Selected Papers of #AoIR2025:
The 26th Annual Conference of the
Association of Internet Researchers
Niterói, Brazil / 15 – 18 Oct 2025

BETWEEN (DIGITAL) DREAMS AND CONTROL: REGULATING AI IN INDONESIA

Diah Angendari
Leiden University

Introduction

Indonesia's relationship with Information and Communication Technologies (ICTs) has long been intertwined with national aspirations and power dynamics. For instance, the introduction of television in 1962 coincided with the ASEAN Games, functioning primarily as a symbol of modernity and national prestige rather than as a means of public information access. Similarly, the launch of the Palapa satellite in the 1980s served dual purposes: unifying Indonesia's vast archipelago and centralizing information control, thereby reinforcing authoritarian governance (Lim, 2013; Barker, 2015). These episodes exemplify the dual imaginaries historically associated with technologies in Indonesia. While celebrated as markers of progress and modernity, these technologies also function as instruments of surveillance and state control.

The Internet followed a similar pattern. When it first arrived in the 1990s, it was overshadowed by more profitable telecommunication ventures. However, as neighboring Southeast Asian countries began launching their own "information superhighways," Indonesia responded in 1996 with the "Nusantara 21" (N21) or "Telematika Indonesia" initiative. Although N21 promised nationwide connectivity through the Palapa Ring, it primarily benefited President Soeharto's[1] family and business allies, who viewed the Internet as a means to bolster a new narrative of modernity while generating economic profits (Amir, 2012; Lim, 2018). After Soeharto's downfall in 1998 and the subsequent democratization, the Internet was hailed as a tool of freedom and grassroots empowerment, possibilities that had been unthinkable under the Soeharto regime. Nonetheless, the issuance of the 2008 Electronic Information and Transaction (EIT) Law[2] drew criticism for enabling a more draconian digital environment (Lim, 2013; Alifah, 2022) and was seen as a mechanism for the executive to reassert power (Saptaningrum, 2021).

In 2020, amid intensifying global discussions on artificial intelligence (AI), Indonesia introduced a National AI Strategy, followed by a circular letter on AI Ethics. Currently the

[1] Soeharto served as Indonesia's second president from 1965 to 1998, an era often characterized by authoritarian rule. During his administration, he imposed strict regulations on the media and

Suggested Citation (APA): Angendari, D. (2025, October). *Between (Digital) Dreams And Control: Regulating Ai In Indonesia*. Paper presented at AoIR2025: The 26th Annual Conference of the Association of Internet Researchers. Niterói, Brazil: AoIR. Retrieved from http://spir.aoir.org.

communication industries.
[2] The 2008 EIT Law was the first Internet specific law in Indonesia.
government is also drafting two presidential regulations on AI. However, these efforts are unfolding amid concerns that Indonesia's digital policies may be drifting toward authoritarian tendencies, raising questions about whose interests are ultimately served by these AI policies.

Against this backdrop, this study examines how AI policy is made in Indonesia by exploring which actors are involved, how they imagine AI, and how these imaginaries intersect with the interests of key actors and bureaucratic realities. Policy actors in this paper include government officials, politicians, private-sector representatives, civil society organizations, and think-tank or research institutions (Howlett et al., 2009; Birkland, 2020).

This study contributes to the broader understanding of AI policy in the Global South by illustrating how imaginaries, bureaucratic realities, and political, economic, and technological interests converge in shaping AI policy. Rather than simply adopting Global North models or wholly local affairs, Indonesia's experience reveals a complex interplay between visions of modernity, elite power consolidation, and policy adaptation.

Approaching AI Policy-Making

To capture the historical and cultural dimensions of AI policies, this research builds on the concepts of sociotechnical imaginaries (Jasanoff, 2015) and the policy-making cycle (Howlett et al., 2009). Sociotechnical imaginaries are collective visions of desirable futures rooted in shared understandings of social life and order, realized through scientific and technological advances. Far from abstract ideals, they are deeply embedded in institutions, material infrastructures, and policy discourses, shaping how societies prioritize, adopt, and regulate new technologies.

Considerable research has examined sociotechnical imaginaries across sectors such as energy (see Delina, 2018; Rudek, 2022), emerging technologies (see Mukherjee et al., 2022; Schiolin, 2020), and Internet history and policy (see Stevens, 2021; Kim, 2018). Despite increasing attention to how imaginaries are embedded in policy, research has not fully explored the interplay among actors, social structures, and institutions (Sovacool & Hess, 2017). Addressing this gap, the present study investigates how these imaginaries are shaped and mobilized during policy-making process.

A multi-sited ethnographic approach (Marcus, 1995; Hine, 2007) was employed to trace AI policy as it circulated among diverse stakeholders and venues. Data collection took place from October 2023 to February 2024 and involved:

1. **Semi-structured interviews** with 27 policy actors from government agencies, private tech firms, civil society organizations, think tanks, and academic institutions.
2. **Participant observation** at the Ministry of Communication and Informatics (MoCI), the lead institution in drafting AI regulations in Indonesia.

