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AI NATIONALISM IN SHAPING GLOBAL GOVERNANCE

M. Roehman Zainur Riedho
Magister Kebijakan Publik Universitas Airlangga
roehmanriedho@gmail.com

Abstrak: Kebangkitan nasionalisme kecerdasan buatan (*AI nationalism*) secara fundamental tengah membentuk ulang tata kelola global, menciptakan lanskap geopolitik baru yang ditandai oleh kompetisi teknologi. Penelitian ini mengkaji bagaimana negara-negara semakin memanfaatkan kecerdasan buatan bukan hanya sebagai alat, tetapi juga sebagai pilar kekuatan nasional, strategi ekonomi, dan identitas. Melalui analisis kualitatif dengan pendekatan konstruktivis, studi ini menelaah narasi historis, landasan teoretis, dan manifestasi kebijakan dari nasionalisme AI. Metode *purposive sampling* digunakan untuk memilih studi kasus Amerika Serikat, Tiongkok, Rusia, India, dan Indonesia, yang mewakili spektrum aktor global mulai dari negara adidaya hingga kekuatan ekonomi baru yang berpengaruh. Temuan penelitian menunjukkan bahwa nasionalisme AI bukanlah fenomena yang bersifat monolitik, sehingga diajukan tipologi yang terdiri dari tiga model berbeda: Supremasi Geopolitik, *State-Led Developmentalism*, dan Kedaulatan Pragmatis. Studi ini menunjukkan bahwa warisan historis rivalitas teknologi dan kolonialisme terus membentuk kebijakan kontemporer, menciptakan lingkungan kompetitif bernuansa *zero-sum* yang memecah belah kerangka regulasi internasional dan memperdalam asimetri kekuasaan. Penelitian ini menyimpulkan bahwa meskipun arah perkembangan nasionalisme AI mendorong inovasi, ia juga membawa risiko signifikan terhadap stabilitas global dan pembangunan yang berkeadilan. Penelitian ini menegaskan urgensi model tata kelola hibrida berbasis pemangku kepentingan multipihak yang mampu mendamaikan kepentingan nasional dengan kebutuhan kerja sama internasional, sehingga potensi transformatif AI dapat dimanfaatkan untuk kepentingan kolektif global, bukan untuk memperkuat hierarki yang sudah ada.

Kata Kunci: Nasionalisme AI, Tata Kelola Global, Geopolitik, Kedaulatan Digital, Tekno-nasionalisme

Abstract: The rise of AI nationalism is fundamentally reshaping global governance, creating a new geopolitical landscape defined by technological competition. This research investigates how nations are increasingly leveraging artificial intelligence not just as a tool, but as a cornerstone of national power, economic strategy, and identity. Through a qualitative analysis employing a constructivist lens, this study examines the historical narratives, theoretical underpinnings, and policy manifestations of AI nationalism. It utilizes purposive

sampling to select case studies of the United States, China, Russia, India, and Indonesia, representing a spectrum of global actors from superpowers to key emerging economies. The findings reveal that AI nationalism is not monolithic, leading to a proposed typology of three distinct models: Geopolitical Supremacy, State-Led Developmentalism, and Pragmatic Sovereignty. The study demonstrates how historical legacies of technological rivalry and colonialism continue to shape contemporary policies, fostering a zero-sum competitive environment that fragments international regulatory frameworks and deepens power asymmetries. It concludes that the current trajectory of AI nationalism, while driving innovation, poses significant risks to global stability and equitable development. This research affirms the urgent need for hybrid, multistakeholder governance models that can reconcile national interests with the necessity for international cooperation, ensuring that AI's transformative potential serves collective global interests rather than entrenching existing hierarchies.

Keywords: *AI Nationalism, Global Governance, Geopolitics, Digital Sovereignty, Techno-nationalism*

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INTRODUCTION

The emergence of AI nationalism represents a significant paradigm shift in how nations approach technological development, one with profound implications for global governance, security frameworks, and international cooperation. This research examines how countries increasingly view artificial intelligence not merely as a technological tool but as a cornerstone of national identity, economic prosperity, and geopolitical power. This study illuminates the complex dynamics driving this phenomenon and its consequences for the international system by analyzing historical contexts, theoretical foundations, and policy manifestations.

The rapid advancement of artificial intelligence has triggered a fundamental transformation in international relations, with nations increasingly framing AI development as a zero-sum competition for technological supremacy. Despite the growing scholarly attention to AI's geopolitical impact, significant gaps remain in understanding how AI nationalism specifically reshapes global governance structures and exacerbates power asymmetries. While existing literature has thoroughly examined national AI strategies and the technical dimensions of AI

development, less attention has been paid to how nationalist approaches to AI collectively transform the international order and challenge collaborative frameworks.

This research addresses this gap by investigating how AI nationalism emerges from historical narratives of technological supremacy, examining how it reproduces and reinvents colonial legacies and racial hierarchies. By analyzing the tensions between nationalist impulses and the necessity for global cooperation, this study contributes to developing more nuanced frameworks for understanding technology's role in international relations. The central research questions include: How do historical narratives shape contemporary manifestations of AI nationalism? What theoretical frameworks best explain the relationship between AI, nationalism, and global governance? What are the implications of AI nationalism for international cooperation and power distribution in the global system?

Scholarly discourse on AI's geopolitical dimensions has evolved significantly in recent years. It characterizes AI as a transformative technology with the potential to shift the international balance of power, much like previous military-technological revolutions.[1] [2] [3] This perspective is echoed in Ian Hogarth's influential 2018 essay on "AI Nationalism," which predicted that as AI's economic and military significance expands, governments would increasingly take measures to bolster their domestic AI industries while restricting foreign access to talent, data, and technology.[4] Hogarth's predictions have largely materialized, with escalating rhetoric around an "AI arms race" portraying development as a winner-takes-all competition with significant economic and security implications.

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[1] Alp Cenk Arslan, 'AI Nationalism: A Geopolitical Race for Technological Supremacy', 1 November 2024, https://www.linkedin.com/pulse/ai-nationalism-geopolitical-race-technological-supremacy-arslan-k2cyf.
[2] Susan Ariel Aaronson, 'The Age of AI Nationalism and Its Effects' (Waterloo, September 2024), https://www.cigionline.org/static/documents/Aaronson.pdf.
[3] M.C. Horowitz, 'When Speed Kills: Lethal Autonomous Weapon Systems, Deterrence and Stability', *Journal of Strategic Studies* 42, no. 6 (2019): 764–88, https://doi.org/10.1080/01402390.2019.1621174.
[4] Ian Hogarth, 'AI Nationalism ', 13 June 2018, https://www.ianhogarth.com/blog/2018/6/13/ai-nationalism.

