

Beyond Efficiency: A Procedural and Substantive Justice Framework for Artificial Intelligence in Indonesia's Judiciary

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ARTICLE INFO	ABSTRACT
Article History Received: 12 August 2026 Revised : 12 August 2026 Accepted: 13 August 2026 Keywords <i>Procedural Justice; Substantive Justice; Artificial Intelligence; Judicial Reasoning; Indonesia.</i> DOI https://doi.org/xx.xxxx/governia.vXiX.XXX	<i>This article extends the author's earlier mapping of the risks and opportunities of judicial artificial intelligence (AI) in Indonesia by asking a narrower, theory-driven question: which conception of justice should govern the normative limits of AI-assisted adjudication, a procedural one or a substantive one? Employing normative legal research with a conceptual-theoretical approach, the study places John Rawls' distinction between pure, perfect, and imperfect procedural justice alongside Tom Tyler's empirical procedural-justice criteria and substantive-justice concerns drawn from Dworkin's law-as-integrity and distributive-justice literature. It argues that judicial AI in Indonesia can, at best, function as an instrument of imperfect procedural justice: no algorithm supplies an independent, verifiable criterion of a substantively correct outcome, so procedural safeguards, explainability, participation, neutrality, and correctness, cannot by themselves guarantee substantive fairness, and must be paired with distinct substantive safeguards addressing bias, equality, and Indonesia's legally pluralistic context of civil law, adat, and Islamic law. The article proposes a dual-track governance model that treats procedural and substantive justice as separate but interlocking pillars, rather than folding both into a single generic regulatory checklist. The findings suggest that Indonesian policy on judicial AI should be organized explicitly around these two tracks to avoid conflating the legitimacy of a decision-making process with the fairness of its outcome.</i> This is an open access article under the CC-BY 4.0 license.

1. Introduction

In an earlier study, the author mapped the risks and opportunities of artificial intelligence (AI) use by judges in Indonesian courts, surveying ethical dilemmas, regulatory gaps, and comparative practice from jurisdictions such as Singapore, Estonia, and the United States. That study established that AI adoption in Indonesia's judiciary is accelerating faster than the regulatory and ethical frameworks meant to govern it, and it proposed a general set of recommendations, legislation, explainability, oversight bodies, pilot projects, and training, aimed at closing that gap.¹

This article does not repeat that survey. Instead, it isolates a question the earlier study raised but did not resolve: when commentators say AI must not compromise "judicial independence" or must preserve "fairness," which theory of justice is actually doing the work? Much of the existing literature, including the author's own prior contribution, treats procedural safeguards, transparency, explainability, human review, and substantive outcomes, equal treatment, non-discrimination, correct application of law, as though they were interchangeable proxies for the same underlying value. They are not. A process can be procedurally impeccable and still produce a substantively unjust result, and a substantively defensible outcome can be reached through a process that denies litigants voice or comprehensibility. The distinction matters acutely for AI, because algorithmic systems are, by design, easier to regulate at the level of process (logging, disclosure, appeal rights) than at the level of substance (what counts as a correct or fair decision in a given case).²

The research problem addressed here is therefore theoretical rather than descriptive: how should procedural justice and substantive justice, as distinct normative standards, be used to evaluate and bound the use of AI by judges in Indonesia, and what does that distinction imply for how Indonesian regulation should be structured? This reframing responds to a gap in the literature on algorithmic justice in Indonesia, which tends to borrow the language of "fairness" without specifying whether fairness is being claimed of the decision procedure or of the decision itself.³

Two theoretical resources anchor the analysis. The first is John Rawls' typology of procedural justice, in particular his distinction between pure procedural justice (where a fair procedure defines what counts as a fair outcome), perfect procedural justice (where an independent criterion of a correct outcome exists and the procedure is designed to reliably reach it), and imperfect procedural justice (where an independent criterion of correctness exists but no procedure guarantees it will be reached). The second is Tom Tyler's empirical account of

¹ Indra Padillah Akbar and Asep Sarifudin, 'Legalitas Kecerdasan Buatan (Artificial Intelligence) Sebagai Subjek Hukum Pemegang Hak Paten', *NUSANTARA: Jurnal Ilmu Pengetahuan Sosial*, 11.2 (2024), pp. 779–88 <<http://jurnal.um-tapsel.ac.id/index.php/nusantara/article/view/14217/0%0Ahttp://jurnal.um-tapsel.ac.id/index.php/nusantara/article/download/14217/8507>>.

