

Research Article

Digital Resource Nationalism: Evaluating Indonesia's Data Sovereignty Legal Framework Through Sumitronomics-Kusumaatmadja Analysis

Moch. Marsa Taufiqurrohman* 

Universitas Padjadjaran, Indonesia

Tarsisius Murwadi 

Universitas Padjadjaran, Indonesia

Helza Nova Lita 

Universitas Padjadjaran, Indonesia

ABSTRACT: Indonesia's digital economy, projected to reach USD 99 billion in gross merchandise value by 2025 with over 220 million internet users, has intensified the challenge of securing data sovereignty, particularly as foreign digital platforms continue to extract economic value from citizens' personal data. This paper assesses the adequacy of Indonesia's digital legal framework through an integrated analytical framework that combines Sumitronomics, an economic philosophy grounded in resource sovereignty and downstream processing with Mochtar Kusumaatmadja's Legal Development Theory, which conceptualizes law as an instrument of social transformation (*sarana pembaharuan masyarakat*). Adopting a doctrinal legal methodology, the study employs statutory, conceptual, and comparative approaches to examine three primary legal instruments: the Personal Data Protection Law (Law 27/2022), the Competition Law (Law 5/1999), and the Consumer Protection Law (Law 8/1999). These are evaluated against three criteria: resource sovereignty, developmental orientation, and adaptive responsiveness, with comparative insights drawn from China, India, and Brazil. These findings identify significant structural gaps across the three regimes. The Personal Data Protection Law permits cross-border data transfers without requiring meaningful local processing; the Competition Law does not adequately address data-driven market dominance; and the Consumer Protection Law remains silent on algorithmic manipulation. As a result, the current framework operates largely in a reactive manner, rather than serving as a proactive instrument for developmental governance. The study proposes a set of reforms, including the introduction of tiered local data processing obligations, the recognition of data-driven market power within competition law, the incorporation of algorithmic transparency and collective redress mechanisms in consumer protection, and the establishment of an inter-agency Digital Governance Coordination Council to support more adaptive regulatory oversight.

KEYWORDS: Digital Sovereignty, Sumitronomics, Legal Development Theory, Personal Data Governance, Digital Resource Nationalism.

*Corresponding author, email: moch23009@mail.unpad.ac.id

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I. INTRODUCTION

Indonesia's digital economy, projected to reach USD 99 billion in gross merchandise value by 2025, has positioned the country as the largest digital market in Southeast Asia, with over 220 million internet users.¹ Yet this rapid expansion has also exposed a persistent structural paradox: foreign digital platforms continue to extract substantial economic value from Indonesian citizens' personal data while contributing only marginally to domestic technological development and value creation. This imbalance echoes a pattern long identified by Sumitro Djojohadikusumo, Indonesia's leading development economist, in the context of natural resources, namely, the extraction of raw national assets by foreign actors without meaningful downstream processing or local benefit.² Sumitro's economic philosophy, widely known as "Sumitronomics," is built on three interrelated pillars: sustained economic growth, equitable development, and dynamic national stability. It emphasizes industrialization, resource sovereignty, and the protection of domestic economic interests as key pathways toward national self-reliance.³ These ideas have gained renewed policy relevance under President Prabowo Subianto's administration since 2024, particularly through downstream processing policies that have transformed Indonesia from a major exporter of raw nickel ore into the world's leading producer of processed nickel.⁴ Against this backdrop, a critical question emerges: can the principles of resource sovereignty, which have proven effective in governing tangible commodities, be meaningfully extended to regulate the extraction and use of personal data in the digital economy? At the same time, Mochtar Kusumaatmadja's Legal Development Theory (*Teori Hukum Pembangunan*) offers a complementary jurisprudential foundation.⁵ Building on Roscoe Pound's notion of "law as a tool of social engineering," arguing that law should function as a "means of social renewal" (*sarana pembaharuan masyarakat*), actively guiding societal transformation toward orderly and purposeful development rather than merely preserving existing conditions.⁶ Taken together, these two distinctly Indonesian intellectual traditions provide a compelling, yet still underexplored, analytical lens for assessing whether Indonesia's digital legal regime advances national development objectives or instead accommodates the interest of global digital platforms. While neither Kusumaatmadja nor Pound addressed the challenges of digital governance, this

¹ *e-Conomy SEA 2025: Roaring 20s*, by Google, Temasek, & Bain & Company (Mountain View: Google, 2025) at 2-3; *Digital 2025: Indonesia*, by DataReportal, We Are Social, & Meltwater (Singapore: Meltwater, 2025) at 8.

² Sumitro Djojohadikusumo, *Dasar Teori Ekonomi Pertumbuhan dan Ekonomi Pembangunan: Perkembangan Pemikiran Ekonomi* (Jakarta: LP3ES, 1994) at 95.

³ Muhammad Said et al, "Revitalizing Sumitro Djojohadikusumo's Economic Legacy: Pathways to Indonesia's Economic Self-Reliance in the Digital and Globalization Era" (2025) 9:2 Profit: Jurnal Kajian Ekonomi dan Perbankan Syariah at 563.

⁴ Abdullah A Afifi et al, "Re-Viewing Sumitro's Policy and Industrial Maturity: Powering Downstream and Manufacturing Industries for Economic Growth and Sustainable Society" (2024) 2:2 Journal of Regional Development and Technology Initiatives at 92.

⁵ Mochtar Kusumaatmadja, *Konsep-konsep Hukum dalam Pembangunan* (Bandung: Alumni, 2006) at 13.

⁶ Nor Fadillah, "Tinjauan Teori Hukum Pembangunan Mochtar Kusumaatmadja Dalam Undang-Undang Ibu Kota Negara (IKN)" (2022) 11:1 Supremasi Hukum: Jurnal Kajian Ilmu Hukum at 56.

study extends their theoretical insights into this emerging domain through contextual and doctrinal interpretation.

Previous scholarship has examined digital sovereignty and data governance from multiple perspectives, each of which reveals limitations when applied to emerging economic powers such as Indonesia. Paul Voigt and Axel von dem Bussche offer a comprehensive framework for cross-border data transfers under the GDPR. Nevertheless, their adequacy-based model is grounded in a rights-centric paradigm that conceptualizes data primarily as a matter of privacy, rather than as a strategic economic asset that may warrant sovereign control.⁷ Similarly, Henry Gao's comparative analysis of data sovereignty in the United States, China, and the European Union highlights divergent national approaches to governance. Yet, his "Three Digital Kingdoms" framework omits Global South jurisdictions, limiting its relevance for countries where data sovereignty is closely tied to broader development priorities.⁸ Further contributions by Luca Belli, Nicolo Zingales, and Laura Curzi move the discussion forward by examining data governance models within BRICS countries, illustrating the emergence of alternatives to dominant Western paradigms. However, their analysis remains at the policy level and does not sufficiently explore how specific legal instruments might be redesigned to operationalize resource-oriented sovereignty in the digital domain.⁹ In the Indonesian context, Solikhah identifies key structural challenges in implementing of Law 27/2022, particularly the absence of an independent supervisory authority. Even so, her analysis stops short of interrogating whether the law's underlying design, heavily influenced by the GDPR's individual rights framework, is conceptually suited to a country whose primary objective lies in harnessing economic value from its demographic dividend, rather than focusing on privacy protection.¹⁰ At the same time, scholars revisiting Sumitro Djohadikusumo's economic thought have sought to adapt *Sumitronomics* to contemporary conditions, yet these efforts have not been extended to the realm of digital governance. Likewise, studies engaging with Mochtar Kusumaatmadja's Legal Development Theory have not fully explored the application of the *sarana pembaharuan masyarakat* concept within the context of technology regulation.¹¹

Despite this expanding body of scholarship, three key limitations remain. First, much of the existing literature relies on Western-centric legal frameworks, particularly the GDPR model, which emphasize individual privacy rights and market efficiency, while giving

⁷ Paul Voigt & Axel von dem Bussche, *The EU General Data Protection Regulation (GDPR)* (Cham: Springer International Publishing, 2017) at 56.

⁸ Henry S Gao, "Data Sovereignty and Trade Agreements: Three Digital Kingdoms" (2021) 22:S1 World Trade Review at 223.

⁹ Luca Belli, Walter B Gaspar & Shilpa Singh Jaswant, "Data sovereignty and data transfers as fundamental elements of digital transformation: Lessons from the BRICS countries" (2024) 54:1 Computer Law & Security Review at 5.