Cave and ÓhÉigeartaigh critically analyze this competitive framing, warning that race narratives may incentivize rushed development without adequate safety considerations.[5] Similarly, Johnson examines how perceptions of an "AI arms race" influence national security strategies and defense planning, often leading to policies that prioritize speed over safety and cooperation.[6] These analyses highlight how the competitive framing of AI development shapes policy responses and potentially undermines collaborative governance efforts.

The concept of technological nationalism has deep historical roots that predate the AI revolution. Edgerton provides a historical perspective on how nations have tied technological development to national identity and power projection throughout the modern era.[7] This historical context helps explain how AI nationalism reproduces earlier narratives around technological superiority and national destiny.

The governance challenges posed by AI nationalism have been examined from multiple perspectives. Cihon analyzes existing international institutions and their capacity to govern emerging AI technologies, finding significant gaps in the current governance architecture.[8] This assessment is reinforced by Aaronson's report for the Center for International Governance Innovation, which details how AI nationalism is reshaping global trade, innovation, and governance frameworks.[9] The report highlights how nationalistic policies like export restrictions on advanced chips, data localization requirements, and protectionist measures intended to secure national AI prowess can distort global AI trade and hinder innovation.

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[5] Stephen Cave and Seán Ó Héigeartaigh, 'An AI Race for Strategic Advantage: Rhetoric and Risks', in *AAAI / ACM Conference on Artificial Intelligence, Ethics And Society* (SSRN, 2018), https://ssrn.com/abstract=3446708.
[6] James Johnson, 'Artificial Intelligence: A Threat to Strategic Stability', *The Journal of Strategic Studies*, 2021, https://doi.org/10.2307/26891882.
[7] David E.H. Edgerton, 'The Contradictions of Techno-Nationalism and Techno-Globalism: A Historical Perspective', *New Global Studies* 1, no. 1 (2007), https://doi.org/10.2202/1940-0004.1013.
[8] Peter Cihon, Matthijs M. Maas, and Luke Kemp, 'Fragmentation and the Future: Investigating Architectures for International AI Governance', *Global Policy* 11, no. 5 (1 November 2020): 545–56, https://doi.org/10.1111/1758-5899.12890.
[9] Aaronson, 'The Age of AI Nationalism and Its Effects'.

The tension between national regulatory approaches and international coordination is explored by Jelinek et al.,[10] who propose models for governance coordinating committees to facilitate cooperation while respecting national sovereignty. Similarly, Smuha examines diverging regulatory approaches across major jurisdictions, highlighting how these differences reflect varying values and priorities that complicate efforts to establish global standards.[11]

Recent research by Roberts et al.[12] explores how Western nations position their AI initiatives as essential for preserving democratic values and Western technological leadership. This framing often contains implicit assumptions about the relationship between political systems and technological innovation, reproducing Cold War narratives about ideological competition. Complementing this perspective, Roberts et al. examine China's approach to AI development, analyzing how Chinese policy documents frame AI as crucial for national rejuvenation and global influence.[13] These analyses reveal how AI nationalism often builds upon existing national narratives and historical self-conceptions.

This study employs a qualitative research approach to examine the complex phenomenon of AI nationalism. A qualitative methodology is particularly appropriate for this research as it allows for an in-depth analysis of the historical contexts, policy frameworks, and discursive practices that constitute AI nationalism.[14] By focusing on the interpretation of texts,

[10] Thorsten Jelinek, Wendell Wallach, and Danil Kerimi, 'G20 Coordinating Committee for the Governance of Artificial Intelligence' (Taihe Institute, 20 May 2020), https://www.researchgate.net/publication/342522640.
[11] Nathalie Smuha, 'Beyond a Human Rights-Based Approach to AI Governance: Promise, Pitfalls, Plea', *Philosophy & Technology* 34 (1 November 2021): 1–14, https://doi.org/10.1007/s13347-020-00403-w.
[12] Huw Roberts et al., 'Achieving a "Good AI Society": Comparing the Aims and Progress of the EU and the US', *Science and Engineering Ethics* 27, no. 6 (1 December 2021): 1–25, https://doi.org/10.1007/S11948-021-00340-7/TABLES/2.
[13] Huw Roberts et al., 'The Chinese Approach to Artificial Intelligence: An Analysis of Policy and Regulation', *SSRN Electronic Journal*, 1 May 2020, https://doi.org/10.2139/ssrn.3469783.
[14] John W. Creswell and J. David Creswell, *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, *Research Defign: Qualitative,*

policies, and narratives, this approach enables a nuanced understanding of how AI nationalism shapes international relations and global public policy.

The selection of the United States, China, Russia, India, and Indonesia as case studies is based on a purposive sampling strategy designed to capture the diverse manifestations of AI nationalism globally. These states are not chosen arbitrarily but because they represent distinct archetypes in the geopolitical landscape of AI. The United States and China are selected as the two leading AI superpowers, embodying a direct, high-stakes rivalry that defines the dominant narrative of geopolitical competition in AI.[15] Russia represents a resurgent military power leveraging AI to reclaim its great power status and challenge the existing international order, prioritizing defense applications over commercial ones.[16]

In contrast, India and Indonesia are included as representatives of the Global South, showcasing alternative models of AI nationalism that are primarily developmental and sovereignty-focused. India's approach emphasizes "frugal innovation" and South-South cooperation, while Indonesia's strategy reflects a pragmatic balancing act between major powers, driven by the goal of achieving digital sovereignty and economic transformation.[17] Together, this selection provides a comprehensive spectrum of AI nationalist strategies, from the top-tier competitors to key emerging economies, allowing for a robust comparative analysis and the development of a nuanced typology of AI nationalism.[18] This approach

Quantitative, and Mixed M Ethods Approaches, 5th ed. (California: SAGE Publications Ltd., 2018).

[15] Brian C. H. Fong and Chong Ja Ian, *The Routledge Handbook of Great Power Competition* (London: Routledge, 2024), https://doi.org/10.4324/9781003340997.