² Shabrina Fadiah Ghazmi, 'Urgensi Pengaturan Artificial Intelligence pada Sektor Bisnis Daring Di Indonesia', *Jurnal Hukum Lex Generalis*, 2.8 (2021), pp. 782–303 <<https://jhlgr.rewangrencang.com/>>.

³ Akbar and Sarifudin.

procedural justice as a determinant of legitimacy, built around voice, neutrality, trustworthiness, and respect. These are read together with substantive-justice concerns drawn from Dworkin's account of law as integrity and from distributive-justice literature on algorithmic bias, to keep the analysis from collapsing procedural and substantive standards into one another.

The contribution of this article is threefold. First, it supplies a more precise theoretical vocabulary for evaluating judicial AI than the general ethics-and-regulation framing used in the earlier study. Second, it shows, using Rawls' typology, why judicial AI in Indonesia should be classified as, at best, an instrument of imperfect procedural justice, a classification with direct implications for how much normative weight AI outputs may be given. Third, building on that classification, it proposes a dual-track governance model that treats procedural safeguards and substantive safeguards as separate, non-substitutable pillars, refining the single, undifferentiated regulatory checklist proposed in the author's earlier work into a structure organized explicitly around the two justice tracks.

Rawls distinguishes three forms of procedural justice. In pure procedural justice, there is no independent standard for a correct outcome; whatever result the fair procedure yields is, by definition, fair, as in a properly conducted lottery. In perfect procedural justice, an independent criterion of the right outcome exists, and a procedure can be designed that is guaranteed to reach it. In imperfect procedural justice, an independent criterion of the right outcome exists, but no available procedure guarantees that it will be reached; a criminal trial is Rawls' own example, since the goal is to convict the guilty and acquit the innocent, yet no trial procedure can guarantee that result in every case (Rawls, 1971). This typology is useful precisely because it forces a prior question before any AI-fairness debate can proceed: which type of procedural situation is judicial decision-making? Adjudication is not a lottery, so pure procedural justice is the wrong model. And because a substantively correct application of law to fact remains, in principle, independent of whichever procedure produced it, perfect procedural justice is unavailable, since no institutional design, human or algorithmic, can guarantee that every judgment is substantively correct. Judicial decision-making, with or without AI, is therefore properly understood as a domain of imperfect procedural justice.⁴

This has a direct consequence for how AI outputs should be treated. If judicial decision-making is inherently imperfect-procedural, then no amount of procedural refinement of an AI system, better logging, better explanation, better appeal mechanisms, can convert its recommendations into a guarantee of substantive correctness. Procedural safeguards reduce the probability of error and make error correctable; they do not eliminate the gap between process and outcome. Any argument that treats AI-generated recommendations as authoritative because

⁴ Samuel Frans Boris Situmorang and others, 'Teori Keadilan Sebagai Fairness Karya John Rawls Dikaitkan Dengan Bank Tanah Di Indonesia', *IINNOVATIVE: Journal Of Social Science Research*, 3.2 (2023), pp. 1562–78 <<https://j-innovative.org/index.php/Innovative/article/view/362/403>>.

the process behind them is transparent or auditable commits a category error, mistaking procedural legitimacy for substantive correctness.⁵