¹⁰ Mar'atus Solikhah, "Personal Data Protection in the Era of Digital Transformation: Challenges and Solutions in the Indonesian Cyber Law Framework" (2025) 2:1 Indonesian Cyber Law Review at 4.

¹¹ Said et al, *supra* note 3 at 92.

insufficient attention to the developmental priorities and resource sovereignty concerns that are central to emerging economies. Second, prior studies have rarely brought together principles of economic nationalism and legal development theory in the analysis of digital governance. This omission creates a significant gap in understanding how developing countries might design legal frameworks that both safeguard individual data rights and advance broader national development goals. Third, comparative research on digital governance in the Global South has tended to examine countries in isolation, rather than systematically exploring how resource sovereignty principles, long established in traditional commodity sectors, could inform the design of digital governance regimes in the digital sphere.¹²

This paper addresses these gaps by developing an integrated analytical framework that brings together the economic philosophy of Sumitronomics and Mochtar Kusumaatmadja's Legal Development Theory to assess the adequacy of Indonesia's digital legal framework. It makes three main contributions. First, it extends both Sumitronomics and Kusumaatmadja's Theory into the domain of digital governance, offering a Global South-oriented alternative to predominantly Western-centric approaches to technology law. Second, it provides a systematic doctrinal analysis of three core legal instruments using the integrated framework, identifying the ways in which existing provisions may either enable or constrain data sovereignty. Third, it incorporates a comparative perspective by drawing on digital governance approaches in China, India, and Brazil, situating Indonesia's framework within a broader landscape of emerging economy practices.

The study evaluates the adequacy of Indonesia's digital legal framework in advancing data sovereignty and broader economic objectives. It is guided by three research questions. First, how can economic philosophy of *Sumitronomics* and Mochtar Kusumaatmadja's Legal Development Theory be synthesised into an integrated analytical framework for assessing digital sovereignty in emerging economies? Second, to what extent do Indonesia's three principal digital governance laws, the Personal Data Protection Law (Law 27/2022), the Competition Law (Law 5/1999), and the Consumer Protection Law (Law 8/1999), meet the evaluative criteria of resource sovereignty, developmental orientation, and adaptive responsiveness derived from this framework? Third, what specific statutory reforms are required to align Indonesia's digital legal regime with the resource nationalism principles of *Sumitronomics* and the responsive law orientation advanced by Kusumaatmadja? The article is structured as follows. Section II outlines the doctrinal legal research methodology and comparative analytical approach. Section III develops the integrated Sumitronomics-Kusumaatmadja framework for analyzing digital sovereignty. Section IV applies this framework to Indonesia's existing legal regime, incorporating comparative insights from other

¹² *Ibid.*

emerging economies. Section V proposes targeted legal reforms, and Section VI concludes by discussing the broader implications for technology law scholarship in rising economic powers.

II. METHODOLOGY

This research adopts a normative legal research methodology, structured around three complementary approaches. First, the statute-based approach involves a systematic examination of Indonesia's key legal instruments, such as the Personal Data Protection Law (Law 27/2022), the Competition Law (Law 5/1999), and the Consumer Protection Law (Law 8/1999), along with their implementing regulations, to identify textual gaps and regulatory inconsistencies. Second, the conceptual approach applies an integrated analytical framework that combines Sumitronomics with Mochtar Kusumaatmadja's Legal Development Theory. Specifically, it draws on Sumitro Djojohadikusumo's principles of resource sovereignty and downstream processing, as well as Kusumaatmadja's notion of law as *sarana pembaharuan masyarakat*, to provide the evaluative lens through which statutory provisions are assessed. Third, a comparative approach is employed to examine digital governance frameworks in China (Cybersecurity Law 2016, Data Security Law 2021, Personal Information Protection Law 2021), India (Digital Personal Data Protection Act 2023), and Brazil (*Lei Geral de Proteção de Dados* 2018) to identify regulatory innovations and alternative legal strategies.

This study draws on both primary and secondary legal materials. Primary sources consist of the Indonesian statutes discussed above, as well as relevant foreign legislative instruments. Secondary materials include peer-reviewed journal articles, scholarly monographs, and academic commentaries on digital sovereignty, data governance, *Sumitronomics*, and Legal Development Theory. These materials are analyzed using a prescriptive legal approach. In practice, statutory provisions are examined through three modes of interpretation: grammatical interpretation, to clarify their textual meaning; systematic interpretation, to coherence across legal instruments; and teleological interpretation, to evaluate the extent to which the provisions fulfill their intended objectives within the integrated analytical framework. This prescriptive normative approach is appropriate because the study seeks to assess the adequacy of existing legal provisions against a defined theoretical benchmark, namely, the integrated Sumitronomics–Kusumaatmadja framework, rather than to examine how these laws operate in empirical settings.

III. SUMITRONOMICS-KUSUMAATMADJA THEORETICAL FRAMEWORK FOR DIGITAL SOVEREIGNTY

This section addresses the first research question by developing the integrated theoretical framework that underpins the subsequent analysis. It proceeds in three stages. First, Section III. A elaborates Sumitronomics as a contemporary interpretation of Sumitro Djojohadikusumo's economic nationalism and resource control philosophy, and considers

how its emphasis on downstream processing logic can be normatively extended to the governance of personal data as a strategic digital resource. Second, Section III.B revisits Mochtar Kusumaatmadja's Legal Development Theory, focusing in particular on the concept of law as *sarana pembaharuan masyarakat*. Although originally formulated prior to the digital era, this concept is reinterpreted here to assess whether Indonesia's digital legal framework operates as an instrument of social transformation and developmental direction. Third, Section III.C synthesizes both theoretical strands into three evaluative criteria, resource sovereignty, developmental orientation, and adaptive responsiveness, which are then systematically applied in Section IV to assess the Personal Data Protection Law, the Competition Law, and the Consumer Protection Law.

A. Sumitronomics and Resource Control in the Digital Context

Sumitro Djojohadikusumo is widely regarded as a central architect of Indonesia's early developmental state strategy. During his tenure as Minister of Trade and Industry (1950–1951), he introduced the Benteng programme, Indonesia's first affirmative economic policy, aimed at fostering an indigenous business class by allocating import licences to *pribumi* entrepreneurs while maintaining strategic control over foreign capital participation.¹³ Thee Kian Wie characterizes this approach as a distinctly Indonesian economic nationalism, one that sought “to convert the colonial economy into a national economy” through active state intervention in key sectors, rather than reliance on unregulated market forces.¹⁴ Importantly, the Benteng programme was not merely a protectionist measure. Rather, it combined selective restrictions on market access with state-guided industrial development, establishing a policy template that would continue to shape Indonesia's post-independence economic trajectory.¹⁵

Contemporary scholarship has revisited Sumitro's economic thought under the label Sumitronomics, framing it around three foundational pillars: sustained economic growth, equitable distribution, and dynamic national stability.¹⁶ Recent work by Said et al. further develops this perspective by describing it as a form of “digital economic nationalism,” in which the state actively guides both real-sector and digital-sector development to safeguard national interests against the extractive dynamics of global capital.¹⁷ What sets Sumitronomics apart from more generic state-led development models, common across many post-colonial contexts, is its distinctive combination of resource control, mandatory downstream

¹³ Thee Kian Wie, “Understanding Indonesia: The Role of Economic Nationalism” (2010) 3 *Journal of Indonesian Social Sciences and Humanities* at 60.

¹⁴ *Ibid.*

¹⁵ Gumilar Rachdityo Mumpuni & Rukmi Hapsari, “Program Benteng Sumitro Djojohadikusumo: Fondasi Awal Kelahiran Pengusaha Nasional Indonesia” (2025), online: *Media Keuangan* <<https://mediakeuangan.kemenkeu.go.id/article/show/program-benteng-sumitro-djojohadikusumo-fondasi-awal-kelahiran-pengusaha-nasional-indonesia>>.

¹⁶ Said et al, *supra* note 3 at 575.