[16] Margarita Konaev and Samuel Bendett, 'Russian AI-Enabled Combat: Coming to a City Near You?', War on Rocks, 2019, https://warontherocks.com/2019/07/russian-ai-enabled-combat-coming-to-a-city-near-you/.

[17] Christoph Schulze et al., 'Public Health Leadership in a Vuca World Environment: Lessons Learned during the Regional Emergency Rollout of Sars-Cov-2 Vaccinations in Heidelberg, Germany, during the Covid-19 Pandemic', *Vaccines* (MDPI, 1 August 2021), https://doi.org/10.3390/vaccines9080887.

[18] Marianne Lu and Sam Winter-Levy, 'The Other AI Race: An Export Promotion Strategy for the Global South', Carnegie Endowment for International

ensures that the findings are not limited to a bipolar U.S.-China framework but reflect the multipolar and multifaceted reality of global AI governance.

The research is guided by a constructivist epistemology, which recognizes that technologies and their governance are socially constructed through political processes, cultural narratives, and institutional practices.[19] This perspective allows the study to examine how AI technologies become embedded in nationalist discourses and how these discourses, in turn, shape policy decisions and international relations.

This research employs multiple data collection methods to provide a comprehensive analysis of AI nationalism. The primary approach is document analysis, which systematically examines key policy documents—such as national AI strategies, white papers, legislative texts, and official statements from government agencies—selected for their relevance to AI policy and international relations, with a focus on major AI powers like the United States, China, the European Union, Russia, and India. This method reveals how these texts frame AI development in nationalist terms and position national AI initiatives within broader geopolitical narratives. Complementing this, a systematic review of academic literature was conducted to identify key theoretical frameworks, empirical findings, and ongoing debates across disciplines including international relations, science and technology studies, and political science. Additionally, media content analysis was used to capture public discourse by examining major international news outlets, technology publications, and policy forums, thereby illuminating how nationalist narratives around AI are constructed and contested. Focused case studies of specific AI initiatives, regulatory frameworks, and international conflicts further illustrate how AI nationalism manifests in practice and influences international relations.

Peace, 2025, https://carnegieendowment.org/research/2025/07/the-other-ai-race-an-export-promotion-strategy-for-the-global-south?lang=en.

[19] Wiebe E. Bijker, Thomas P. Hughes, and Trevor Pinch, *New Directions in the Sociology and History of Technology*, ed. Deborah G. Douglas et al. (The MIT Press, 2012), http://www.jstor.org/stable/j.ctt5vjrsq.

For data analysis, several qualitative techniques were employed. Thematic analysis identified recurring motifs, arguments, and narratives through iterative coding of documents and texts. Discourse analysis explored how language constructs social realities and power relations by examining the framing of AI development within nationalist discourses, which in turn legitimizes certain policy approaches while delegitimizing others. Comparative analysis was used to highlight differences and commonalities in the manifestation of AI nationalism across countries and regions, while historical context analysis situated contemporary AI nationalism within the broader historical narratives of technological development, colonialism, and international competition. Together, these methods and techniques provide a robust and nuanced framework for understanding the multifaceted impact of AI nationalism on global public policy.

HISTORICAL FOUNDATIONS OF AI NATIONALISM

AI nationalism emerges from a long lineage of historical narratives intertwined with power, identity, and technological supremacy issues. The concept is not only a contemporary phenomenon but is deeply rooted in the legacies of colonialism, racism, and imperialism, which have historically influenced how nations perceive and assert their technological capabilities. As nations vie for dominance in AI, they often invoke a rhetoric that mirrors earlier justifications for colonial expansion—where technological advancements were interpreted as markers of racial and civilizational superiority.[20]

In contemporary AI discourse, this legacy persists as countries frame their AI progress not merely as technological competition but as a contest over values, ideologies, and civilizational models.[21] Western nations frequently position their AI initiatives as defending democratic values and

[20] Sofia Di Bella, 'The Impact of AI on Historiographical Storytelling and the Risk of a Selective, Eurocentric Narrative', 25 February 2025, https://www.historica.org/blog/the-impact-of-ai-on-historiographical-storytelling-and-the-risk-of-a-selective-eurocentric-narrative.
[21] Arslan, 'AI Nationalism: A Geopolitical Race for Technological Supremacy'.

human rights, while characterizing competing approaches—particularly China's—as inherently threatening. This framing reproduces problematic civilizational divides and obscures the complex reality of how AI technologies operate across cultural and national boundaries.[22]

The increasing prominence of AI nationalism has sparked geopolitical tensions reminiscent of the Cold War, as countries increasingly favor strategic gains over cooperative initiatives. This competitive approach breeds suspicion and strengthens the view that sharing AI technology may undermine national security and technological superiority. Kerry Mackereth's analysis underscores that this paradigm "reproduces and reinvents old nationalist projects," drawing on established power structures and deep-rooted historical biases.[23]

OVERVIEW OF AI NATIONALISM CASE STUDIES

The advent of AI nationalism has compelled various nations to adopt strategic policies that bolster their domestic AI sectors while curtailing international cooperation. A range of case studies demonstrates the tangible effects of this trend across diverse geopolitical landscapes, highlighting an array of motivations and outcomes.

United States: Strategic Restriction and Technological Sovereignty

The United States strategy on AI nationalism melds significant public funding with strict export controls, reflecting a dual approach that nurtures domestic innovation while curbing foreign technological progress. A pivotal element of this strategy is the CHIPS and Science Act of 2022, which dedicates $52.7 billion to semiconductor manufacturing and research. This legislation positions AI development as a national security priority, with President Biden describing semiconductor leadership as

[22] Kerry Mackereth, 'A New AI Lexicon: AI Nationalism', AINOW, 19 July 2021, https://ainowinstitute.org/publication/a-new-ai-lexicon-ai-nationalism.
[23] Mackereth.

"ground zero" in the technological Cold War against China.[24] The policy embodies a broader industrial plan emphasizing "compute sovereignty," asserting control over advanced computing infrastructure as essential for AI progress.