Tyler's procedural justice theory supplies the second layer of the framework. Drawing on extensive empirical work on legal legitimacy, Tyler identifies four components that determine whether people experience a legal process as fair: voice (the opportunity to state one's case and have it considered), neutrality (the absence of bias and the consistent application of principles), trustworthiness (a sense that the decision-maker is acting in good faith and with concern for those affected), and respect (treatment that acknowledges the dignity and rights of participants). Unlike Rawls' typology, which is a conceptual classification, Tyler's framework is diagnostic: it can be applied directly to specific features of AI-assisted adjudication, e-Court filing systems, algorithmic case triage, AI-drafted recommendations, to ask whether each feature strengthens or weakens litigants' experience of voice, neutrality, trustworthiness, and respect.⁶

Substantive justice, by contrast, is concerned with the content of outcomes rather than the qualities of process. Dworkin's account of law as integrity holds that a correct legal decision is one that fits and justifies the relevant body of law as a coherent scheme of principle, not merely one that emerges from a procedurally sound process (Dworkin, 1986). Applied to algorithmic decision-making, this raises the distinct question of whether an AI system's outputs cohere with the substantive principles of the legal order, including constitutional guarantees of equality, rather than only whether the system was procedurally well-governed. The literature on algorithmic bias adds a distributive dimension: because AI systems are trained on historical data, they risk encoding and reproducing patterns of inequality that a substantively just legal order is committed to correcting, independent of how transparent or well-documented the system's processes are.

For Indonesia, the substantive dimension carries an additional layer of complexity that the procedural dimension does not fully capture: legal pluralism. Indonesian adjudication operates across civil law, customary (adat) law, and Islamic law, each with different substantive conceptions of a just outcome in matters such as inheritance, family law, and land disputes. An AI system trained predominantly on codified civil-law materials may be procedurally transparent, its reasoning fully disclosed, while still being substantively biased toward one normative order over the others. Procedural justice, in Tyler's sense, cannot detect this kind of bias, because voice, neutrality, trustworthiness, and respect can all be formally satisfied while the substantive content of the applicable law is skewed. This is the central theoretical payoff of separating the two tracks: procedural and substantive justice diagnose different failure modes, and a regulatory framework that only measures one will be blind to the other.

⁵ Agus Budi Susilo, 'Penegakan Hukum Yang Berkeadilan Dalam Perspektif Filsafat Hermeneutika Hukum: Suatu Alternatif Solusi Terhadap Problematika Penegakan Hukum Di Indonesia', *Perspektif*, 16.4 (2011), p. 214, doi:10.30742/perspektif.v16i4.84.

⁶ Suwardi Sagama, 'Analisis Konsep Keadilan, Kepastian Hukum Dan Kemanfaatan Dalam Pengelolaan Lingkungan', *Mazahib*, 15.1 (2016), pp. 20–41, doi:10.21093/mj.v15i1.590.

2. Research Method

This study uses normative legal research with a conceptual-theoretical approach.⁷ Where the author's earlier study relied primarily on a comparative and prescriptive method, surveying regulatory practice across jurisdictions to derive general recommendations, this article instead applies a deductive theoretical framework, Rawls' typology of procedural justice and Tyler's empirical procedural-justice criteria, together with substantive-justice literature, to the specific features of AI-assisted adjudication in Indonesia. The primary materials are the same body of statutory provisions, judicial administration regulations (including e-Court and e-Litigation frameworks), and international soft-law instruments on AI in justice systems referenced in the earlier study; the secondary materials are supplemented here with foundational jurisprudential and political-theory literature on procedural and substantive justice.

The analytical procedure proceeds in three steps. First, each stage of AI-assisted adjudication identified in the earlier study, document analysis and case triage, pattern identification, recommendation generation, is classified according to Rawls' typology to establish whether it operates within a pure, perfect, or imperfect procedural-justice structure. Second, each stage is evaluated against Tyler's four criteria to identify specific procedural strengths and deficits. Third, each stage is separately evaluated for substantive-justice risk, with particular attention to Indonesia's legal pluralism, to determine whether procedural compliance alone would be sufficient to certify the stage as just.

