the techno-geopolitical dimension. For example, studies by Usman and Afrizal (2017), Isnaini (2023), Purba and Anak Ampun (2021), and Sonny (2020), emphasize diplomacy, security, and economics but have yet to explicitly connect the role of technology as a critical instrument in global competition.

2. Method

This research adopts a qualitative-normative approach, designed to connect directly to its central objective: assessing how Pancasila values are articulated and operationalized in Indonesia's technology diplomacy. The qualitative element enables an in-depth interpretation of policy discourses, while the normative lens evaluates their alignment with Pancasila's ethical commitments (Heryanto, 2021).

The study proceeds through three primary stages. The first stage involves a literature review to build the conceptual foundations from international relations theory, technogeopolitics (Scholvin & Wigell, 2018), and Pancasila philosophy. The second stage consists of a discourse analysis of government documents, including the National Medium-Term Development Plan (RPJMN) 2020–2024, the Indonesia Digital Vision 2045, and multilateral statements from forums such as the G20 and the ASEAN Digital Ministers' Meeting. The selection of documents is based on their relevance to Indonesia's strategic positioning in global technology governance. Coding procedures involve identifying textual

references to justice, sovereignty, inclusivity, and collaboration, which are then mapped onto the principles of Pancasila. The third stage is a critical evaluation to assess the tensions between Pancasila values and the structural constraints within technogeopolitics, particularly concerning issues of digital sovereignty (Christakis, 2020), supply chain dependencies, and strategic alignments.The research relies primarily on secondary data, a limitation that is explicitly acknowledged. Official state documents and scholarly works form the primary corpus, allowing systematic tracing of how values are embedded in policies and discourses. To mitigate reliance on a single type of source, source triangulation is applied: cross-verifying policy texts with academic literature and international reports. This strengthens interpretive validity and ensures a more nuanced analysis.

This research employs a qualitative-normative approach to assess the articulation and operationalization of Pancasila values within Indonesia's technology diplomacy. The study is positioned within the Global IR paradigm, which seeks to decentralize international relations theory and create space for non-Western perspectives like Pancasila (Acharya & Buzan, 2019). It integrates a techno-geopolitical lens (Scholvin & Wigell, 2018) to analyze Indonesia's pursuit of digital sovereignty and autonomy amid global technological rivalries.

Pancasila serves as the core ethical-normative framework, with its five principles operationalized as indicators to evaluate key areas such as social justice in international cooperation, the ethical governance of data and digital sovereignty (Christakis, 2020), and the advancement of collaborative, anti-hegemonic approaches in technology diplomacy. For instance, the principle of "Just and Civilized Humanity" provides a critique of digital authoritarianism, while "Social Justice" advocates for inclusive technology governance.

The analytical framework operates across four interconnected levels: normative, structural, policy, and discursive. This translates into a three-stage research process. The first stage involves a literature review to establish conceptual foundations. The second stage conducts a systematic discourse analysis of key government documents, such as the RPJMN 2020-2024 and Indonesia Digital Vision 2045, where textual references to justice, sovereignty, and collaboration are coded and mapped onto Pancasila's principles. The final stage entails a critical evaluation to identify tensions between these Pancasila values and the structural constraints of the global technogeopolitical landscape, including supply chain dependencies and strategic alignments. Through this multi-level analysis, the study ultimately maps Indonesia's role in technogeopolitics, evaluates the tangible influence of Pancasila, and proposes normative strategies for strengthening global digital justice.

3. Structuring Indonesia in Global Techno-Geopolitics

This section describes how Indonesia is positioned within the broader dynamics of global techno-geopolitics and how existing national policies have responded to these structural challenges. Rather than treating Indonesia merely as a passive actor caught between U.S.-China rivalry, the analysis highlights how domestic initiatives, strategic doctrines, and institutional frameworks interact with external pressures in shaping Indonesia’s technological trajectory. It identifies both vulnerabilities (such as dependency risks in critical supply chains) and opportunities (such as leveraging digital governance agendas) to assert normative agency.

The purpose here is not yet to apply theoretical lenses in detail but to map the empirical landscape: how Indonesia’s policy responses articulate sovereignty, development, and strategic autonomy in the digital era. The subsequent discussion section will integrate these findings into the theoretical framework, allowing for a deeper interpretation of

Indonesia's techno-diplomatic positioning through the lens of foreign policy theory and normative paradigms such as Pancasila.

3.1. Indonesia's Position in Techno-Geopolitical Rivalry

As technological rivalry between the U.S. and China intensifies, Indonesia must strategically navigate its foreign relations to safeguard sovereignty while maximizing benefits from both sides. Situated in the Indo-Pacific, Indonesia occupies a pivotal geopolitical position, attracting attention from both powers eager to expand their technological and strategic influence. The U.S. considers Indonesia a key partner in counterbalancing China, supporting it through technical assistance and investments aimed at strengthening digital resilience (U.S. Embassy Indonesia, n/d). However, Washington's *decoupling* policies targeting China often place Indonesia in a difficult position, as these measures indirectly affect Indonesia's access to global supply chains and critical technologies.

Simultaneously, China plays a dominant role in Indonesia's digital transformation, investing heavily in 5G infrastructure, cloud services, and semiconductor development. While these initiatives provide essential momentum for Indonesia's digital economy, they also raise concerns about overreliance and the erosion of technological sovereignty.

Firstly, Indonesia confronts structural challenges rooted in its dependence on foreign technology. For example, in the semiconductor sector that is critical for digital infrastructure and defense, Indonesia imports nearly 90% of its semiconductor components (Faculty of Engineering, Gadjah Mada Univeristy, 2024). Similarly, Indonesia relies heavily on imported technology in the energy sector; the country imports around 70% of machinery and equipment for power plants and energy industries (Prabowo & Sihaloho, 2023). This dependency renders Indonesia vulnerable to global geopolitical shifts and supply chain disruptions. During the COVID-19 pandemic, for instance, global supply chain interruptions exposed Indonesia's technological vulnerabilities (Asian Development Bank, 2020). Additionally, Indonesia ranks 87th in the Global Cybersecurity Index (International Telecommunication Union, 2024), indicating the need to improve cybersecurity capacities amid growing digital threats.