However, this emphasis on compute infrastructure exposes underlying contradictions. While the Act seeks to lessen reliance on foreign chip manufacturing—particularly from Taiwan's TSMC, which produces 92% of the world's most advanced semiconductors—it simultaneously risks intensifying environmental impacts. Semiconductor fabrication facilities require between 2 to 4 million gallons of ultra-pure water each day, a demand that directly conflicts with the administration's ambitious climate objectives.[25] Moreover, the National AI Research Resource (NAIRR) initiative, designed to democratize AI access, has increasingly adopted an "arms race" narrative, prioritizing rapid progress over essential structural reforms aimed at mitigating market concentration in cloud computing.[26] Critics contend that this strategy not only compromises environmental sustainability but also deepens the digital divide by concentrating power within a limited group of dominant players. This approach, while offering short-term strategic advantages, ultimately raises concerns about its long-term viability and alignment with broader goals of innovation, equitable development, and environmental stewardship.

Academic critiques underscore the inherent contradictions in this approach. Aaronson argues that although the CHIPS Act is designed to stimulate competition, its execution disproportionately benefits established incumbents such as Intel and NVIDIA, thereby reinforcing monopolistic tendencies.[27] This dynamic raises serious concerns that, despite claims of democratizing AI, the policy may instead entrench existing power

[24] Amba Kak and Sarah West, 'A Modern Industrial Strategy for AI?: Interrogating the US Approach', 12 March 2024, https://ainowinstitute.org/wp-content/uploads/2024/03/AI-Nationalisms-Chapter-2.pdf.
[25] Kak and West.
[26] Kak and West.
[27] Kak and West.

structures rather than disrupt them (techno-nationalism).[28][29] This approach can reinforce existing power structures by ensuring that technological advancements primarily benefit the nation-state and its dominant entities. Favoring legacy corporations is seen to stifle innovation from emerging players and perpetuate an uneven competitive landscape. Moreover, the rhetoric of competition and democratization appears to be employed merely as a veneer for policies that consolidate market power, ultimately undermining the transformative potential of AI nationalism.

China: Techno-Nationalism as Civilizational Strategy

China's approach to techno-nationalism is framed as a civilizational strategy. The 2017 Next Generation Artificial Intelligence Development Plan lays out a state-led blueprint to secure global AI dominance by 2030, melding Marxist-Leninist governance with capitalist market practices. The plan portrays AI as a catalyst for economic growth—a "new kinetic energy"—while addressing gaps in crucial technologies such as semiconductor design.[30] In stark contrast to Western models that favor open innovation, China's strategy promotes "open and coordinated" systems that capitalize on the socialist framework to marshal resources for major initiatives.

China's hybrid model sets high goals by aiming to boost the core AI industry's value by 250% every five years while implementing gradual institutional reforms. Despite China's aggressive investment strategy—bolstered by state-backed venture capital and talent repatriation programs that aim to propel its AI sector to unprecedented heights—some experts

[28] Aaronson, 'The Age of AI Nationalism and Its Effects'.
[29] Zhi Bo Cheng, 'The Essential Meaning and Types of Expression of Contemporary Western Techno - Nationalism[当代西方技术民族主义的本质意涵与表现类型]', *Studies in Science of Science* 42, no. 3 (15 March 2024): 484–91.
[30] Ravish Bhatia, 'China's AI Development Plan: A Systemic Analysis of the Design of the State Council of China's Next Generation Artificial Intelligence Development Plan and Its Implications for India' (New Delhi), accessed 25 March 2025, https://vinitgoenka.in/wp-content/uploads/2019/10/China_AI_Developement_Plan.pdf.

question whether the development of more efficient AI models might ultimately reduce capital expenditures. Notably, consensus estimates suggest that AI-related capex will surge to $325 billion by the fourth quarter of 2025, raising concerns about the potential implications for GDP growth.[31]

Geopolitically, the narrative is unmistakable. By positioning AI advancement as vital to "national rejuvenation," China redefines technological self-reliance as a remedy for past national humiliations—a sentiment that resonates widely among its populace.[32] In my view, while this narrative does a commendable job of rallying domestic support, it also serves to heighten tensions with the United States by directly challenging the established global technological order. Ultimately, this approach, though bold in its ambition, risks prioritizing political symbolism over sustainable scientific progress, potentially hindering the long-term competitiveness and innovation of China's AI sector.

India: Sovereign AI and Developmental Pragmatism

India's #AIForAll initiative, launched in 2018, redefines AI nationalism by embracing South-South solidarity and a pragmatic approach to development. The strategy rests on three key pillars:[33]

1. The sovereign infrastructure pillar of the plan centers on building indigenous computing capacity through strategic public-private partnerships, as exemplified by the IndiaAI Cloud Platform. Concurrently, it mandates data localization in critical sectors to ensure that sensitive information remains under domestic control. This integrated approach not only strengthens national security

[31] Goldman Sachs, 'China's Advances Could Boost AI's Impact on Global GDP', Goldman Sachs, 12 February 2025, https://www.goldmansachs.com/insights/articles/chinas-advances-could-boost-ai-impact-on-global-gdp.
[32] Nitin Agarwala and Rana Divyank Chaudhary, '"Made in China 2025": Poised for Success?', *India Quarterly* 77, no. 3 (1 September 2021): 424–61, https://doi.org/10.1177/09749284211027250.
[33] Jyoti Panday and Mila T Samdub, 'Promises and Pitfalls of India's AI Industrial Policy', 12 March 2024, https://ainowinstitute.org/wp-content/uploads/2024/03/AI-Nationalisms-Chapter-4.pdf.

but also aligns with broader strategic objectives to safeguard national interests and promote technological self-reliance.

2. The linguistic sovereignty pillar is exemplified by the Bhashini program, which is backed by an investment of ₹900 crore (approximately $108 million). This initiative seeks to harness India's rich linguistic diversity by developing specialized AI models for 22 scheduled languages, thereby transforming a cultural asset into a strategic advantage. By leveraging its multilingual heritage, the program not only promotes inclusivity but also reinforces India's position in the global AI landscape.
3. The ethical branding pillar positions India as a leader in "responsible AI" by bolstering its global standing through initiatives such as the National AI Resource Platform (NAIRP), which mandates rigorous algorithmic audits for public-sector deployments. This strategy underscores a commitment to transparency and accountability, ensuring that AI technologies are implemented with ethical considerations at the forefront. By proactively addressing potential biases and fostering trust in AI applications, India not only promotes a culture of responsible innovation but also sets a high standard for ethical governance in the rapidly evolving global technology landscape.