¹⁷ *Ibid.*

processing, and conditional market access. Together, these instruments are designed to transform structural dependency into industrial upgrading and enhanced national bargaining power.¹⁸

Indonesia's nickel downstreaming policy offers perhaps the clearest contemporary illustration of this logic. Following the partial ban on raw nickel ore exports in 2014, and its expansion into a comprehensive ban in 2020, Indonesia moved from being a largely passive exporter of unprocessed ore to becoming one of the world's leading producers of higher-value nickel products, including ferronickel, nickel pig iron, and battery-grade nickel sulphate.³⁰ As Guberman show, this policy shift increased Indonesia's nickel export revenues from less than US\$5 billion in 2017 to more than US\$33 billion in 2023.¹⁹ Although the World Trade Organization later found that the export ban was inconsistent with Article XI:1 of the GATT, Indonesia has continued to defend the policy on developmental grounds.²⁰ This response reflects a deliberate decision to prioritize industrial sovereignty and domestic value creation over strict adherence to trade liberalization commitments.²¹

The analogy between natural resources and personal data does not rest on a claim that nickel ore and digital information are physically or economically identical. Instead, it draws attention to two structural similarities in their roles within global value chains. First, both function as indispensable inputs. Processed nickel is critical to the manufacture of stainless steel and electric vehicle batteries, while personal data underpins algorithmic products, targeted advertising, and artificial intelligence training. Second, both yield relatively little domestic value when exported in raw form, whether as unprocessed ore or unprocessed data, since the highest-value transformation takes place during processing. In Indonesia's contemporary digital economy, this processing stage is still dominated by foreign platforms that control offshore data centres and analytics infrastructure.

Indonesia's large digital user base, more than 220 million internet users as of 2025, generating extensive behavioural, transactional, and social data, may therefore be conceptualized as a reservoir of "digital resources." The economic value of these resources depends less on the raw data itself than on who controls the infrastructure, algorithms, and analytical capabilities needed to transform it into commercially valuable goods and services.²² Where foreign platforms collect personal data from Indonesian users and process it entirely offshore, Indonesia assumes a position analogous to that of a raw-ore exporter: it provides

¹⁸ Howard Dick et al, *The Emergence of a National Economy: An Economic History of Indonesia, 1800–2000* (University of Hawaii Press, 2002) at 261.

¹⁹ *Indonesia's Export Ban of Nickel*, by David Guberman & Samantha Schreiber (Washington DC: USITC, 2024) at 10.

²⁰ Salman Samir, Rizky Utami & Muhammad Maula Razak, "What Are the Economic Impacts of Indonesia's Export Ban? A Computable General Equilibrium Analysis" (2024) 25:1 *Jurnal Ekonomi Pembangunan* at 128.

²¹ Annisa Fitriani et al, "The European Union's Legal Challenge to Indonesia's Nickel Export Ban at the World Trade Organization" (2025) 5:2 *Research Horizon* at 67.

²² Wibowo Heru Prasetyo et al, "Assessing Digital Competence in Indonesian students: demographic and Internet usage factors through the Rasch Model" (2025) 21:2 *Journal of e-Learning and Knowledge Society* at 2.

indispensable inputs yet captures only a small proportion of the value generated from them. Elnathan and Wiswayana describe this pattern as “digital resource nationalism,” in which data sovereignty policies are directed at protecting national data resources from unregulated extraction by foreign technology corporations.²³ Viewed through a Sumitronomics lens, this means that Indonesia’s legal framework incorporate forms of “digital downstreaming” comparable to the rationale behind the nickel export ban, such as local data-processing requirements, technology transfer obligations, and mandatory investment in domestic digital infrastructure and human capital as conditions for platform access to the Indonesian market.

B. Kusumaatmadja’s Legal Development Theory and Digital Sovereignty

Mochtar Kusumaatmadja’s Legal Development Theory (Teori Hukum Pembangunan) reframes law as *sarana pembaharuan masyarakat*, an instrument of social renewal, rather than simply a means of preserving order or resolving individual disputes.²⁴ While the theory draws inspiration from Roscoe Pound’s influential conception of law as a “tool of social engineering,”²⁵ it departs from Pound in significant ways. Kusumaatmadja retains the core functional insight that law can actively shape society, but relocates that function from the courts to the legislative and administrative institutions of a post-colonial developmental state. In doing so, he shifts the emphasis of law from the balancing of interests toward the steering of social and economic transformation.²⁶

Within Kusumaatmadja’s framework, statutes and regulations in developing countries must be deliberately designed to steer social transformation toward democratically determined development goals.²⁷ In this view, law is assessed not only by its internal doctrinal coherence or its ability to protect individual rights, but also by its effectiveness in shaping institutional behaviour and economic structures in line with national objectives. Syah et al explain that this places legal design at the centre of state-led development, with the legislature bearing primary responsibility for producing legal instruments capable of anticipating social and economic change, rather than leaving courts to adjust inherited doctrine incrementally.²⁸ The distinction is especially significant for digital governance. It suggests that Indonesia’s digital laws should be evaluated not solely on the basis of how well they protect individual privacy, the dominant benchmark in Western GDPR-inspired frameworks, but also on whether they actively foster the structural conditions for national digital development.

²³ Andrew Elnathan & Wishnu Mahendra Wiswayana, “ASEAN’s Limitation of Regional Digital Integration” (2025) 4:11 Journal of Social Research at 2920.

²⁴ Kusumaatmadja, *supra* note 5 at 16.

²⁵ Roscoe Pound, *An Introduction to the Philosophy of Law* (Project Gutenberg, 2010) at 68.

²⁶ Fadillah, *supra* note 6 at 56.

²⁷ Kusumaatmadja, *supra* note 5 at 18.

²⁸ Danial Syah et al, “Revitalisasi Konsep Hukum Pembangunan Mochtar Kusumaatmadja dalam Pembaruan Hukum Kontemporer” (2025) 4:5 Jurnal Ilmu Multidisiplin at 3501.

Kusumaatmadja did not, of course, write in the language of “digital sovereignty” or “platform regulation,” as his major works predated the rise of the contemporary digital economy. Nevertheless, Indonesian legal scholars have extended the concept of *sarana pembaharuan masyarakat* into newer regulatory fields. This concept has proven useful for analyzing how contemporary Indonesian law responds to the tensions between legal community and rapid social and technological change. In the field of technology law, scholars have argued that Indonesia’s electronic transaction regime should be assessed in terms of its capacity to steer digital transformation toward national development goals, in line with the developmental orientation associated with Kusumaatmadja and, more broadly, Roscoe Pound.²⁹ Building on this interpretive tradition, this article applies the concept of *sarana pembaharuan masyarakat* to the specific problem of digital data sovereignty.

Applying Kusumaatmadja’s framework to digital governance suggests that Indonesia’s legal instruments must fulfil three core functions. First, they should anticipate structural transformations in the digital economy, such as cross-border data extraction, data-driven market concentration, and algorithmic decision-making, instead of responding only after foreign platforms have entrenched their dominance. Second, they should direct these developments toward outcomes that enhance national technological capacity, expand inclusive digital participation, and generate greater domestic value, so that law operates as an instrument of planned development rather than a passive regulatory mechanism. Third, they must remain flexible enough to adjust to future technological disruptions, including generative artificial intelligence, emerging forms data monetization, and changing platform business models, while continuing to protect constitutional rights and democratic oversight.³⁰ Together, these three functions, anticipation, developmental steering, and adaptive flexibility, form the jurisprudential dimension of the integrated framework developed below.

C. Integration Framework: Resource Sovereignty, Developmental Orientation, and Adaptive Responsiveness

The preceding sub-sections have developed two theoretically distinct but complementary perspectives. Sumitronomics offers the economic rationale, namely that strategic national assets, including personal data, should be governed through resource-control mechanisms designed to secure local processing, technology transfer, and domestic value creation. Kusumaatmadja’s Legal Development Theory provides the jurisprudential rationale by asserting that legal instruments in a developing state should do more than preserve order or protect individual rights in isolation; they should actively guide social transformation toward

²⁹ Imelda Martinelli, Christian Samuel Lodoe Haga & I Putu Juni Artana, “Electronic Agreements from the Lens of the Legal Perspective” *Law as a Tool of Social Engineering* Proposed by Roscoe Pound” (2023) 13:2 BJ at 134.

³⁰ Aditya Permana & Ardian Prasetyo, “Pancasila and Technogeopolitics: Integrating National Values into Foreign and Technology Policy” (2025) 5:2 *Jurnal Keindonesiaan* at 244.

national development goals. This sub-section synthesizes both strands into three evaluative criteria that are systematically applied in Section IV.