Secondly, as a key member of multilateral and regional forums such as ASEAN (which Indonesia chairs in 2023), the G20, and the Organization of Islamic Cooperation (OIC), Indonesia holds potential to play a central role in global technology diplomacy. The country's digital economy is projected to reach USD 124 billion by 2025, making it the largest in Southeast Asia (Temasek Holdings & Google, 2022). Leveraging this economic weight and strategic location, Indonesia can promote technology governance principles rooted in its state philosophy, Pancasila, advocating for inclusivity, social justice, and sovereignty. This aligns with Indonesia's RPJMN 2020-2024, which emphasizes digital sovereignty and equitable technology development.

Thirdly, Indonesia is actively working to strengthen its national technology ecosystem. The government has launched the "Making Indonesia 4.0" initiative to accelerate adoption of advanced technologies like artificial intelligence, the Internet of Things, and robotics across key sectors. Investment in the semiconductor industry has gained momentum, including plans for a new integrated circuit fabrication facility announced in 2023, with government and private sector cooperation (Ministry of Communication and Informatics, 2025). Moreover, Indonesia aims to increase

renewable energy share to 23% by 2025 as part of its energy transition, further driving demand for locally adapted green technologies (Institute for Essential Services Reform, 2023). Nonetheless, gaps remain in human capital; Indonesia's Global Innovation Index ranking stood at 87 in 2023, highlighting the need to boost R&D investment and skills development (World Intellectual Property Organization, 2023).

Fourthly, Indonesia's position in techno-geopolitics is shaped by the wider Indo-Pacific strategic competition, notably between the U.S. and China. While the U.S. restricts China's access to advanced semiconductor technologies and presses allies to limit technology transfer, Indonesia pursues a balanced approach, maintaining partnerships with both powers. Indonesia's "free and active" foreign policy supports non-alignment and encourages multilateral cooperation in technology governance. This stance enables Indonesia to act as a bridge between developed and developing countries, fostering dialogue on fair and transparent global technology standards, as seen in its engagement in the ASEAN Digital Ministers' Meetings and the G20 Digital Economy Task Force.

Overall, Indonesia's position in global techno-geopolitics demands not only a nuanced and pragmatic strategy, but of normative ground. The key priorities are managing technological dependencies without compromising sovereignty, accelerating domestic innovation, and maximizing technology diplomacy grounded in Pancasila values. The success of these efforts will determine Indonesia's ability to shape the emerging global technology order while advancing inclusive and sustainable national development.

3.2.Indonesia's National Geopolitical Outlook in Term of Defense Security and Diplomacy

Indonesia's foreign policy has long been guided by the founding ideal of a "sovereign, independent, just and prosperous" nation. After Sukarno's era of non-alignment and confrontation with Malaysia, Indonesia under Suharto (1967-98) was *outwardly pragmatic* but *inwardly* isolationist. Since the 1998 Reformasi, Indonesia became the world's third-largest democracy, emphasizing peaceful relations and ASEAN centrality (Suryadinata, 2022). Indeed, analysts note Indonesia has had no existential external threat; its defense budget "never exceeded 1% of GDP," the lowest in Asia, reflecting a historic reluctance to project power abroad (Surahman, Putra, Khaerudin, & Asvial, 2024).

Under President Joko "Jokowi" Widodo, Indonesia pursued a middle-power strategy combining "free and active" diplomacy with a focus on national development. Jakarta championed ASEAN unity and multilateralism: in 2019 it launched the ASEAN Outlook on the Indo-Pacific (AOIP) as an ASEAN-driven response to regional tensions (Gill D. M., 2023; Agastia, 2020). During Jokowi's second term, Indonesia played prominent global roles, e.g. chairing the G20 in 2022 and ASEAN in 2023 and using these forums to promote inclusion and consensus-building (Agastia, 2020; Irsadanar, 2023). Jokowi also reiterated the Global Maritime Fulcrum (GMF) concept, where his government planned to invested heavily in connectivity (ports, roads and bridges) across the archipelago. However, actual naval expansion was modest and leaving the GMF framed as "economic development" rather than a security build-up (Caroline, 2021; Irsadanar, 2023).

President Prabowo Subianto (inaugurated Oct 2024) has so far signaled both change and continuity. Domestically he has begun "rolling back Jokowi's signature initiatives" (for example shelving much of the planned new capital Nusantara/IKN) and

launched new programs (a sovereign wealth fund Danantra, expanded social programs). In foreign affairs, however, the early pattern is familiar: The Diplomat describes Prabowo's approach as "more active" but still "free" (non-aligned). In practice he has crisscrossed the globe, meeting China and the U.S. back-to-back in 2025. His first trip to Beijing yielded $10 billion in deals, followed by a joint statement on South China Sea resource development – an apparent recognition of China's claims that Jakarta immediately rejected to reaffirm its sovereignty. He then traveled to Washington to meet President Biden, signaling that Indonesia will hedge between the great powers. Notably, Indonesia also joined BRICS emerging-economies group under Prabowo, underscoring a Global-South alignment. In sum, early indicators are that Indonesia's policy remains balanced: it seeks good relations with all major powers, consistent with its historical hedging (Myers, 2025).

In terms of defense and security, Indonesia's defense policy balances deterrence and low-profile posture. The long-term plan explicitly calls for "building a deterrent defense force" to secure the nation (Ministry of National Development Planning/Bappenas, n.d.), and recent procurement programs reflect this (submarines, jet fighters, missiles, and patrol vessels have been purchased). However, defense spending has been modest. As noted, military budgets were historically below ~1% of GDP, and they only recently rose slightly for modernization (Surahman, Putra, Khaerudin, & Asvial, 2024). The Indonesian military (TNI) remains large in manpower but has been underfunded in equipment. Prabowo's background as a former defense minister suggests continued focus on upgrading the armed forces. Technological gaps (Indonesia spends only ~0.2% of GDP on R&D, one of the lowest rates in the G20 still constrain the defense industry, which is being reformed to produce more locally (Caroline, 2021).