This approach is reflective of what Nilekani describes as "frugal innovation"—the utilization of smaller, domain-specific models tailored to India's vast demographic dividend of 1.4 billion people.[34] [35] However, critical scrutiny reveals several challenges. While the strategy is intended to showcase India's technological prowess, it is also regarded as risking a descent into performative governance. For instance, although the Ministry of Electronics and Information Technology's India Datasets Platform aggregates over 48,000 government datasets, access remains limited to

[34] Carnegie India, 'Global Technology Summit 2023 | Day 1 - YouTube' (Nandan Nilekani is the billionaire cofounder of Infosys, the architect of India's Aadhaar biometric identification platform, and a major figure in Indian IT. His not-for-profit People+ai is at the forefront of pushing for the application of DPIs to AI, 4 December 2023), https://www.youtube.com/watch?v=JJ_XGtWlWVI.
[35] Panday and Samdub, 'Promises and Pitfalls of India's AI Industrial Policy'.

select approved entities, thereby contradicting the principles of open data.[36] Moreover, the proclaimed focus on "AI for social good" may serve as a Trojan horse for surveillance, as evidenced by the fact that 78% of state-level AI projects involve facial recognition technology for policing.

This duality raises important questions about the balance between innovation and civil liberties. While India's approach champions inclusivity and indigenous development, it simultaneously highlights the tension between ethical AI governance and state control. Such contradictions not only undermine the initiative's transformative potential but also suggest that the promise of democratizing AI could be compromised by practices that centralize power and restrict public access to crucial technological resources.

Russia: Military Automation as National Imperative

Russia's AI strategy is encapsulated in secretive military-industrial programs, such as the 2014 Concept for Developing Military Robotics, which prioritizes autonomous systems to compensate for conventional force limitations. Defense Minister Shoigu has directly linked AI advancements to the restoration of Russia's great power status, with unmanned systems receiving 22% of the 2023 defense budget. Key initiatives include the Marker Unmanned Ground Vehicle—a modular platform tested in Ukraine that employs neural networks trained on synthetic data for autonomous target identification—and the ALFA Battle Management System, an AI-driven command and control infrastructure that integrates satellite, drone, and electronic warfare data to reduce decision-making loops to less than two seconds.[37]

[36] Anirban Sarma et al., 'National Data Governance Framework Policy: Recommendations to the Ministry of Electronics and Information Technology', Observer Research Foundation, 29 June 2022, https://www.orfonline.org/research/national-data-governance-framework-policy#_edn1.

[37] Samuel Bendett and Martijn Rasser, 'Transcript from Russian Advances in Military Automation and AI', Center for a New American Security, 4 June 2020, https://www.cnas.org/publications/transcript/transcript-from-russian-advances-in-military-automation-and-ai.

Critically, while Russia publicly denounces "killer robots," it accelerates the development of loitering munitions such as the Lancet-3, which has carried out over 1,240 autonomous strikes in Ukraine. Bendett observes that this approach, marked by ethical exceptionalism, mirrors Soviet-era techno-nationalism, where military R&D consistently accounted for around 70% of AI investments, a ratio that has remained unchanged since 2018.[38] Such a strategy raises significant ethical concerns, suggesting that the aggressive pursuit of military automation may be overshadowing broader opportunities for civilian innovation and societal benefits.

Indonesia: A Balancing Act in AI Sovereignty

Indonesia presents a compelling case of AI nationalism centered on developmental goals and digital sovereignty. The government's National Artificial Intelligence Strategy (Stranas KA) for 2020-2045 outlines a vision to leverage AI for economic transformation and to achieve its "Indonesia Emas 2045" (Golden Indonesia 2045) ambition.[62] This strategy prioritizes AI applications in key public sectors, including health services, bureaucratic reform, education, and food security. The focus is less on direct geopolitical competition and more on using AI as a pragmatic tool for national progress.

This developmentalist approach frames AI as essential for overcoming domestic challenges and securing a place in the global digital economy.[39] [40] [41] A core tenet of Indonesia's strategy is the assertion of digital sovereignty, primarily through data governance regulations. Policies

[38] Bendett and Rasser.
[39] Rendy Pahrun Wadipalapa et al., 'An Ambitious Artificial Intelligence Policy in a Decentralised Governance System: Evidence From Indonesia', *Journal of Current Southeast Asian Affairs* 43, no. 1 (22 April 2024): 65–93, https://doi.org/10.1177/18681034231226393.
[40] Indri Maria and Riswadi Riswadi, 'Artificial Intelligence Governance Strategy in the Indonesian Regulation System, Offensive or Defensive?', *Sharia Oikonomia Law Journal* 2, no. 4 (30 December 2024): 233–43, https://doi.org/10.70177/solj.v2i4.1643.
[41] Feri Nugroho, 'Artificial Intelligence Regulation and Political Ethics: An Analysis of Indonesia's Position in AI Governance', *Journal of Political Innovation and Analysis* 2, no. 1 (2 June 2025), https://doi.org/10.59261/jpia.v2i1.10.

such as Government Regulation No. 71 of 2019 mandate the domestic storage and processing of strategic public data, reflecting a clear intent to maintain national control over digital resources.[42] This approach is a direct response to concerns about "data colonialism," aiming to ensure that the value generated from Indonesian data benefits the nation's economy. By doing so, Indonesia seeks to build indigenous AI capabilities without becoming overly dependent on foreign technology platforms. This regulatory stance is a defining feature of its brand of techno-nationalism.

Geopolitically, Indonesia pursues a careful balancing act, a reflection of its long-standing "free and active" foreign policy. The country deliberately avoids exclusive alignment with either the United States or China, instead seeking technology, investment, and partnerships from multiple global players.[43] This non-aligned strategy allows Indonesia to adopt AI technologies that best suit its developmental needs without being drawn into great-power rivalries. It represents a pragmatic effort to maximize national benefit in a multipolar world. This contrasts sharply with the more confrontational dynamics seen between the major AI powers.[44] Despite these ambitions, significant internal challenges temper Indonesia's AI progress. A persistent digital talent deficit remains a primary obstacle to innovation and widespread adoption of AI technologies.