The first criterion is resource sovereignty. Informed by the downstream-processing logic of Sumitronomics', this criterion examines whether a statutory provision treats personal data as a strategic national resource and provides mechanisms, such as local processing requirements, data localization obligations, or technology transfer conditions, that enable economic value generated from data processing to be retained domestically rather than captured offshore. Resource sovereignty does not imply autarky or a blanket prohibition on data exports. Instead, it focuses on whether the legal framework establishes structural conditions that require foreign platforms to contribute meaningfully to the development of domestic digital industrial capacity as a condition for access to the national market.

The second criterion is developmental orientation. Rooted in Kusumaatmadja's conception of law as *sarana pembaharuan masyarakat*, this criterion assesses whether a statutory provision actively fosters national technological capability, digital skills development, and the growth of indigenous digital industries, rather than merely reacting to harms after the fact.³¹ In this sense, a legal framework should do more than regulate market conduct; it should ensure that foreign platforms operating in Indonesia contribute substantively to national development goals, instead of simply extracting value from domestic markets for offshore processing and monetization.

The third criterion is adaptive responsiveness. It synthesizes Kusumaatmadja's emphasis on law's need to anticipate future challenges with Sumitronomics' recognition that global value chains and technological conditions are constantly changing. This criterion evaluates whether a statutory provision contains built-in mechanisms for periodic review, regulatory adjustment, or flexible standard-setting, so that the legal framework can respond to emerging technologies without relying on slow and protracted legislative amendment processes. It also considers whether the provision supports effective inter-agency coordination, since digital governance depends on alignment across data protection, competition, consumer protection, and sectoral regulatory authorities.

Taken together, these three criteria translate the integrated Sumitronomics-Kusumaatmadja framework into a structured analytical tool. Each of the three laws examined in Section IV is assessed against all three criteria, with comparative reference to how China, India, and Brazil address similar regulatory challenges. This approach makes it possible to identify specific gaps in Indonesia's current legal framework and to formulate targeted statutory reforms.

³¹ Fadillah, *supra* note 6 at 56.

IV. INDONESIA'S CURRENT DIGITAL LEGAL FRAMEWORK ANALYSIS

In addressing the second research question, this section systematically applies the three evaluative criteria developed in Section III, resource sovereignty, developmental orientation, and adaptive responsiveness, to Indonesia's three principal digital governance instruments. Each sub-section examines one law, identifies the specific gaps it reveals under each criterion, and draws on comparative perspectives from China, India, and Brazil to position Indonesia within a broader landscape of regulatory approaches adopted by emerging economic powers. Questions of sectoral fragmentation and enforcement, rather than being treated as standalone issues, are incorporated into the discussion of each law where they have the greatest analytical relevance.

A. Personal Data Protection Law (Law 27/2022): Privacy without Resource Control

Article 56 of Law 27/2022 allows cross-border data transfers of personal data as long as the receiving country ensures an "equivalent level" of personal data protection or, in the absence of such equivalence, adequate safeguards are provided, or the data subject gives explicit consent.³² The provision is framed entirely around the maintenance of privacy protections abroad. It does not require local processing, domestic value addition, or technology transfer before personal data is transferred out of Indonesia. From a Sumitronomics perspective, Article 56 is analogous to allowing the export of raw nickel ore solely on the basis that the importing country complies with acceptable environmental standards, without asking whether any downstream processing or economic value remains within Indonesia.

First, in terms of resource sovereignty, China's regulatory architecture adopts a markedly different approach. Article 37 of the Cybersecurity Law (2016) requires critical information infrastructure operators to store personal information and important data within China, while Article 31 of the Data Security Law (2021) extends localization requirements to entities handling "important data." Article 40 of the Personal Information Protection Law (2021) strengthens this framework further by imposing domestic storage obligations and government-conducted security assessments on processors handling significant volumes of data.³³ India has adopted a more flexible, but still sovereignty-oriented model. The Digital Personal Data Protection Act (2023) permits cross-border transfers except to countries blacklisted by the government, and Draft Rule 14 grants the Central Government broad authority to impose localization obligations on any data fiduciary by notification. Brazil's LGPD also permits transfers based on adequacy decisions, standard contractual clauses, or binding corporate rules under Resolution CD/ANPD No. 19/2024. Yet the ANPD has not

³² Law No. 27 of 2022 on Personal Data Protection [Indonesia], art. 56.

³³ Cybersecurity Law of the People's Republic of China (2016), art. 37 ; Data Security Law of the People's Republic of China (2021), art. 31; Personal Information Protection Law of the People's Republic of China (2021), art. 40.

recognized any country, including the United States, as providing adequate protection, effectively producing a precautionary default.³⁴ Indonesia's Article 56, by contrast, does not even provide the institutional infrastructure necessary to make its own equivalence standard operational. As of 2025, the implementing regulation needed to authorize standard contractual clauses and identify equivalent jurisdictions had still not been issued, creating a regulatory vacuum that Mufidi describes as a "paradox of normative compliance."³⁵

The resource sovereignty deficit created by Article 56 becomes even more significant when viewed through the lens of zero-price market dynamics. Indonesian users access the services of major foreign platforms, including search engines, social media, e-commerce intermediaries, and app stores, without making direct monetary payments. Instead, they provide personal data as the effective consideration for access. This pricing model systematically obscures the personal data as the effective consideration for access. This pricing model systematically obscures the extraction of economic value: what appears to consumers as a costless transaction is, from the platform's perspective, the acquisition of a raw that can be converted into advertising revenue, algorithmic personalization, and machine learning training. Much of this downstream processing continues to take place outside Indonesian territory. In this context, the absence of any requirement in Article 56 for local processing or domestic value creation is not merely a gap in privacy protection. More fundamentally, it operates as a structural enabler of offshore value capture, one that progressively reinforces the market power of established foreign platforms.

The mechanism operates through two closely related pathways. First, unrestricted cross-border data transfers enable incumbent platforms to continuously accumulate data-driven advantages. As these platforms process growing volumes of Indonesian user data in offshore facilities, their algorithmic capabilities, including recommendation systems, targeted advertising tools, fraud detection models, and price-optimisation systems, become progressively more sophisticated. This produces a self-reinforcing cycle: stronger algorithmic performance attracts more users, those users generate more data, and the additional data further enhances algorithmic performance. In the absence of any local processing requirement, Indonesian law neither disrupts this cycle nor ensures that any part of the resulting algorithmic intelligence is retained within the domestic jurisdiction. The competitive consequence is significant. Any prospective domestic rival must attempt to enter a market in which incumbents have already accumulated years of behavioural data and transformed it into proprietary analytical assets, assets that no regulatory framework requires them to share, replicate locally, or transfer to domestic firms.

³⁴ *Brazil's Cross-Border Data Transfer Regulation*, by Information Technology and Innovation Foundation, itif.org (2026) online: <<https://itif.org/publications/2025/05/16/brazil-cross-border-data-transfer-regulation/>>.

³⁵ Hilman Mufidi et al, "Cross-Border Data Transfer: Notary Compliance for Foreign Deeds under PDP Law" (2025) 19:3 *Krtha Bhayangkara* at 938.

Second, the absence of value-addition requirements enables data-driven advantages to be externalized across markets and jurisdictions. Foreign platforms do not use Indonesian user data solely to improve their performance within the Indonesian market. Rather, this data is aggregated with inputs from other jurisdictions, processed through global analytical infrastructure, and converted into generalized algorithmic capabilities that can be deployed across the platform's wider international ecosystem. From a competitive perspective, this means that data generated in Indonesia contributes to strengthening the platform's global market power. In effect, Indonesian data subsidizes the expansion and consolidation of dominance far beyond the domestic market. Viewed through the logic of Sumitronomics, this dynamic is structurally analogous to the extraction of raw commodity inputs without any meaningful retention of value at the national level. As discussed in Section IV.B, Indonesian competition law does not yet recognize this process as a mechanism of market power reinforcement. Yet the underlying problem originates upstream, precisely in the absence of local processing under Article 56.

When viewed through the lens of the zero-price market literature, this dynamic explains why traditional competition analysis, typically centred on price effects and market-share thresholds, often underestimates the competitive harm associated with permissive cross-border data transfer regimes. In zero-price markets, competition is shaped less by price than by service quality, user choice, and the ability of rivals to compete through alternative data-driven capabilities. Where a dominant platform is free to extract and process vast quantities of user data offshore without meaningful regulatory constraint, the quality gap between the incumbent's algorithmically refined services and those of any prospective domestic competitor is likely to widen over time. This occurs not necessarily because of overt exclusionary conduct, but because the regulatory framework passively allows data-driven advantages to accumulate and be externalized at scale. In this context, Article 56's silence on local processing and value addition is not a neutral omission. Rather, it functions as an architecturally permissive provision that structurally favours entities already equipped to exploit offshore processing infrastructure, a position currently occupied almost exclusively by large foreign platform operators rather than indigenous Indonesian digital enterprises.