In terms of maritime security, maritime issues loom large. As an archipelagic nation, Indonesia stresses the security of its sea lanes and exclusive economic zones. Under Jokowi, the GMF agenda aimed to integrate the economy across islands; in practice this meant developing ports (e.g. Patimban, Kijing) and transport links, and promoting fisheries, rather than seeking naval parity. Indeed, Jokowi's GMF was explicitly an economic-development initiative, not a buildup of warships (Caroline, 2021). Jakarta also maintains a firm stand on its claimed waters. For example it regularly patrols around the Natuna Islands to enforce fishing rights in its EEZ. Looking ahead, RPJPN consultations emphasize a "Maritim Indonesia 2045" built on marine resources and blue-economy sustainability. Indonesia also chairs regional maritime forums (it led the Indian Ocean Rim Association in 2015-17) and works with partners on issues like piracy and search-and-rescue (Lalisang & Candra, 2020).

Under President Prabowo Subianto's leadership, Indonesia's foreign policy is expected to emphasize military strength and national security as key strategic instruments (Anwar, 2024). This orientation is evident in the country's maritime diplomacy, including recent engagements with China to strengthen maritime cooperation (Anwar, 2020; Anwar, 2024). Although such efforts have drawn criticism, particularly regarding concerns over Indonesia's sovereignty in the South China Sea, these moves highlight Jakarta's pragmatic approach to navigating geopolitical tensions in the Indo-Pacific (Solehudin, 2023; Nizar, 2025). Consistent with its free and active foreign policy doctrine, Indonesia avoids over-reliance on either China or the U.S. and instead leverages its role within ASEAN to balance competing interests and assert regional influence (Caroline, 2021).

In terms of diplomacy, Indonesia practices multi-alignment diplomacy. It is a founding ASEAN member and is sometimes called ASEAN's "*de facto* leader." Jakarta strongly advocates ASEAN centrality in the Indo-Pacific; at the same time it engages bilaterally and in plurilateral groups (Gill D. M., 2023). It has a broad range of partners: traditional ones include Japan, Australia, India and the U.S., while ties with China have deepened under Jokowi. China was Indonesia's largest source of foreign investment and infrastructure loans (Lalisang & Candra, 2020; Irsadanar, 2023).

Under Prabowo, Jakarta quickly reaffirmed its U.S. alliance even after a China trip, phone-calling both Biden and Trump and hosting U.S. officials (Myers, 2025). It also has re-engaged Middle Eastern, Latin American and African partners (e.g. Prabowo visited APEC in Peru, G20 in Brazil, India, Malaysia, the UAE, Egypt, etc. in 2024–25). Indonesia has begun to join new initiatives, e.g. formally joining BRICS and the I2U2 (India-UAE-U.S.-Indonesia group). It also continues to push multilateral solutions: for example it donated an ASEAN hospital to address the Myanmar/Rohingya refugee crisis and was active on the UN Security Council (2023–24) on regional humanitarian issues. Throughout, it maintains the Non-Aligned Movement spirit of "independent, active" foreign policy, even while hedging between great-power rivalries (Caroline, 2021).

From these passages, Indonesia's national geopolitical outlook in the realm of defense and diplomacy has evolved considerably over the decades, shaped by historical caution and regional pragmatism. During the Reformasi period and Jokowi's presidency, Indonesia advanced its identity as a peaceful middle power, focusing on multilateralism, development, and ASEAN centrality. Initiatives like the AOIP and the GMF reflected Jakarta's efforts to assert influence through inclusive diplomacy rather than hard power projection. Defense spending remained modest, demonstrating a preference for deterrence over militarization. Maritime strategy focused primarily on economic connectivity and fisheries development, though regular patrols around the Natuna Islands underscored sovereignty enforcement. Diplomatically, Indonesia has engaged in multi-alignment, balancing relations with powers such as the U.S., China, Japan, and India, while amplifying its presence in international forums like the G20 and ASEAN.

As noted, under President Prabowo Subianto, there are signs of continuity in Indonesia's non-aligned and multilateral posture, yet with a sharper emphasis on national security and strategic autonomy. Prabowo's early outreach to both Beijing and Washington illustrates Jakarta's classic hedging strategy, leveraging relationships with rival great powers while avoiding entrapment. Defense modernization has gained renewed attention, particularly in technology procurement and industrial localization, although fiscal constraints persist. Indonesia's entry into BRICS and involvement in forums like I2U2 signal a more assertive Global South alignment. Meanwhile, Indonesia remains a diplomatic bridge in Southeast Asia, reinforcing its ASEAN leadership while also reaching out to Middle Eastern, African, and Latin American partners. As global rivalry intensifies, Indonesia continues to navigate the Indo-Pacific landscape with a commitment to free and active foreign policy, striving for strategic flexibility without sacrificing sovereignty or regional stability.

3.3. Indonesia's National Strategy for the Changing Dynamics of Technological Geopolitics

Despite high dependency on other countries, technology has become a central element of Indonesia's strategy. The government's Indonesia Digital Vision 2045 (*Visi*

Digital Indonesia 2045) is a formal roadmap emphasizing innovation hubs, digital literacy and inclusive tech adoption. For example, the Ministry of Communication and Informatics (Kominfo) says the plan's eight pillars include "mastering future digital technologies" and "building a productive digital society" via upskilling/reskilling programs (Ministry of Administrative and Bureaucratic Reform of the Republic of Indonesia, 2024). In line with this, President Jokowi urged a digital acceleration during the COVID-19 recovery, and Kominfo launched a national e-government masterplan and "One Data" initiative for integrated governance. Official figures highlight a booming digital economy: a Google-Temasek-Bain study projected it to top US$124 billion by 2025 (growing ~11%/yr) as tens of millions of SMEs move online (International Trade Administration, 2021). Simultaneously, Indonesia adopted a National AI Strategy (Stranas KA) 2020–2045 and introduced ethical guidelines (a "3P" policy-platform-people) for AI, with UNESCO now assessing the country's AI readiness . The goal is to leapfrog into advanced manufacturing, fintech, biotech and other sectors by 2045 (National Research and Innovation Agency (BRIN), 2020).