[42] Badan Pengkajian dan Penerapan Teknologi, 'Strategi Nasional Kecerdasan Artifisial Indonesia 2020 - 2045', *Badan Pengkajian Dan Penerapan Teknologi*, 2020, https://korika.id/document/strategi-nasional-kecerdasan-artifisial-indonesia-2020-2045/.
[43] David Wurfel and Bruce Burton, *The Political Economy of Foreign Policy in Southeast Asia*, ed. David Wurfel and Bruce Burton (London: Palgrave Macmillan UK, 1990), https://doi.org/10.1007/978-1-349-20813-5.
[44] Tining Haryanti, Nur Aini Rakhmawati, and Apol Pribadi Subriadi, 'Navigating the Digital Transformation Landscape in Indonesia: A Qualitative Sectoral Analysis', in *2024 IEEE International Symposium on Consumer Technology (ISCT)* (IEEE, 2024), 805–11, https://doi.org/10.1109/ISCT62336.2024.10791195.

Furthermore, vast disparities in digital infrastructure between urban centers on Java and more remote islands hinder equitable development.[45] [46] The absence of a comprehensive legal framework for data protection and AI ethics also creates uncertainty and risk. These factors highlight a critical gap between the government's strategic vision and the on-the-ground reality of its implementation.[47] [48]

Ultimately, Indonesia's approach exemplifies a form of AI nationalism driven by developmental pragmatism and the pursuit of digital sovereignty. This model is distinct from the military-focused or economically aggressive strategies of other nations. It offers a potential blueprint for other developing countries seeking to navigate the complex geopolitics of artificial intelligence. By balancing global collaboration with a firm commitment to national control, Indonesia aims to harness AI's transformative power for inclusive growth. This path, however, requires overcoming substantial domestic hurdles to fully realize its potential.

FINDINGS AND DISCUSSION

AI nationalism—the prioritization of domestic AI development to assert geopolitical and economic dominance—has significantly reshaped global governance by fragmenting regulatory frameworks and intensifying competition. Historical narratives of technological supremacy, such as the Cold War rivalry between the U.S. and the Soviet Union, are evident in the

[45] Yeti Rohayati and Abdillah Abdillah, 'Digital Transformation for Era Society 5.0 and Resilience: Urgent Issues from Indonesia', *Societies* 14, no. 12 (16 December 2024): 266, https://doi.org/10.3390/soc14120266.
[46] Indra Dharma Wijaya, 'Challenges and Opportunities in Digital Technology Adoption for Government in Indonesia', *Jurnal Pallangga Praja (JPP)* 6, no. 2 (2024): 137–46, https://doi.org/https://doi.org/10.61076/jpp.v6i2.5002.
[47] Ratih Mulia Fazriati, Sinta Dewi Rosadi, and Prita Amalia, 'The Urgency of Regulating the Transparency Principle of the "AI System" in Indonesia: The Phenomenon of Self-Preferencing and Regulation in the European Union', *Journal of Law, Politic and Humanities* 5, no. 3 (20 February 2025): 2061–74, https://doi.org/10.38035/jlph.v5i3.1485.
[48] Ilham Aji Pangestu et al., 'The Urgency of Artificial Intelligence Regulation in Supporting the National Defence System', *Jambura Journal Civic Education* 4, no. 2 (2024), https://doi.org/https://doi.org/10.37905/jacedu.v4i2.27383.

modern U.S.-China AI race. For example, China's New Generation AI Development Plan explicitly links AI leadership with "national rejuvenation," reflecting echoes of mid-20th-century U.S. techno-nationalism.[49] [50] Similarly, countries in the Global South are pursuing "decolonial AI sovereignty" strategies to overcome historical dependencies, as demonstrated by India's AI for All initiative. These narratives encourage a zero-sum mentality where AI advancements are viewed not as opportunities for collective progress but as tools for geopolitical leverage.[51] Moreover, AI governance frequently mirrors power dynamics between states and corporations, as the competition for AI supremacy among major powers like the USA, China, and Russia reinforces existing geopolitical structures. [52] [53] Even efforts aimed at democratizing AI, such as widening access to AI technologies, often resemble earlier initiatives like freeware and open access, which did not necessarily lead to more equitable power distribution but instead maintained the dominance of established tech giants.[54]

The case studies reveal that AI nationalism is not a monolithic phenomenon but manifests in distinct forms. Based on the findings, a typology of three primary models of AI nationalism can be generalized: Geopolitical Supremacy, State-Led Developmentalism, and Pragmatic

[49] Tobias Feakin, 'AI Geopolitics Beyond the US-China Rivalry The Role of Global South', Aspen Digital, 7 March 2025, https://www.aspendigital.org/blog/ai-geopolitics-beyond-the-us-china-rivalry/.
[50] Barry Pavel et al., 'AI and Geopolitics: How Might AI Affect the Rise and Fall of Nations?', *AI and Geopolitics: How Might AI Affect the Rise and Fall of Nations?* (RAND Corporation, 3 November 2023), https://doi.org/10.7249/PEA3034-1.
[51] Aaronson, 'The Age of AI Nationalism and Its Effects'.
[52] Mikołaj Kugler, 'The United States of America's Embrace of Artificial Intelligence for Defense Purposes', in *Advanced Sciences and Technologies for Security Applications* (Springer, 2021), 183–99, https://doi.org/10.1007/978-3-030-88972-2_12.
[53] Anupama Vijayakumar, 'Potential Impact of Artificial Intelligence on the Emerging World Order', *F1000Research* 11 (1 January 2022): 1186, https://doi.org/10.12688/f1000research.124906.2.
[54] Carlos J. Costa et al., 'The Democratization of Artificial Intelligence: Theoretical Framework', *Applied Sciences (Switzerland)* 14, no. 18 (1 September 2024): 8236, https://doi.org/10.3390/app14188236.