Second, in terms of developmental orientation, the consent framework set out in Articles 20–22 of Law 27/2022 treats personal data primarily as an issue of individual privacy, in line with the GDPR's rights-centric approach. Although consent remains essential for the protection of personal data, the law does not connect data processing to broader developmental objectives. It imposes no obligation on foreign platforms to invest in local research and development, train Indonesian engineers, establish joint ventures with domestic firms, or build domestic data-processing infrastructure as a condition for handling Indonesian personal data. The Personal Data Protection Agency (*Lembaga*), established under Article 58, is tasked with overseeing privacy compliance, but it is not mandated to assess whether data-processing activities contribute to national technological capability or wider economic

development.³⁶ This institutional design reflects the law's basic orientation: it approaches data governance as a matter of privacy management rather than developmental direction. Measured against Kusumaatmadja's *sarana pembaharuan masyarakat* criterion, Law 27/2022 operates more as a passive instrument for the protection of rights than as an active tool of development.

Third, regarding adaptive responsiveness, Law 27/2022 was enacted in 2022, it contains no built-in mechanism for periodic review or regulatory updating to address emerging developments such as generative artificial intelligence, algorithmic decision-making, or new models of data monetization. Inter-agency coordination is also weak. The law operates largely in isolation from competition law enforcement by the KPPU, consumer protection oversight, and relevant sectoral regulations, including Bank Indonesia's payment data localization requirement (PBI 23/6/2021) and the OJK's digital financial innovation sandbox (POJK 13/2018). This fragmentation creates regulatory silos that sophisticated platforms can exploit by optimizing compliance across multiple regimes.³⁷

B. Competition Law (Law 5/1999): Analogue Framework for a Digital Market

Law 5/1999 was originally designed for traditional industrial markets and contains no provisions that recognize the accumulation of personal data as a source of market power or as a form of resource concentration.³⁸ Article 25, which prohibits the abuse of a dominant position, defines dominance through conventional indicators, principally market share thresholds, without accounting for how control over large datasets, network effects, and algorithmic capabilities can themselves constitute dominance in digital markets, even where traditional metrics suggest otherwise.³⁹ Taufiqurrohman identifies this as a “regulatory gap between the digital market structure and existing legal norms,” noting that dominance in digital platform markets is driven less by price or distribution control alone than by network effects, data lock-in, and algorithmic influence.⁴⁰ Likewise, the merger control provisions in Articles 28 and 29 lack criteria for assessing the competitive effects of data concentration. As a result, when a platform acquires a competitor, the significance of combining user datasets and algorithmic systems remains largely invisible within the current statutory framework.⁴¹

³⁶ Rozlinda Mohamed Fadzil, “Urgency of Legal Personal Data Protection in E-Commerce Transactions Involving Artificial Intelligence” (2024) 6:2 *Walisongo Law Review (Walrev)* at 103.

³⁷ *Bank Indonesia Regulation No. 23/6/PBI/2021 on Payment System; Financial Services Authority Regulation No. 13/POJK.02/2018 on Digital Financial Innovation.*

³⁸ *Law No. 5 of 1999 on Prohibition of Monopolistic Practices and Unfair Business Competition* [Indonesia].

³⁹ Moch Marsa Taufiqurrohman, Helza Nova Lita & Gress Gustia Adrian Pah, “Digital Markets and Data Exploitation: Addressing Abuse of Dominance Under Indonesian Competition Law” (2025) 25:1 *Jurnal Penelitian Hukum De Jure* at 8.

⁴⁰ *Ibid.*

⁴¹ *Law No. 5 of 1999 on Prohibition of Monopolistic Practices and Unfair Business Competition* [Indonesia], *supra* note 38, art. 28-29.

First, regarding resource sovereignty, this gap is significant when viewed through a Sumitronomics lens of resource control. If personal data is understood as a strategic resource, then the unchecked accumulation of Indonesian users' data by a single foreign platform is analogous to allowing monopolistic control over a valuable mineral deposit without meaningful regulatory scrutiny. China's approach offers a useful point of contrast: the State Administration for Market Regulation has developed specific antitrust guidelines for the platform economy that expressly recognize data accumulation as a relevant factor in assessing market dominance.⁴² In Indonesia, the KPPU's 2022–2023 investigation and sanctioning of Google for abuse of dominant position through the mandatory use of the Google Play Billing System, including its 30% service fee, demonstrates that issues of digital dominance are already emerging in practice. However, the legal framework currently available remains rooted in a framework designed for traditional markets. As Hutabarat notes, although Google meets the dominant position threshold under Article 25 with a market share exceeding 90%, the statute still lacks a conceptual basis for addressing *data-driven* dominance.⁴³

Second, regarding developmental orientation, Law 5/1999 primarily pursues market efficiency and consumer welfare. Although these are legitimate objectives, they do not capture the developmental steering function envisaged in Kusumaatmadja's framework. The law contains no provisions for protecting or nurturing indigenous digital platforms in the face of predatory competition from well-capitalized foreign incumbents. A developmentally oriented competition law, as illustrated by Brazil's CADE, would assess mergers and acquisitions not only in terms of their competitive effects, but also in relation to their implications for domestic industrial development and technological capacity.⁴⁴ Indonesia's current framework provides no such mechanism. As Taufiqurrohman also notes, Indonesia's competition law "remains largely reactive rather than preventive," lacking the conceptual definitions and procedural tools needed to address digital market-specific anti-competitive practices before they become entrenched.⁴⁵

Third, regarding adaptive responsiveness, the KPPU's institutional capacity to monitor digital markets remains significantly constrained. As Manan notes, although the KPPU plays an important role in safeguarding competition in the digital economy, it still lacks specialized technical expertise in data-driven market dynamics, algorithmic competition, and platform

⁴² Angela Zhang, *Chinese antitrust exceptionalism: How the rise of China challenges global regulation* (Oxford University Press, 2021) at 423.

⁴³ Sylvana Murni Deborah Hutabarat & Muhammad Syahrul Ramadhan, "Abuse of Dominant Position by Google in the Application Payment System" (2025) 9:2 Unram Law Review at 233-234.

⁴⁴ "Data Protection & Privacy 2025 – Brazil" (2025), online: *Chambers and Partners* <<https://practiceguides.chambers.com/practice-guides/data-protection-privacy-2025/brazil>>.

⁴⁵ Moch Marsa Taufiqurrohman, Helza Nova Lita & Gress Gustia Adrian Pah, "Tech Giants' Non-Negotiable Privacy Policies Strategy versus Indonesian Competition Law" (2024) 9:1 Jurnal Bina Mulia Hukum at 167.

ecosystem effects.⁴⁶ Traditional competition analysis also relies on extensive market studies and lengthy procedural processes, which often struggle to keep pace with the speed of concentration in digital markets. By the time a formal investigation is completed, market positions may already have become entrenched through ecosystem lock-in.⁴⁷ In addition, the law provides no expedited review procedures, powers to grant preliminary injunctions, or interim measures specifically tailored to digital market conditions. As a result, the existing enforcement framework lacks the adaptive mechanisms needed to respond effectively to rapid technological and market developments.

C. Consumer Protection Law (Law 8/1999): Pre-Digital Rights in a Platform Economy

First, in terms of resource sovereignty, consumer protection law does not regulate the issue directly, yet its rules on information disclosure and fair dealing remain relevant to the broader framework of data sovereignty. Article 4 guarantees consumers the right to accurate information, and Article 7 imposes disclosure obligations on business actors. Even so, neither provision requires platforms to disclose the economic value derived from consumer data or to explain how personal information is monetized through behavioural targeting and algorithmic personalization.⁴⁸ Viewed through the lens of Sumitronomics, this reveals a failure to ensure that Indonesian consumers, as the source of the “digital resource”, obtain any meaningful share of the value generated from their data.⁴⁹

Second, in terms of developmental orientation, Law 8/1999 was to protect consumers in a largely physical marketplace. The remedial mechanisms contained in Chapter IX focus mainly on product defects and service failures, not on algorithmic harm or data exploitation.⁵⁰ Arianti argues that the law is inadequate to respond to the “new threats” of the digital era, including the misuse of personal data, opaque algorithmic manipulation of consumer behaviour, and persuasive platform design, issues that fall outside the statute’s original framework.⁵¹ A developmentally oriented consumer protection regime, however, would not stop at preventing harm. It would also require platforms to support consumer digital literacy, ensure greater algorithmic transparency, and promote fairer data value-sharing, in line with Kusumaatmadja’s vision of law as an active instrument of societal improvement. Haryanti similarly contends that Indonesia’s consumer protection framework requires fundamental

⁴⁶ Abdul Manan, Moh Nafri & Mohamad Didi Permana, “Law Enforcement Against Digital Businesses (E-Commerce) by The Business Competition Supervisory Commission (KPPU) in Competition Practices Unhealthy Business” (2025) 3:2 *Sinergi International Journal of Law* at 127.