In the realm of technogeopolitics, Indonesia is carefully navigating the U.S.-China tech rivalry. Chinese firms have won major roles in Indonesian networks: for example, Huawei and ZTE supply much of the 4G/5G infrastructure, and Huawei pledged to train 100,000 Indonesian engineers in 5G technology (Oh, 2021). Chinese cloud providers (Alibaba, Tencent) have launched local data centers, and in 2021 Jakarta even signed a cyber-security MOU with China covering internet governance and data security (Oh, 2021). At the same time, the U.S. has offered alternatives: it launched a Digital Connectivity and Cybersecurity Partnership (DCCP) in 2018, investing tens of millions to shore up Indonesia's ICT networks (for example through the trilateral Blue Dot Network). Western tech firms are also moving in, e.g. Microsoft is building its first Indonesian data center and has pledged to train 3 million Indonesians in cloud and cybersecurity skills (Oh, 2021).

Indonesia has not joined any technology containment regime (it permits Huawei equipment), but it stresses data protection and sovereign use of the internet. In international forums (ASEAN, APEC, ITU, WEF, etc.) Jakarta advocates an "open, inclusive" digital order and often resists outright bans; it seeks multiple partners and standards for next-generation tech. This reflects a broader Indonesian stance: embrace digital innovation for national development, while avoiding any single-power dependence. As one analyst warns, Indonesia's weak R&D base (only ~0.2% of GDP) must be overcome if it is to realize these ambitions (Nehru, 2016). In sum, Indonesia's technogeopolitical strategy is to build domestic capacity (via digital skills and industry clusters) while keeping foreign ties plural and its policies adaptive to global tech shifts.

This technogeopolitical strategy mirrors Indonesia's broader geopolitical orientation, which seeks to preserve strategic autonomy through hedging, multi-alignment, and the reinforcement of national sovereignty. Much like its defense and diplomatic posture under President Prabowo Subianto, Indonesia's approach to global technology governance is defined by selective engagement and a refusal to align fully with either the U.S. or China. The country's openness to both Western and Chinese digital ecosystems while maintaining its regulatory independence through data protection laws and local content requirements demonstrates a consistent geopolitical logic: resisting technological dependency while leveraging external partnerships for national capacity-building. The Indonesia Digital Vision 2045, AI roadmap, and growing digital economy serve not only economic goals but also national security

imperatives, aligning with long-term defense planning and strategic autonomy frameworks as outlined in RPJPN 2025–2045 and other national development blueprints.

Moreover, this alignment underscores Indonesia's evolving understanding of sovereignty in the digital age. No longer confined to territorial integrity or military deterrence, sovereignty now encompasses control over data flows, digital infrastructure, and the domestic applicability of foreign technologies. The integration of digital policy into national development and foreign affairs reflects Indonesia's attempt to assert influence in a multipolar and interconnected global order, particularly as technological interdependence becomes a new arena of competition and vulnerability. As a result, Indonesia's geopolitical outlook that are characterized by maritime prioritization, defense modernization, multilateral diplomacy, and Global South solidarity is increasingly inseparable from its technopolitical strategies. The ability to remain digitally sovereign and geopolitically non-aligned will thus define Indonesia's resilience and relevance as a middle power navigating the fluid dynamics of 21st-century global order.

3.4. Challenges

Within the context of the U.S.-China technological rivalry, Indonesia faces a range of challenges that are not only material and structural but also normative and ideological. The foremost challenge lies in Indonesia's dependency on foreign technology, particularly in strategic sectors such as semiconductors and energy. Data shows that around 90% of Indonesia's semiconductor needs and 70% of machinery for energy production are imported. This dependence exposes the country to vulnerabilities stemming from geopolitical shocks and global supply chain disruptions. The COVID-19 pandemic revealed the fragility of Indonesia's position within a highly interconnected global system.

Beyond structural aspects, Indonesia also encounters challenges in consolidating digital sovereignty in accordance with Pancasila's values. As the state's philosophical foundation, Pancasila emphasizes social justice, independence, and deliberation in decision-making. However, the influx of foreign investment in the technological sector, whether through Chinese digital infrastructure or U.S. cybersecurity initiatives, often presents dilemmas between the pragmatic need for economic growth and the risk of technological domination that could undermine national autonomy.

Furthermore, Pancasila demands that digital transformation advance not only economic growth but also inclusivity and social justice. This challenge is evident in Indonesia's limited human capital capacity, reflected in its low rankings in the Global Innovation Index and Global Cybersecurity Index. Without significant improvements in research, innovation, and digital literacy, Indonesia risks remaining primarily a consumer of global technology rather than a sovereign producer.

Diplomatically, Indonesia faces a further dilemma between maintaining its "free and active" foreign policy and the external pressures to take sides in the U.S.-China rivalry. Pancasila, particularly through its principles of "Indonesian Unity" and "Social Justice for All Indonesian People," offers a normative framework for advocating an inclusive and equitable digital order. However, articulating these values in international arenas such as ASEAN, the G20, and BRICS requires strong technological diplomacy capacities, which are still in the process of development.

Indonesia's challenges in global technogeopolitics are multidimensional: structural dependence on foreign technologies, domestic innovation gaps, and the necessity of

embedding Pancasila's values into both national digital strategies and global technology diplomacy. Indonesia's ability to address these challenges will be decisive for its role as a sovereign, inclusive, and relevant middle power in an increasingly multipolar era.

3.5. Assessing Pancasila as Normative Paradigm towards "Wawasan Nusantara" in the Contemporary Tehcnogeopolitical Dynamics

Wawasan Nusantara, Indonesia's long-standing archipelagic outlook, has traditionally framed national resilience through territorial unity and strategic autonomy. In the digital era, this doctrine extends beyond geographic space into networks, data infrastructures, and algorithmic governance. Reinterpreted through this lens, Wawasan Nusantara becomes a conceptual bridge between territorial sovereignty and digital sovereignty, positioning Indonesia to confront risks of technological dependency and what scholars have termed "digital colonization" (Kristalia & Wibisono, 2024; Nizar, 2025). Sovereignty today is no longer merely spatial; it is infrastructural and informational.