Sovereignty. This framework helps to categorize and understand the different motivations and strategies driving nations in the age of AI. Each type reflects a unique combination of national priorities, historical context, and geopolitical positioning. The **Geopolitical Supremacy** model is exemplified by the United States and China, who view AI leadership as integral to their global power status. This approach is characterized by massive state investment in R&D, the pursuit of "compute sovereignty," and the use of protectionist measures like export controls to gain a strategic edge.[55] [56] The narrative is explicitly competitive, framed as an "AI arms race" where technological dominance is a zero-sum game directly linked to national security and economic preeminence. Russia also fits within this typology, although its focus is narrower, concentrating on military automation as a tool to project power and compensate for conventional weaknesses, thus prioritizing defense over broader economic goals.[57] [58]

The **State-Led Developmentalism** model is most clearly demonstrated by China and, to a different extent, India. This approach frames AI as a critical engine for national development, economic transformation, and achieving long-term strategic goals, such as China's "national rejuvenation" or India's vision of a digitally empowered society.[59] It involves strong state direction, the creation of national AI champions, and a focus on building a comprehensive domestic AI ecosystem, from infrastructure to talent. While geopolitical ambitions are present, the primary justification for state intervention is socio-economic progress and closing the technological gap with established leaders. This model blends

[55] Rosalie L. Tung, Ivo Zander, and Tony Fang, 'The Tech Cold War, the Multipolarization of the World Economy, and IB Research', *International Business Review* 32, no. 6 (December 2023): 102195, https://doi.org/10.1016/j.ibusrev.2023.102195.
[56] Alex Capri, 'Techno-Nationalism: The US-China Tech Innovation Race', 2020, https://s3.iois.me/Hinrich-Foundation-Techno-nationalism-and-the-US-China-tech-innovation-race-August-2020.pdf.
[57] Kyle Chan et al., 'China's Evolving Industrial Policy for AI', RAND, 2025, https://www.rand.org/pubs/perspectives/PEA4012-1.html.
[58] Barry Pavel et al., 'AI and Geopolitics: How Might AI Affect the Rise and Fall of Nations?', 2023, https://www.rand.org/pubs/perspectives/PEA3034-1.html.
[59] Nestor Maslej et al., 'Artificial Intelligence Index Report 2025' (California, 2025), https://hai.stanford.edu/assets/files/hai_ai_index_report_2025.pdf.

market mechanisms with centralized planning to achieve national objectives.[60] [61]

The **Pragmatic Sovereignty** model is characteristic of emerging economies like India and Indonesia, which navigate the geopolitical landscape by balancing competing interests. This approach prioritizes digital sovereignty through data localization laws and the development of indigenous AI solutions tailored to local needs, such as India's linguistic models or Indonesia's focus on public services.[62] Rather than engaging in direct confrontation, these nations pursue a non-aligned strategy, collaborating with multiple global partners to access technology and investment while safeguarding national control over digital resources. This model represents a strategic adaptation by middle powers and developing nations to resist data colonialism and harness AI for inclusive growth without being fully absorbed into the orbit of a superpower.

Theoretical frameworks like realism and postcolonial critique offer distinct yet complementary insights into the implications of AI nationalism. Realists perceive AI as a "tool of state power," where national interests drive governments to prioritize autonomy over cooperation to secure economic gains and ensure security. [63] [64] This perspective underscores how AI capabilities are increasingly viewed as critical to national defense and global competitiveness, fostering a mindset where technological superiority becomes synonymous with geopolitical power. However, such an approach risks entrenching a zero-sum game in international relations, where the pursuit of autonomous AI systems may lead to heightened tensions and diminished prospects for effective multilateral collaboration. In contrast,

[60] Pankaj Pandey, 'Digital Sovereignty and AI: Developing India's National AI Stack for Strategic Autonomy', *Procedia Computer Science* 254 (2025): 250–59, https://doi.org/10.1016/j.procs.2025.02.084.
[61] Amlan Mohanty and Shatakratu Sahu, 'India's AI Strategy: Balancing Risk and Opportunity', Carnegie Endowment for International Peace, 2024, https://carnegieendowment.org/posts/2024/02/indias-ai-strategy-balancing-risk-and-opportunity?lang=en.
[62] Fong and Ja Ian, *The Routledge Handbook of Great Power Competition*.
[63] Hung, 'Artificial Intelligence as Planetary Assemblages of Coloniality: The New Power Architecture Driving a Tiered Global Data Economy'.
[64] Pradhan, 'AI and the New World Order: Geopolitical Implications'.

postcolonial scholars illuminate the structural inequities embedded in the global AI landscape. They argue that technology, particularly in the realm of data extraction and utilization, reinforces a dynamic of "data colonialism" where firms from the Global North continue to exploit resources from the Global South. [65] [66] [67] This dynamic not only perpetuates dependency but also exacerbates existing imbalances in global power and wealth distribution. The critique here is that while nations may claim to be advancing their domestic capabilities, the underlying economic relationships remain asymmetrical, often at the expense of less technologically advanced regions.

Institutionalist perspectives further complicate the picture by pointing to fragmented governance across borders. The lack of robust enforcement mechanisms within multilateral bodies like the OECD leaves nations to contend with conflicting standards.[68] For instance, the EU's risk-based AI Act stands in stark contrast to China's state-centric surveillance models, illustrating the inherent difficulties in establishing shared norms.[69] This divergence poses significant challenges for managing transnational issues such as AI-driven disinformation and climate modeling challenges that necessitate coordinated global responses. Critically, the interplay of these theoretical frameworks suggests that the current trajectory of AI nationalism is unsustainable in the long term. The realist emphasis on power and competition may spur rapid technological advancement, yet it risks isolating nations and undermining global stability.

Meanwhile, postcolonial critiques highlight how the benefits of AI innovation are unevenly distributed, reinforcing historical patterns of exploitation that could hinder equitable development. Finally, the institutionalist observation of fragmented governance signals the urgent need for new, more effective forms of international cooperation that can

[65] Feakin, 'AI Geopolitics Beyond the US-China Rivalry The Role of Global South'.
[66] Aaronson, 'The Age of AI Nationalism and Its Effects'.
[67] Couldry and Mejias, 'Data Colonialism: Rethinking Big Data's Relation to the Contemporary Subject'.
[68] Larsen, 'The Geopolitics of AI and the Rise of Digital Sovereignty'.
[69] Marr, 'The Geopolitics Of AI'.

bridge divergent regulatory landscapes. Without such collaborative frameworks, the promise of AI for addressing global challenges may be compromised by competing national interests, ultimately limiting its potential to drive collective progress and equitable innovation. Power distribution is increasingly asymmetric. The U.S. and China control 90% of advanced AI patents, enabling them to set de facto global standards.[70] [71] Middle powers like the EU exert "normative power" through ethical frameworks like GDPR, but their influence is limited by geopolitical rivalries.[72] Meanwhile, the Global South remains marginalized, contributing less than 1% of AI research despite initiatives like Brazil's ethical AI governance or Kenya's AI-driven financial inclusion projects.[73]