⁴⁷ Ratna Dewi et al, “Analisis Praktik Persaingan Usaha Tidak Sehat di Platform Digital E-Commerce di Indonesia: Tinjauan Hukum Persaingan Usaha” (2025) 3:3 *Jurnal Pustaka Cendekia Hukum dan Ilmu Sosial* at 214.

⁴⁸ *Law No. 8 of 1999 on Consumer Protection [Indonesia]*, art. 4 & 7.

⁴⁹ I Wayan Suarjana, “Etika Bisnis dan Perlindungan Konsumen dalam Algoritma Rekomendasi Marketplace: Studi Kritis Atas Keberpikahan Sistem AI” (2025) 6 *Journal Scientific Of Mandalika (Jsm)* at 2100.

⁵⁰ *Law No. 8 of 1999 on Consumer Protection [Indonesia]*, *supra* note 48, ch. IX.

⁵¹ Zahra Dwi Arianti & Rina Arum Prastyanti, “Legal response to consumer protection risks in the information technology era” (2025) 6:2 *International Journal of Business, Law, and Education* at 1066.

“reconstruction” to address digital platform responsibilities, e-dispute resolution mechanisms, and the integration of personal data protection.⁵²

Third, regarding adaptive responsiveness, Law 8/1999, like the Competition Law, lacks any built-in mechanism for periodic review or regulatory adaptation in response to technological change. It does not address algorithmic transparency, automated decision-making, or the platform-mediated market structures that now dominate Indonesian consumer commerce. Taufiqurrohman’s analysis of AI use in Indonesian digital marketing further suggests that the current legal system continues to treat AI as a “legal object,” rather than as a source of distinct regulatory responsibility. Consequently, the complex accountability problems generated by algorithmic manipulation of consumers fall into a regulatory void.⁵³ Without adaptive provisions, each new technological development, whether generative AI in customer service, dynamic algorithmic pricing, or behavioural nudging, widens the gap between statutory coverage and market reality, while the legal framework offers no institutional mechanism to bridge it.

V. LEGAL RESTRUCTURING RECOMMENDATIONS

In addressing the third research question, the analysis in Section IV reveals a consistent pattern: Indonesia’s three principles of digital governance laws fall short of all three evaluative criteria. This section accordingly sets out specific statutory amendments for each law, followed by a broader structural recommendation on inter-statutory coordination. Each proposal builds on the comparative insights already discussed in Section IV, explaining not only *what* reforms are needed, but also *why* they are required under the integrated framework and *how* other jurisdictions have responded to comparable regulatory challenges.

A. Amending the Personal Data Protection Law: From Privacy Compliance to Resource Governance

The Sumitronomics principle of downstream processing, under which raw resources must undergo local value addition before export, provides the economic rationale for the amendments proposed here. The core deficiency of Law 27/2022 is that it conceptualizes personal data exclusively as an object of privacy protection, rather than also a strategic economic resource. Yet this weakness can be addressed through two targeted statutory amendments, without disturbing the law’s broader privacy framework.

First, Article 56 should be amended to establish tiered cross-border transfer conditions tied to local processing obligations. In its current form, the provision requires only

⁵² Tuti Haryanti, “Reconstruction of Consumer Protection Law in the Digital Era: A Legal Responsiveness Perspective” (2025) 24:1 Pena Justisia: Media Komunikasi dan Kajian Hukum at 7284.

⁵³ Moch Marsa Taufiqurrohman, “Otomatisasi dan Kecerdasan Buatan pada Profesi Hukum: Kerangka Teoritis dan Narasi Ideal di Masa Depan” (2024) 13:2 Jurnal Rechtsvinding: Media Pembinaan Hukum Nasional at 228.

“equivalent protection” or the data subject’s explicit consent, a standard that addresses privacy risk but ignores the problem of economic value leakage. The proposed amendment would require any data controller processing the personal data of more than one million Indonesian data subjects to demonstrate that a meaningful share of data processing activities, including algorithmic training, analytics, and profiling, takes place within Indonesian territory before cross-border transfers may occur.⁵⁴ This approach mirrors the tiered model adopted in China, where Article 40 of the Personal Information Protection Law mandates domestic storage and government-conducted security assessments for processors handling significant volumes of data, while permitting more flexible transfer arrangements for smaller operators.⁵⁵ India’s Draft Rule 14 under the Digital Personal Data Protection Act (2023) similarly preserves governmental discretion to impose localization requirements through notification, thereby creating a flexible yet sovereignty-preserving mechanism. By using a threshold model, the amendment would avoid placing burdens on small and medium-sized enterprises while ensuring that major platforms, which capture the overwhelming share of economic value derived from Indonesian data, cannot transfer raw data abroad without first generating domestic value.

Second, Article 58 establishing the Personal Data Protection Agency should be amended to expand the Agency’s mandate beyond privacy compliance and into the domain of digital development assessment. The Agency should be empowered not only to supervise data protection obligations, but also to evaluate whether data processing activities by major platforms contribute meaningfully to national technological development. Relevant indicators could include the local employment of data scientists and engineers, investment in domestic data centre infrastructure, partnerships with Indonesian research institutions, and technology transfer to local firms.⁵⁶ This would transform the Agency from a passive privacy watchdog into an active instrument of developmental steering, in line with Kusumaatmadja’s *sarana pembaharuan masyarakat* principle. Brazil’s ANPD provides a useful, if partial, precedent: in July 2024, it suspended Meta’s use of Brazilian personal data for AI model training, showing that a data protection authority can exercise substantive oversight over the purposes and consequences of data use, rather than focusing solely on whether consent has been obtained.

B. Modernizing the Competition Law: Data as a Factor in Market Dominance

The Sumitronomics principle of conditional market access, under which foreign entities must contribute to domestic capacity as a condition for operating in strategic sectors, underpins the amendments proposed below. Law 5/1999’s failure to recognize data accumulation as a source of market power leaves Indonesia’s competition framework structurally blind to the

⁵⁴ Law No. 27 of 2022 on Personal Data Protection [Indonesia], *supra* note 32, art. 56.

⁵⁵ This threshold mirrors the approach in China’s PIPL, art 40, which imposes heightened obligations on entities processing personal information above specified volume thresholds

⁵⁶ Law No. 27 of 2022 on Personal Data Protection [Indonesia], *supra* note 32, art. 58.

principal mechanism through which digital platforms establish and entrench dominance. To address this deficiency, three amendments are recommended.

First, Article 1 on definitions should be amended to recognize “data-driven market power” as a distinct basis of market dominance. The definition should specify that control over large-scale user datasets, algorithmic capabilities derived from data processing, and network effects that deepen as data volume may each constitute, or materially contribute to, a dominant market position, regardless of whether conventional market-share thresholds are satisfied.⁵⁷ Lo and Chen note that Indonesia’s current dependence on traditional market-share indicators systematically underestimates platform dominance in digital markets.⁵⁸ The KPPU’s investigation of Google’s abuse of dominant position through the mandatory use of Google Play Billing shows that digital dominance is already arising, yet the Commission has been required to confront them through concepts inherited from the analogue era rather than tools designed for the digital economy.