Embedding Pancasila as the ethical foundation of this reinterpretation is essential. The principles of Just and Civilized Humanity (Kemanusiaan yang Adil dan Beradab) and Social Justice (Keadilan Sosial) redirect national strategies, such as Indonesia Digital Vision 2045 and the National AI Strategy (Stranas KA), toward inclusive development, equitable technological access, and protection of personal data. These values challenge techno-nationalist models that reduce technology policy to efficiency or competitiveness, often at the expense of fairness and ethics. In contrast, Pancasila repositions technology as a moral-political project where innovation is inseparable from justice and human dignity.

Equally, the principles of People's Sovereignty (*Kerakyatan*) and the Unity of Indonesia (Persatuan Indonesia) *legitimize* Indonesia's hedging strategy amid the U.S.-China rivalry. Rather than aligning unilaterally, Indonesia leverages its autonomy to promote equitable global digital governance within ASEAN, the G20, and the UN. This move reflects *not only* strategic pragmatism but also normative agency, that seeking to influence global rules rather than simply adapt to them. This perspective is supported by scholarship that reconceptualizes hedging not merely as a passive, risk-averse tactic, but as an active normative strategy through which middle powers can preserve autonomy while proactively shaping the regional order in line with their preferred principles (Lee, 2023). Indonesia frames its international engagement around the consistent promotion of dialogue and inclusiveness, establishing these as central characteristics of its approach to norm advocacy, especially in the case of ASEAN and Bali Democracy Forum for instance, as Grzywacz (2023) noted. Indonesia is guided by cultural traditions as well as regional expectations (Grzywacz, 2023).

Foreign policy theory in general has often emphasized pragmatism as the underlying logic of state behavior (Pratt, et al., 2021). Realist perspectives frame foreign policy as the pursuit of survival and autonomy under conditions of power asymmetry , where hedging and balancing become rational strategies (Festenstein, Pragmatism, Realism and Moralism, 2016). Liberal approaches highlight how states employ institutions, regimes, and cooperative frameworks to mitigate risks, maximize economic benefits, and enhance predictability in an interdependent system (Festenstein, 2010; Hay, 2010). Constructivist readings shift the lens to identity, norms, and shared meanings, underscoring that states' external behavior is not reducible to material interests but also reflects self-conceptions and legitimizing narratives (Haas & Haas, 2002). Finally,

critical approaches interrogate how power, inequality, and hegemony shape the very structures within which foreign policy is made, pointing to possibilities for counter-hegemonic practices and alternative normative orders (Ray, 2004; Frega, 2014).

Broader debates on foreign policy theory frequently highlight pragmatism as a flexible orientation bridging realism, liberalism, and constructivism. Pragmatism emphasizes adaptation to indeterminate contexts, prioritizing workable solutions over rigid ideological commitments. Yet recent IR scholarship urges that pragmatism be understood not merely as a tactical disposition but as a substantive framework that unites empirical analysis with normative valuation. As Pratt et al. (2021) argue, pragmatism offers both explanatory and moral resources by centering on valuation, i.e. the process of determining which values ought to guide action, thereby integrating ethical commitments into foreign policy practice. Jane Addams's activism illustrates this by showing how democratic experimentation and social intelligence can reshape international norms through practice. From this perspective, pragmatism becomes not only an instrument of flexibility but also a vehicle for embedding ethical visions into global politics (Pratt, et al., 2021).

Put in these perspectives, foreign policy theories traditionally explain Indonesia's external behavior through the same pragmatic lenses. From a realist perspective, hedging in the U.S.-China rivalry reflects the imperative of survival and the maximization of autonomy under conditions of asymmetric power (Anwar, 2023). Indonesia avoids full alignment because binding commitments would expose it to vulnerabilities, especially in critical technologies. A liberal approach, meanwhile, interprets Indonesia's multilateral activism in ASEAN or the G20 as rational institutionalism, using cooperative frameworks to mitigate risks and gain collective bargaining power (Anwar, 2023). Both perspectives capture the logic of prudence and adaptability that underlies Indonesia's pragmatic diplomacy.

Yet, constructivist readings emphasize that Indonesia's foreign policy is also shaped by identity and normative commitments. The self-image of being a non-aligned, independent, and solidaristic actor informs its hedging strategy just as much as material constraints (Grzywacz, 2023). *Wawasan Nusantara* and Pancasila thus function not only as rhetorical tropes but also as ideational resources that shape policy preferences and legitimizing narratives.

Critical approaches push the analysis further, highlighting how normative frameworks like Pancasila challenge dominant logics of techno-nationalism and neoliberal globalization. They suggest that Indonesia's invocation of justice, humanity, and sovereignty in digital governance is not merely tactical but a subtle attempt to reframe the normative parameters of global techno-politics. In this sense, what appears as pragmatic hedging also contains seeds of counter-hegemonic resistance-seeking to pluralize the normative order (Frega, 2014) beyond Western liberalism and Chinese techno-statism.

The global shift towards a multipolar order has created space for middle powers to articulate alternative normative frameworks, moving beyond the binaries of the superpower rivalry (Acharya, 2014). Placed in this comparative perspective, Indonesia's approach reveals its distinctiveness within the Global South. By these elaboration, placed in comparative perspective, Indonesia's approach reveals its distinctiveness within the Global South. For instance, Brazil's Marco Civil da Internet (2014) offers a *rights-based model* centered on freedom of expression, privacy, and net neutrality, embodying liberal-constitutional values (Rossini, Cruz, & Doneda, 2015; Hoskins, 2024). India's Digital India strategy emphasizes infrastructural expansion and

economic modernization, often aligning with techno-nationalist priorities while sidestepping deeper normative debates (Zhang & Hu, 2024). Indonesia, by contrast, grounds its digital strategy in Pancasila, a hybrid ethical framework that integrates solidarity, justice, and sovereignty. As for the impact, this integration positions Indonesia not merely as a regulatory innovator like Brazil, or a developmentalist state like India, but as a normative actor that *combines ideological heritage with policy practice*.

This synthesis underscores that Pancasila provides a unique alternative to both Western liberal universalism and Chinese techno-statism, while also distinguishing Indonesia from fellow Global South actors. Unlike models that privilege rights (Brazil) or growth (India), Pancasila articulates a more holistic paradigm. It emphasizes that technological power must advance dignity, justice, and peace rather than domination or exclusion.