3. **Document collection and analysis** of policy drafts, strategic plans, press releases, and academic papers produced by government bodies, civil society groups, and the private sector.

Initial Findings and Contribution

Preliminary findings highlight three key points. First, policy actors exhibit both optimism and anxiety about AI. On one hand, it is hailed as a driver of innovation, poised to boost economic competitiveness. On the other, these optimistic visions are tempered by fears of job displacement, social disruptions, misinformation, and the potential for monopolies by powerful multinational tech firms. These concerns mirror global debates about AI's disruptive potential while tapping into Indonesia's historical unease over foreign dominance and authoritarian control in the digital sphere.

Second, imaginaries are shaped and mobilized to justify policy choices. Recent AI policies have been framed as responses to technological potentials, but in practice, they have become arenas for government bodies to reclaim authority and assert leadership. This demonstrates how imaginaries are strategically mobilized by powerful actors to lend
legitimacy to regulation, while enabling the government to reassert, maintain, and expand its authority. This demonstrates that policy is not the product of a unified state imaginaries, but the outcome of bureaucratic competition and negotiation.

Third, while global AI policy debates frequently cast Global South countries as passive "policy takers," Indonesia's experience offers a more nuanced view. The country selectively borrows from EU and OECD frameworks, such as ethical guidelines and risk based regulation, while adapting these measures to local priorities and power structures. Domestic tech firms, for instance, play a substantial role in drafting and negotiating regulations, reflecting the government's goal of fostering national AI champions. This dynamic indicates a more complex policy adaptation, rather than mere replication of Northern models.

These developments reflect Indonesia's longstanding tradition of leveraging ICTs to balance national development visions with elite control and profit-making strategies. Imaginaries are strategically mobilized by state actors not only to justify regulatory choices but also to assert or expand bureaucratic authority, revealing that policies emerge from inter-agency competition rather than a unified state vision. Finally, Indonesia's approach complicates the view that Global South countries merely copy Global North models. Despite borrowing frameworks from the EU and OECD, Indonesia adapts them to local priorities and power structures.

References

Amir, S. (2012). The technological state in Indonesia: The co-constitution of high technology and authoritarian politics. Routledge.

Barker, J. (2015). Guerilla engineers: The Internet and the politics of freedom in Indonesia. *Dreamscapes of Modernity: Sociotechnical Imaginaries and the Fabrication of Power*, 199-218.

Birkland, T. A. (2019). *An introduction to the policy process: Theories, concepts, and models of public policy making*. Routledge.
Delina, L. L. (2018). Whose and what futures? Navigating the contested coproduction of Thailand's energy sociotechnical imaginaries. *Energy research & social science*, *35*, 48-56.
Hine, C. (2007). Multi-sited ethnography as a middle range methodology for contemporary STS. *Science, Technology, & Human Values*, *32*(6), 652-671.

Howlett, M., Ramesh, M., & Perl, A. (2009). *Studying public policy: Policy cycles and policy subsystems* (Vol. 3). Oxford: Oxford university press.

Jasanoff, S. (2015). Future imperfect: Science, technology, and the imaginations of modernity. *Dreamscapes of modernity: Sociotechnical imaginaries and the fabrication of power*, 1-33.

Kim, E. S. (2018). Sociotechnical imaginaries and the globalization of converging technology policy: Technological developmentalism in South Korea. *Science as Culture*, *27*(2), 175-197.

Lim, M. (2013). The internet and everyday life in Indonesia: A new moral panic?. *Bijdragen tot de Taal-, land-en volkenkunde/Journal of the Humanities and Social Sciences of Southeast Asia*, *169*(1), 133-147.

Lim, M. (2018). Dis/connection: The co-evolution of sociocultural and material infrastructures of the internet in Indonesia. *Indonesia*, *105*(1), 155-172.

Marcus, G. E. (1995). Ethnography in/of the world system: The emergence of multi-sited ethnography. *Annual review of anthropology*, *24*(1), 95-117.

Rudek, T. J. (2022). Capturing the invisible. Sociotechnical imaginaries of energy. The critical overview. *Science and Public Policy*, *49*(2), 219-245.

Saptaningrum, I. (2021). *Internet regulation in Indonesia 1990-2018: an inquiry into a contested regulatory field* (Doctoral dissertation, UNSW Sydney).

Schiølin, K. (2020). Revolutionary dreams: Future essentialism and the sociotechnical imaginary of the fourth industrial revolution in Denmark. *Social studies of science*, *50*(4), 542-566.

Sovacool, B. K., & Hess, D. J. (2017). Ordering theories: Typologies and conceptual frameworks for sociotechnical change. *Social studies of science*, *47*(5), 703-750.

Stevens, H. (2021). From RangKoM and JARING to the Internet: visions and practices of electronic networking in Malaysia, 1983–1996. *Internet Histories*, *5*(3-4), 230-247.