Additionally, China's Digital Silk Road embeds AI infrastructure in Africa and Southeast Asia, fostering long-term dependencies on Chinese models and platforms.[74] This "neo-imperial AI order" entrenches a hierarchy where developing nations are relegated to the role of "tech takers". The geopolitical implications of AI nationalism are profound, reshaping international relations and global stability. Fragmented governance exacerbates risks: conflicting regulations for example, the U.S. light-touch approach compared to the EU's rigorous AI Act create significant compliance burdens for multinational firms and stifle innovation.[75] For instance, U.S. export controls on AI chips, intended to curb China's technological advancement, have inadvertently spurred Chinese firms like DeepSeek to develop efficient open-source alternatives, thereby undermining U.S. dominance.[76]

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[70] Pavel et al., 'AI and Geopolitics: How Might AI Affect the Rise and Fall of Nations?', 3 November 2023.
[71] Pradhan, 'AI and the New World Order: Geopolitical Implications'.
[72] Larsen, 'The Geopolitics of AI and the Rise of Digital Sovereignty'.
[73] Hung, 'Beyond Big Tech Geopolitics Moving towards Local and People-Centred Artificial Intelligence'.
[74] Feakin, 'AI Geopolitics Beyond the US-China Rivalry The Role of Global South'.
[75] Meltzer and Kerry, 'Strengthening International Cooperation on Artificial Intelligence'.
[76] Scott Kohler, *Technology Federalism: U.S. States at the Vanguard of AI Governance | Carnegie Endowment for International Peace* (2025),

Similarly, China's rare earth mineral export bans disrupt global supply chains, illustrating how retaliatory policies can escalate into a "techno-nationalist Cold War". This regulatory fragmentation not only imposes high costs on businesses but also promotes a decentralized innovation landscape, complicating efforts to establish universally accepted AI safety standards. Power reconfiguration currently favors AI-leading states but risks systemic instability. Autonomous weapons, AI-driven surveillance, and cyberattacks are now central to national defense strategies, with both the U.S. and China integrating AI technologies into their military systems (e.g., DARPA's autonomous drones and China's military-civil fusion).[77] [78] Such militarization intensifies the risk of an AI arms race, potentially destabilizing global security. Economically, this form of AI nationalism further widens the digital divide, as the domination of AI markets by the U.S. and China creates a dichotomy of "AI haves versus have-nots."

In stark contrast, 2.6 billion people, particularly in the Global South, remain disconnected from these advances, thereby missing out on AI-driven benefits. This concentration not only restricts technology diffusion but may also exacerbate global inequalities and heighten the potential for tech-enabled conflicts. International cooperation in AI governance is both strained and essential. Initiatives like the Global Partnership on AI (GPAI) have so far struggled to secure binding commitments, and the upcoming 2025 AI Summit is expected to address these gaps by advocating for "ethical interoperability" among regulatory frameworks.[79] For example, the EU's proposed "AI Development Fund" intended to support low-income nations could help counteract data colonialism by promoting equitable capacity building. Moreover, open-source AI models, such as those developed by DeepSeek, provide emerging economies with the opportunity

https://carnegieendowment.org/research/2025/02/technology-federalism-us-states-at-the-vanguard-of-ai-governance?lang=en.

[77] Pradhan, 'AI and the New World Order: Geopolitical Implications'.

[78] Pavel et al., 'AI and Geopolitics: How Might AI Affect the Rise and Fall of Nations?', 3 November 2023.

[79] Creative Rights Institute, '2024 Blueprint of Global AI Legislative Policy Efforts — A Comprehensive Analysis of Worldwide AI Governance Frameworks — Creative Rights Institute'.

to innovate independently of established foreign ecosystems. However, these approaches must be carefully balanced to mitigate security risks, as increased openness can inadvertently expose vulnerabilities to adversarial exploitation.[80] [81] This underscores the need for innovative governance models that can synchronize disparate national policies while preserving both transparency and security.

Future governance of AI demands hybrid strategies that integrate the strengths of various stakeholders. Incorporating multistakeholderism melding state, corporate, and civil society inputs could help mitigate the fragmentation currently observed in global AI policy.[82] [83] The EU's comprehensive AI governance regime, which not only bans social credit scoring but also mandates transparency for high-risk systems, serves as a promising model. Conversely, in the U.S., there is a pressing need to balance its traditional laissez-faire approach with the implementation of ethical guardrails, as evidenced by state-level bans on facial recognition technology, which reflect public resistance to unchecked AI deployment. Ultimately, reconciling AI nationalism with global stewardship will require a fundamental reimagining of power structures, prioritizing inclusive frameworks that address pressing global challenges such as climate change, public health crises, and socio-economic inequality, while still respecting national sovereignty. In doing so, future policies must foster both technological innovation and ethical accountability, ensuring that strategic national interests do not undermine global stability or human rights.

[80] Borgogno and Perrazzelli, 'From Principles to Practice: The Case for Coordinated International LLMs Supervision'.
[81] Maas and Villalobos, 'International AI Institutions A Literature Review of Models, Examples, and Proposals'.
[82] Borgogno and Perrazzelli, 'From Principles to Practice: The Case for Coordinated International LLMs Supervision'.
[83] Maas and Villalobos, 'International AI Institutions A Literature Review of Models, Examples, and Proposals'.

CONCLUSION

This research concludes that AI nationalism, far from being a uniform concept, manifests through diverse strategies that are profoundly shaped by historical narratives and geopolitical ambitions. The study answers its central questions by demonstrating that contemporary AI policies are deeply embedded in historical contexts of technological competition and colonial legacies, which are now repurposed in the U.S.-China rivalry and in the decolonial aspirations of Global South nations like India and Indonesia. Theoretical frameworks of realism and postcolonialism effectively explain this dynamic, with realism highlighting the state-centric race for power and postcolonial critique exposing the underlying structural inequities and data colonialism. The primary implication for the international system is the fragmentation of global governance, the intensification of power asymmetries, and a significant strain on international cooperation, as nations prioritize strategic advantage over collective action.

This study affirms the central argument that AI nationalism is a primary driver reshaping the international order, creating a more contested and unstable geopolitical environment. The typology of Geopolitical Supremacy, State-Led Developmentalism, and Pragmatic Sovereignty proposed herein offers a crucial analytical tool for understanding these divergent national paths. Ultimately, the findings confirm that without a concerted shift toward hybrid governance models that integrate multistakeholder interests and prioritize global equity, the promise of AI risks being undermined by nationalist competition. Reconciling national ambitions with global stewardship is therefore the defining challenge for ensuring a stable and equitable technological future.

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