Ultimately, embedding Pancasila into Wawasan Nusantara enables Indonesia to transcend reactive adaptation. It positions the country as a normative entrepreneur in techno-geopolitics, capable of resisting structural dependency while offering a coherent ethical vision for an inclusive digital order. By linking conceptual discourse to concrete policies, Indonesia advances a techno-diplomatic strategy that asserts its sovereignty, contributes to Global South pluralism, and enriches the normative contestation shaping the future of global digital governance.

This synthesis highlights how Pancasila provides a unique normative alternative. Unlike Western liberal universalism or Chinese techno-statism, or even it's Global South counterparts like Brazil with models that privilege rights or India with her growth approach. Pancasila frames digital governance as both a *national solidarity project* and a *humanistic endeavor*. It emphasizes that technological power must serve dignity, justice, and peace rather than control or exclusion. By integrating Pancasila into *Wawasan Nusantara* and aligning it with Indonesia's hedging strategy, the country articulates a normative stance that is distinct within the Global South.

Ultimately, this integration enables Indonesia to move beyond descriptive policy adaptation. It positions the country as a *normative actor* in techno-geopolitics, i.e. one that resists structural dependency while advancing an ethical vision of a just and inclusive digital order. This approach sharpens the link between conceptual discourse and policy practice, clarifying how Pancasila can serve as a compass for Indonesia's techno-diplomatic engagement.

While the integration of Pancasila values into *Wawasan Nusantara* and Indonesia's technogeopolitical strategy offers a noble ethical-normative framework, there are concerns that Pancasila is often employed symbolically and rhetorically (Hadiz, 2004), rather than being substantively implemented in actual technology and foreign policy decisions. For example, although the government promotes the principle of "social justice" within its digital vision, the distribution of digital infrastructure and technological access remains highly uneven across the archipelago, particularly between western and eastern regions. This disparity raises questions as to whether Pancasila truly informs operational policy or merely serves as a tool for legitimizing state initiatives (Hadiz, 2004).

Furthermore, the ethical approach grounded in Pancasila frequently clashes with the strategic realities Indonesia faces amid the global technological rivalry. When forced to choose between technological investments from the U.S. or China, decisions are often driven by short-term economic interests rather than long-term ethical commitments. This creates a dilemma between safeguarding digital sovereignty based

on Pancasila's principles and addressing pragmatic needs to secure critical infrastructure from major powers with their own strategic agendas. In this context, Indonesia's hedging position can be seen as insufficiently bold in applying Pancasila as a normative instrument to guide policy direction meaningfully.

Additionally, the emphasis on Pancasila values in Indonesia's technology diplomacy is not yet matched by sufficient institutional capacity or domestic research development. Efforts to build technological self-reliance as envisioned in the Stranas KA and Indonesia Vision 2045 remain constrained by low R&D expenditure (~0.2% of GDP) and weak synergy between universities, industries, and government agencies. Without structural capacity building and a robust innovation ecosystem, Pancasila risks remaining an idealistic framework incapable of contending with the harsh realities of global technological geopolitics. Thus, the main challenge lies not in the validity of Pancasila itself, but in the state's consistency and political will to translate its values into visionary and globally competitive policies.

4. Conclusion

This study has argued that Indonesia's greatest challenge in global techno-geopolitics is not only structural dependency on external powers, but also the danger of reducing its normative resources to symbolic rhetoric. Pancasila, frequently invoked as an ideological marker in foreign policy discourse, risks being confined to ceremonial references unless reinterpreted as a substantive framework for technology diplomacy. Elevating this distinction between rhetorical and substantive uses of Pancasila is the central contribution of this paper. It shows that Pancasila can serve as more than historical symbolism. It can operate as an ethical paradigm that shapes Indonesia's positioning within digital sovereignty debates, global supply chain politics, and multilateral governance.

The scholarly contribution lies in bridging two strands of literature often treated separately: foreign policy pragmatism and normative international relations theory. By embedding Pancasila within *Wawasan Nusantara*, this study demonstrates how local epistemologies can enrich global debates on digital governance, offering an alternative to both liberal universalism and techno-statism. Future research could expand this line of inquiry by comparing Indonesia with other Global South states, such as Brazil, India, or South Africa, that similarly mobilize normative traditions to contest asymmetries in the digital order. Such comparative work would help clarify whether Pancasila represents a unique national paradigm or part of a broader Southern normative turn in international relations.

For policymakers, the analysis yields three prescriptive insights. *First*, foreign technology policy should institutionalize Pancasila substantively by embedding its principles into measurable benchmarks, such as equity in digital access, human dignity in AI governance, and justice in data-sharing frameworks. *Second*, hedging in the U.S.-China rivalry must be reframed not as passive balancing but as proactive normative entrepreneurship, using ASEAN, the G20, and UN platforms to advance inclusive digital norms. *Third*, Indonesia's domestic digital strategies, such as Indonesia Digital Vision 2045 and Stranas KA, should be consistently evaluated against Pancasila's ethical commitments to ensure they do not replicate techno-nationalist exclusivity or exacerbate inequality.

In conclusion, the primary finding of this study is that Indonesia's techno-diplomacy hinges on whether Pancasila is treated as rhetoric or as substance. If confined to rhetoric, it will remain a legitimizing device without transformative impact. If embraced substantively, Pancasila can function as a compass for resisting dependency, guiding policy innovation,

and articulating a Global South vision of digital governance grounded in justice, humanity, and sovereignty. This shift from symbolic invocation to normative practice is not only Indonesia's challenge but also its opportunity to contribute to a plural and inclusive digital order.

References

Acharya, A. (2014). *The end of American world order*. Polity Press.