Second, Articles 28–29 on merger control should be amended to require mandatory data-concentration assessments for any acquisition, merger, or consolidation involving digital platforms that hold personal data of more than 500,000 Indonesian users.⁵⁹ The assessment should evaluate: (a) the degree of control the combined entity would exercise over user data; (b) the competitive consequences of combining datasets and algorithmic systems; and (c) the effect on the viability of the indigenous digital platform. China’s State Administration for Market Regulation has already developed platform economy antitrust guidelines that treat data accumulation as a relevant factor in merger review. That approach offers a practical model that Indonesia could adapt to its own institutional setting.⁶⁰

Third, the KPPU should be granted expedited review powers and authority to impose interim measures specifically designed for digital market dynamics. Traditional competition investigations often take years to conclude; by that stage, ecosystem lock-in may have already rendered any eventual remedy ineffective. Expedited procedures for digital market cases, combined with the power to impose interim behavioural remedies, such as mandatory data interoperability or temporary restrictions on self-preferencing pending final determination, would enable competition enforcement to keep pace with the speed of digital market concentration. In this way, the proposed reform directly addresses the adaptive responsiveness deficit identified in Section IV. B.

C. Updating the Consumer Protection Law: Algorithmic Transparency and Data Value Disclosure

⁵⁷ Law No. 5 of 1999 on Prohibition of Monopolistic Practices and Unfair Business Competition [Indonesia], *supra* note 38, art. 1.

⁵⁸ Adeline Lo & Natasya Edgina Chen, “Monopoli Digital dalam Persaingan Usaha: Evaluasi Penegakan Hukum oleh KPPU dalam Menanggulangi Dominasi Pasar di Era Platform Ekonomi” (2025) 3:2 Anthology: Inside Intellectual Property Rights at 591.

⁵⁹ Law No. 5 of 1999 on Prohibition of Monopolistic Practices and Unfair Business Competition [Indonesia], *supra* note 38, art. 28–29.

⁶⁰ Zhang, *supra* note 42 at 423.

The Sumitronomics principle of equitable development, under which economic growth should generate meaningful benefits for domestic stakeholders rather than disproportionately favour foreign actors, underpins the consumer protection reforms proposed here. Law 8/1999 was designed for a physical marketplace and has no provisions addressing algorithmic harm, behavioural manipulation through data-driven personalization, or the economic value platforms extract from consumer data. In light of these gaps, two amendments are proposed.

First, a new chapter on “Digital Consumer Rights” should be inserted to establish three core protections. These should include: (a) a right to algorithmic transparency, requiring platforms to disclose in clear and accessible language the basic logic of recommendation systems, personalization algorithms, and automated decision-making processes that materially affect consumer choices; (b) a right to data value disclosure, requiring platforms serving more than one million Indonesian consumers to publish annual reports on the aggregate economic value derived from Indonesian consumer data; and (c) a prohibition on manipulative algorithmic design or dark patterns, that exploit behavioural biases to push consumer toward decisions contrary to their interests.⁶¹ Suarjana’s study of algorithmic recommendation bias in Indonesian marketplaces confirms that platforms already deploy systems structurally biased toward paying advertisers rather than genuine consumer welfare, yet such conduct remains beyond the reach of the current legal framework.⁶² The requirement of data value operationalizes the Sumitronomics principle of resource sovereignty at the consumer level: if consumers are the source of the “digital resource,” they should, at a minimum, be informed of the value their data generates.

Second, remedial mechanisms in Chapter IX should be expanded to include collective redress for systematic algorithmic harm. The current provisions are primarily designed for individual product defects and service failures, making them poorly suited to the realities of digital consumer harm, where individual losses may be small, but the cumulative effects of data exploitation or algorithmic manipulation are significant.⁶³ A collective redress mechanism, enabling consumer associations or the government to bring claims on behalf of affected groups of users, would respond more effectively to the structural nature of this harm.⁶⁴ In addition, because Indonesia’s current legal system still treats AI as a “legal object” without independent responsibility, such a mechanism would help address the accountability gap that currently surrounds algorithmic misconduct.⁶⁵

D. Structural Recommendation: Inter-Statutory Coordination Mechanism

⁶¹ *Law No. 8 of 1999 on Consumer Protection [Indonesia]*, *supra* note 48, art. 4.

⁶² Suarjana, “Etika Bisnis dan Perlindungan Konsumen dalam Algoritma Rekomendasi Marketplace”, *supra* note 49 at 2100.

⁶³ *Law No. 8 of 1999 on Consumer Protection [Indonesia]*, *supra* note 48.

⁶⁴ Arianti & Prastyanti, *supra* note 51 at 1066.

⁶⁵ Taufiqurrohman, *supra* note 53 at 228.

The Sumitronomics principle of integrated governance, under which multiple policy instruments should be coordinated to advance coherent national development objectives, underscores the need for structural alignment across these three laws. A cross-cutting weakness identified in Section IV is the absence of coordination among data protection, competition, and consumer protection enforcement. This fragmentation enables platforms to navigate regulatory silos strategically, complying with privacy rules while engaging in anti-competitive data practices, or meeting competition standards while continuing to exploit consumer information asymmetries.⁶⁶

Instead of proposing an entirely new omnibus “Digital Sovereignty Act”, which would likely involve a protracted legislative process and create a risk of overlapping with existing statutory frameworks, this article recommends establishing a Digital Governance Coordination Council (*Dewan Koordinasi Tata Kelola Digital*) through a Government Regulation (*Peraturan Pemerintah*) issued pursuant to the implementing provisions of Law 27/2022.⁶⁷ The Council should include representatives from the Personal Data Protection Agency, the KPPU, the Consumer Dispute Resolution Agency, the Ministry of Communication and Digital Affairs, Bank Indonesia, and the OJK. It should be mandated to: (a) conduct joint assessments of major platform operations across the three relevant regulatory domains; (b) issue coordinated enforcement measures that address privacy, competition, and consumer protection concerns simultaneously; and (c) produce an annual “Digital Sovereignty Report” assessing the adequacy of Indonesia’s legal framework in response to evolving technological and market conditions. In this way, the criterion of adaptive responsiveness would be institutionalized within the regulatory architecture itself.⁶⁸

This institutional mechanism gives practical effect to Kusumaatmadja’s anticipatory approach to law. Instead of waiting for statutory deficiencies to escalate into crises requiring legislative amendment, the Council would function as a permanent mechanism for identifying emerging challenges, coordinating regulatory responses, and recommending targeted legal reforms. Its role would be to ensure that Indonesia’s legal framework develops in step with the changing dynamics of the digital economy it seeks to govern.

VI. CONCLUSION

This article has demonstrated that an integrated analytical framework synthesising Sumitronomics resource sovereignty principles with Kusumaatmadja’s *sarana pembaharuan masyarakat* jurisprudence yields three operationalised evaluative criteria, resource sovereignty, developmental orientation, and adaptive responsiveness, capable of exposing structural deficiencies in digital governance instruments that remain invisible under conventional rights-

⁶⁶ Fadzil, *supra* note 36 at 103.

⁶⁷ *Law No. 27 of 2022 on Personal Data Protection [Indonesia]*, *supra* note 32, art. 75.

⁶⁸ Kusumaatmadja, *supra* note 5 at 200.

centric analysis. When applied to Indonesia's Personal Data Protection Law (Law 27/2022), Competition Law (Law 5/1999), and Consumer Protection Law (Law 8/1999), none of the three statutes satisfies any of the three criteria, confirming that comprehensive statutory restructuring, rather than incremental regulatory adjustment, is necessary to transform Indonesia's digital legal architecture from a passive facilitator of offshore data extraction into an active instrument of national digital sovereignty.

These findings carry implications beyond Indonesia's immediate regulatory context. The Sumitronomics–Kusumaatmadja integration establishes that indigenous theoretical traditions from the Global South, when rigorously operationalised, can serve as viable analytical alternatives to Western-centric paradigms in technology law scholarship, an approach replicable for other rising economic powers navigating comparable tensions between foreign platform accommodation and domestic digital sovereignty. Future research should test this framework's practical viability through empirical studies examining institutional capacity for implementing the proposed reforms, industry compliance costs, and the trade-law compatibility of digital downstream obligations under WTO disciplines.

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COMPETING INTEREST

The authors will be asked to sign this statement once the submission has been accepted.