Acharya, A., & Buzan, B. (2017). Why is there no Non-Western International Relations Theory? Ten years on. *International Relations of the Asia-Pacific, 17*(3), 341–370. https://doi.org/10.1093/irap/lcx006

Acharya, A., & Buzan, B. (2019). *The making of global international relations: Origins and evolution of IR at its centenary.* Cambridge University Press. https://doi.org/10.1017/9781108647670

Agastia, I. G. (2020). Understanding Indonesia's role in the 'ASEAN Outlook on the Indo-Pacific': A role theory approach. *Asia & the Pacific Policy Studies, 7*(3), 293-305. https://doi.org/10.1002/app5.308

Akmaliza, A., Nehe, A. S., Sihotang, A. M., Hakim, B., Purmadana, E., Praswadi, H., Sabina, S. (2020). Geopolitik Indonesia. *Jurnal Riset Pendidikan dan Pengajaran, 1*(2), 92–109.

Anwar, D. F. (2023). Indonesia's hedging plus policy in the face of China's rise and the US-China rivalry in the Indo-Pacific region. In K. He & H. Feng (Eds.), *Navigating international order transition in the Indo-Pacific* (125–151). Routledge. https://doi.org/10.4324/9781003431930

Asian Development Bank. (2020, March). *Innovate Indonesia: Unlocking growth.* https://www.adb.org/sites/default/files/publication/575806/innovate-indonesia-unlocking-growth.pdf

Capri, A. (2024). *Techno-nationalism: How it's reshaping trade, geopolitics and society.* John Wiley & Sons.

Caroline, E. (2021). Indonesia's global maritime fulcrum: From hedging to underbalancing. *Journal of Asian Security and International Affairs, 8*(3), 413–432. https://doi.org/10.1177/23477970211041661

Christakis, T. (2020). European digital sovereignty: A new regulatory paradigm? *European Journal of Risk* Regulation*, 11*(4), 731–747. https://doi.org/10.1017/err.2020.56

Cox, R. W. (1981). Social forces, states and world orders: Beyond international relations theory. *Millennium: Journal of International Studies, 10*(2), 126–155. https://doi.org/10.1177/03058298810100020

Danilin, I. V. (2021). The U.S.-China technological war. *Russia in Global Affairs, 19*(4), 78–96. https://doi.org/10.31278/1810-6374-2021-19-4-78-96

Diesen, G. (2021). *Great power politics in the Fourth Industrial Revolution: The* geoeconomics *of technological sovereignty.* I. B. Tauris.

Escobar, A. (2008). *Territories of difference: Place, movements, life, redes.* Duke University Press.

Festenstein, M. (2010). Pragmatism, inquiry and political liberalism. *Contemporary Political Theory, 9*(1), 25–44. https://doi.org/10.1057/cpt.2009.6

Festenstein, M. (2016). Pragmatism, realism and moralism. *Political Studies Review, 14*(1), 39–49. https://doi.org/10.1177/1478929915607890

Flyverbom, M. (2019). *The digital prism: Transparency and managed visibilities in a datafied world.* Cambridge University Press. https://doi.org/10.1017/9781108666426

Frega, R. (2014). Between pragmatism and critical theory: Social philosophy today. *Human Studies, 37*(1), 57–82. https://doi.org/10.1007/s10746-013-9290-0

Gill, D. M. (2023). ASEAN outlook on the Indo-Pacific: Motivations, opportunities, and challenges. In S. Singh & R. Marwah (Eds.), *China and the Indo-Pacific: Maneuvers and manifestations* (75–91). Palgrave Macmillan. https://doi.org/10.1007/978-981-19-7521-9

Gill, S. R., & Law, D. (1988). Global hegemony and the structural power of capital. *International* Studies *Quarterly, 33*(4), 475–499. https://doi.org/10.2307/2600523

Grzywacz, A. (2023). Recognising Indonesia's actorness: Challenging and contributing to norm diffusion. In Š. Kolmašová & R. Reboredo (Eds.), *Norm diffusion beyond the West: Norm research in international relations* (97–116). Springer. https://doi.org/10.1007/978-3-031-25009-5_6

Hadiz, V. R. (2004). The failure of state ideology in Indonesia: The rise and demise of Pancasila. In B. H. Chua (Ed.), *Communitarian politics in Asia* (162–175). Routledge.

Haas, P. M., & Haas, E. B. (2002). Pragmatic constructivism and the study of international institutions. *Millennium: Journal of International Studies, 31*(3), 573–601. https://doi.org/10.1177/03058298020310031001

Hay, C. (2012). Consonances between liberalism and pragmatism. *Transactions of the Charles S. Peirce Society, 48*(2), 141–168. https://doi.org/10.2979/trancharpeirsoc.48.2.141

Heryanto, G. (2021). Pancasila as ideological resilience in Indonesia's foreign policy. *Indonesian Journal of International Relations, 5*(1), 1-18. https://doi.org/10.33021/ijir.v5i1.1435

Hoffmann, S. (2022). The politics of digital sovereignty. *Big Data & Society, 9*(1). https://doi.org/10.1177/20539517221106599

Hoskins, G. T. (2024). Far right > digital rights: The precarity of free expression, internet access, net *neutrality* and data privacy in Bolsonaro's Brazil. *Javnost–The Public, 31*(2), 309–326. https://doi.org/10.1080/13183222.2024.2346704

Institute for Essential Services Reform. (2023). *Indonesia energy transition outlook 2023.* https://iesr.or.id/en/pustaka/indonesia-energy-transition-outlook-ieto-2023/

International Telecommunication Union. (2024). *Global cybersecurity index.* https://www.itu.int/en/ITU-D/Cybersecurity/pages/global-cybersecurity-index.aspx

International Trade Administration. (2021, December 9). *Indonesia: Digital economy opportunities.* https://www.trade.gov/market-intelligence/indonesia-digital-economy-opportunities

Irsadanar, R. J. (2023). Japan and Indonesia as middle powers in Indo-Pacific: Towards AOIP–FOIP synergy. *Jurnal Hubungan Luar Negeri, 8*(2), 1–17.

Isnaini, D. R. (2023). Dampak kebijakan geopolitik & geostrategis China di Asia Pasifik terhadap Indonesia. *The International Journal of Pegon: Islam Nusantara Civilization, 11*(3), 111–124. https://doi.org/10.51925/inc.v11i03.97

Kementerian Komunikasi dan Informatika. (2021). *Visi Indonesia Digital 2045.* Republik Indonesia.

Kementerian PPN/Bappenas. (2019). *Rencana pembangunan jangka menengah nasional (RPJMN) 2020–2024.* Republik Indonesia.

Kristalia, B. Y., & Wibisono, I. W. (2024). Ancaman siber dan penguatan kedaulatan digital Indonesia dari perspektif geopolitik digital. *Jurnal Ilmiah Multidisiplin, 3*(2), 83–93. https://doi.org/10.56127/jukim.v3i02.1584

Lalisang, A. E., & Candra, D. S. (2020). *Indonesia's global maritime fulcrum & China's belt and* road *initiative.* Friedrich-Ebert-Stiftung. https://library.fes.de/pdf-files/bueros/indonesien/16770.pdf

Lee, K. (2023). Hedging as normative strategy: Middle powers in the Indo-Pacific. *The Pacific Review, 36*(5), 1021–1048. https://doi.org/10.1080/09512748.2022.2059115

Liubimova, A. (2025). From absolute to relative and cognitive space: Evolution of geopolitics. *International Quarterly of Geopolitics.* https://doi.org/10.22034/igq.2025.489248.1976

Luo, Y., & Van Aasche, A. (2023). The rise of techno-geopolitical uncertainty: Implications of the United States CHIPS and Science Act. *Journal of International Business Studies, 54*(6), 1423–1440. https://doi.org/10.1057/s41267-023-00620-3

Malik, M. (2012). Technopolitics: How technology shapes relations among nations. *The* Interface *of Science, Technology & Security, 12*, 21–29.

Mashayekh, J. (2025). Techno-regionalism in the post-globalisation era: Linking technological cooperation and geopolitical tensions. *Asian Journal of Technology Innovation, 1–30.*

National Research and Innovation Agency (BRIN). (2024). *Indonesia's research and* innovation *roadmap 2045.* https://brin.go.id/publication/research-roadmap-2045

Novick, P. (1988). *That noble dream: The "objectivity question" and the American historical* profession. Cambridge University Press.

Organisation for Economic Co-operation and Development (OECD). (2023). *Digital economy outlook 2023.* OECD Publishing. https://doi.org/10.1787/8b9c21c2-en

Pew Research Center. (2024). *Public trust in government: 1958–2024.* https://www.pewresearch.org/politics/2024/public-trust-in-government-1958-2024

Pohl, M. (2023). Pragmatism in international relations: Ethics, pluralism, and practice. *Ethics & International Affairs, 37*(2), 145–162. https://doi.org/10.1017/S0892679423000102

Prakoso, B., & Santosa, A. D. (2022). Pancasila as a moral foundation for Indonesia's foreign policy: Between idealism and pragmatism. *Jurnal Ilmu Sosial dan Ilmu Politik, 26*(1), 43–58. https://doi.org/10.22146/jsp.71234

Puspitasari, D. (2024). Digital sovereignty and the ethics of technology in Indonesia: A Pancasila perspective. *Journal of Asian Governance Studies, 5*(2), 221–239. https://doi.org/10.1016/j.jags.2024.08.002

Rahman, A., & Yusuf, I. (2024). Technological nationalism and strategic autonomy in Southeast Asia. *Asian Politics & Policy, 16*(3), 415–433. https://doi.org/10.1111/aspp.12789

Rusmulyani, E. (2024). Strengthening Pancasila values and professional ethics in Indonesia's public service education. *Journal of Civic and Moral Studies, 9*(2), 77–94. https://doi.org/10.1016/j.jcms.2024.05.003

Scholvin, S., & Wigell, M. (2018). Power politics and economic interests: The Trump administration's techno-geopolitics towards China. *International Affairs, 94*(5), 1131-1150. https://doi.org/10.1093/ia/iiy145

Setiawan, D., & Nugroho, T. (2023). Ethical historiography in Indonesia: Revisiting objectivity through Pancasila values. *Indonesian Journal of Ethics and Social Research, 5*(1), 12–26. https://doi.org/10.1016/j.ijesr.2023.02.004

Situmorang, R. (2022). The role of Pancasila in shaping Indonesian historiography. Paramita*: Historical Studies Journal, 32*(1), 85–98. https://doi.org/10.15294/paramita.v32i1.34216

Smith, R. (2021). The ethics of history: Responsibility and collective memory. *History and* Theory*, 60*(4), 33–52. https://doi.org/10.1111/hith.12256

Snyder, J. (2024). Reassessing historical objectivity in the post-truth era. *History and Memory,* 36(2), 201–223. https://doi.org/10.2979/histmemo.36.2.09

Timmer, J. (2024). Decolonizing historical methodology: Pancasila and the ethics of interpretation. *Journal of Southeast Asian Studies, 55*(1), 41–58. https://doi.org/10.1017/S0022463424000037

United Nations Educational, Scientific and Cultural Organization (UNESCO). (2023). *Ethics of artificial intelligence in Southeast Asia.* https://unesdoc.unesco.org/ark:/48223/pf0000384762

United Nations. (2022). *Our common agenda: Report of the Secretary-General.* https://www.un.org/en/content/common-agenda-report

Wahid, M. (2023). Pancasila and the reconstruction of Indonesian ethics: An interpretive approach. *Asian Journal of Philosophy and Ethics, 9*(3), 115–132. https://doi.org/10.1016/j.ajpe.2023.06.005

World Intellectual Property Organization (WIPO). (2023). *World Intellectual Property Indicators 2023.* https://www.wipo.int/edocs/pubdocs/en/wipo_pub_941_2023.pdf

Wu, X., & Ruan, X. (2023). Techno-nationalism and its geopolitical implications: A comparative study of the US and China. *Geopolitics, 28*(3), 1125–1150. https://doi.org/10.1080/14650045.2022.2085163

Zhang, W., Zhang, W., Daim, T. U., & Bakry, D. (2025). How do Chinese high-tech firms respond to the techno-geopolitics age? From knowledge seeking to knowledge creation. *Technovation*, 143, 103205. https://doi.org/10.1016/j.technovation.2025.103205

Zuboff, S. (2023). *The age of surveillance capitalism: The fight for a human future at the new* frontier *of power.* PublicAffairs.