REFERENCES

- Afifi, Abdullah A et al, "Re-Viewing Sumitro's Policy and Industrial Maturity: Powering Downstream and Manufacturing Industries for Economic Growth and Sustainable Society" (2024) 2:2 *Journal of Regional Development and Technology Initiatives* 79–102.
- Arianti, Zahra Dwi & Rina Arum Prastyanti, "Legal response to consumer protection risks in the information technology era" (2025) 6:2 *International Journal of Business, Law, and Education* 1063–1069.
- Bank Indonesia Regulation No. 23/6/PBI/2021 on Payment System.*

- Belli, Luca, Walter B Gaspar & Shilpa Singh Jaswant, “Data sovereignty and data transfers as fundamental elements of digital transformation: Lessons from the BRICS countries” (2024) 54:1 *Computer Law & Security Review*.
- Cybersecurity Law of the People’s Republic of China (2016)*.
- Data Security Law of the People’s Republic of China (2021)*.
- DataReportal, We Are Social, & Meltwater, *Digital 2025: Indonesia*, by DataReportal, We Are Social, & Meltwater (Singapore: Meltwater, 2025).
- Dewi, Ratna et al, “Analisis Praktik Persaingan Usaha Tidak Sehat di Platform Digital E-Commerce di Indonesia: Tinjauan Hukum Persaingan Usaha” (2025) 3:3 *Jurnal Pustaka Cendekia Hukum dan Ilmu Sosial*.
- Dick, Howard et al, *The Emergence of a National Economy: An Economic History of Indonesia, 1800–2000* (University of Hawaii Press, 2002).
- Djojohadikusumo, Sumitro, *Teori Ekonomi Pertumbuhan dan Ekonomi Pembangunan: Perkembangan Pemikiran Ekonomi* (Jakarta: LP3ES, 1994).
- Elnathan, Andrew & Wishnu Mahendra Wiswayana, “ASEAN’s Limitation of Regional Digital Integration” (2025) 4:11 *Journal of Social Research*.
- Fadillah, Nor, “Tinjauan Teori Hukum Pembangunan Mochtar Kusumaatmadja Dalam Undang-Undang Ibu Kota Negara (IKN)” (2022) 11:1 *Supremasi Hukum: Jurnal Kajian Ilmu Hukum*.
- Fadzil, Rozlinda Mohamed, “Urgency of Legal Personal Data Protection in E-Commerce Transactions Involving Artificial Intelligence” (2024) 6:2 *Walisongo Law Review (Walrev)* 96–108.
- Financial Services Authority Regulation No. 13/POJK.02/2018 on Digital Financial Innovation*.
- Fitriani, Annisa et al, “The European Union’s Legal Challenge to Indonesia’s Nickel Export Ban at the World Trade Organization” (2025) 5:2 *Research Horizon*.
- Gao, Henry S, “Data Sovereignty and Trade Agreements: Three Digital Kingdoms” (2021) 22:S1 *World Trade Review*.
- Google, Temasek, & Bain & Company, *e-Conomy SEA 2025: Roaring 20s*, by Google, Temasek, & Bain & Company (Mountain View: Google, 2025).
- Guberman, David & Samantha Schreiber, *Indonesia’s Export Ban of Nickel*, by David Guberman & Samantha Schreiber (Washington DC: USITC, 2024).
- Haryanti, Tuti, “Reconstruction of Consumer Protection Law in the Digital Era: A Legal Responsiveness Perspective” (2025) 24:1 *Pena Justisia: Media Komunikasi dan Kajian Hukum*.
- Hutabarat, Sylvana Murni Deborah & Muhammad Syahrul Ramadhan, “Abuse of Dominant Position by Google in the Application Payment System” (2025) 9:2 *Unram Law Review*.
- Information Technology and Innovation Foundation, *Brazil’s Cross-Border Data Transfer Regulation*, by Information Technology and Innovation Foundation, itif.org (2026).

- Kusumaatmadja, Mochtar, *Konsep-konsep Hukum dalam Pembangunan* (Bandung: Alumni, 2006).
Law No. 5 of 1999 on Prohibition of Monopolistic Practices and Unfair Business Competition [Indonesia].
Law No. 8 of 1999 on Consumer Protection [Indonesia].
Law No. 27 of 2022 on Personal Data Protection [Indonesia].
- Lo, Adeline & Natasya Edgina Chen, "Monopoli Digital dalam Persaingan Usaha: Evaluasi Penegakan Hukum oleh KPPU dalam Menanggulangi Dominasi Pasar di Era Platform Ekonomi" (2025) 3:2 Anthology: Inside Intellectual Property Rights.
- Manan, Abdul, Moh Nafri & Mohamad Didi Permana, "Law Enforcement Against Digital Businesses (E-Commerce) by The Business Competition Supervisory Commission (KPPU) in Competition Practices Unhealthy Business" (2025) 3:2 Sinergi International Journal of Law.
- Martinelli, Imelda, Christian Samuel Lodo Haga & I Putu Juni Artana, "Electronic Agreements from the Lens of the Legal Perspective" Law as a Tool of Social Engineering" Proposed by Roscoe Pound" (2023) 13:2 BJ.
- Mufidi, Hilman et al, "Cross-Border Data Transfer: Notary Compliance for Foreign Deeds under PDP Law" (2025) 19:3 Krtha Bhayangkara.
- Mumpuni, Gumilar Rachdityo & Rukmi Hapsari, "Program Benteng Sumitro Djojohadikusumo: Fondasi Awal Kelahiran Pengusaha Nasional Indonesia" (2025), online: *Media Keuangan* <<https://mediakeuangan.kemenkeu.go.id/article/show/program-benteng-sumitro-djojohadikusumo-fondasi-awal-kelahiran-pengusaha-nasional-indonesia>>.
- Permana, Aditya & Ardian Prasetyo, "Pancasila and Technogeopolitics" (2025) 5:2 Jurnal Keindonesiaan.
- Personal Information Protection Law of the People's Republic of China (2021)*.
- Pound, Roscoe, *An Introduction to the Philosophy of Law* (Project Gutenberg, 2010).
- Prasetyo, Wibowo Heru et al, "Assessing Digital Competence in Indonesian students: demographic and Internet usage factors through the Rasch Model" (2025) 21:2 Journal of e-Learning and Knowledge Society.
- Said, Muhammad et al, "Revitalizing Sumitro Djojohadikusumo's Economic Legacy: Pathways to Indonesia's Economic Self-Reliance in the Digital and Globalization Era" (2025) 9:2 Profit: Jurnal Kajian Ekoonomi dan Perbankan Syariah.
- Samir, Salman, Rizky Utami & Muhammad Maula Razak, "What Are the Economic Impacts of Indonesia's Export Ban? A Computable General Equilibrium Analysis" (2024) 25:1 Jurnal Ekonomi Pembangunan.
- Solikhah, Mar'atus, "Personal Data Protection in the Era of Digital Transformation: Challenges and Solutions in the Indonesian Cyber Law Framework" (2025) 2:1 Indonesian Cyber Law Review.

- Suarjana, I Wayan, “Etika Bisnis dan Perlindungan Konsumen dalam Algoritma Rekomendasi Marketplace: Studi Kritis Atas Keberpihakan Sistem AI” (2025) 6 Journal Scientific Of Mandalika (Jsm) E-Issn 2025.
- Syah, Danial et al, “Revitalisasi Konsep Hukum Pembangunan Mochtar Kusumaatmadja dalam Pembaruan Hukum Kontemporer” (2025) 4:5 Jurnal Ilmu Multidisiplin.
- Taufiqurrohman, Moch Marsa, “Otomatisasi dan Kecerdasan Buatan pada Profesi Hukum: Kerangka Teoritis dan Narasi Ideal di Masa Depan” (2024) 13:2 Jurnal Rechtsvinding: Media Pembinaan Hukum Nasional.
- Taufiqurrohman, Moch Marsa, Helza Nova Lita & Gress Gustia Adrian Pah, “Digital Markets and Data Exploitation: Addressing Abuse of Dominance Under Indonesian Competition Law” (2025) 25:1 j peneliti huk dejure 1.
- Taufiqurrohman, Moch Marsa, Helza Nova Lita & Gress Gustia Adrian Pah, “Tech Giants’ Non-Negotiable Privacy Policies Strategy versus Indonesian Competition Law” (2024) 9:1 1.
- Voigt, Paul & Axel von dem Bussche, *The EU General Data Protection Regulation (GDPR)* (Cham: Springer International Publishing, 2017).
- Wie, Thee Kian, “Understanding Indonesia: The Role of Economic Nationalism” (2010) 3 Journal of Indonesian Social Sciences and Humanities.
- Zhang, Angela, *Chinese antitrust exceptionalism: How the rise of China challenges global regulation* (Oxford University Press, 2021).
- “Data Protection & Privacy 2025 – Brazil” (2025), online: *Chambers and Partners* <<https://practiceguides.chambers.com/practice-guides/data-protection-privacy-2025/brazil>>.