3. Results and Discussion

3.1 The Procedural Dimension: AI and the Structure of Fair Process

Applying Tyler's criteria to the stages of AI-assisted adjudication identified in the earlier study yields a mixed picture. Voice is the most vulnerable component: when an AI system pre-screens filings, triages case priority, or drafts a recommendation before a hearing, litigants may never learn that an algorithmic step occurred, let alone have an opportunity to contest its inputs.⁸

Neutrality is, in principle, an area where AI can outperform human decision-makers, since a well-audited system applies the same rule to every case, but this advantage collapses if the training data itself encodes inconsistency or bias, in which case the system achieves consistent unfairness rather than neutrality. Trustworthiness depends on whether litigants believe the system is designed with their interests in mind, which in turn depends on institutional transparency about who built the system, on what data, and for what purpose, questions that Indonesia's current e-Court and e-Litigation frameworks do not yet require public bodies to

⁷ Peter Mahmud Marzuki, *Penelitian Hukum*, Edisi revisi (2019).

⁸ Rafly Nauval Fadillah, 'Perlindungan Hak Atas Kekayaan Intelektual Artificial Intelligence (AI) Dari Perspektif Hak Cipta Dan Paten', *Das Sollen*, 2.2 (2023), pp. 1–25, doi:10.11111/dassollen.xxxxxxx.

answer. Respect is largely a design question: whether the interface and process treat litigants as participants in a legal process or as inputs to an administrative pipeline.⁹

Read through Rawls' typology, none of these stages constitutes perfect procedural justice, since no design of any of them guarantees a substantively correct outcome. Case triage and document analysis are closest to pure procedural justice in a narrow sense, there is often no independent "correct" triage order, so a fair procedure can legitimately define the outcome, but recommendation generation is squarely imperfect procedural justice, because an independent standard of legal correctness exists and no algorithmic procedure can guarantee it is met. This distinction matters practically: it is defensible to let a well-designed procedure fully determine case-triage outcomes, but it is not defensible to let a procedure, however transparent, stand in for the independent substantive judgment that adjudication requires.¹⁰

The author's own reading of this mixed picture is that the procedural weaknesses identified above are not incidental implementation gaps to be fixed by better system design; they are structural, because Indonesia's e-Court and e-Litigation regulations were drafted to govern administrative digitization, not algorithmic decision support, and therefore contain no provisions requiring disclosure of algorithmic involvement, no requirement that litigants be informed when a document has been triaged or a recommendation drafted with AI assistance, and no defined channel through which a litigant could contest an algorithmic input specifically, as opposed to contesting the final judicial decision.

3.2 The Substantive Dimension: Outcome Fairness and Legal Pluralism

The substantive-justice analysis asks a different question of the same stages: even if voice, neutrality, trustworthiness, and respect are all satisfied, does the outcome cohere with the substantive principles of Indonesian law, understood as encompassing civil law, adat, and Islamic law? Two risks stand out. The first is data-driven bias of the familiar kind documented in comparative literature, for example, the well-known criticisms of the COMPAS risk-assessment tool in the United States, where historical sentencing and arrest data reproduced racial disparities regardless of how procedurally well-governed the tool's deployment was.

The second, more specific to Indonesia, is normative-order bias: an AI system trained mainly on codified statutory materials and reported civil-law decisions may systematically underweight adat or Islamic-law reasoning in family, inheritance, or land matters where these bodies of law are substantively controlling. Because this bias operates at the level of which legal

⁹ Paulus Wisnu Yudoprakoso, 'Kecerdasan Buatan (Artificial Intelligence) Sebagai Alat Bantu Proses Penyusunan Undang-Undang Dalam Upaya Menghadapi Revolusi Industri 4.0 Di Indonesia', *Simposium Hukum Indonesia*, 1.1 (2019), pp. 574–86 <<http://journal.trunojoyo.ac.id/shi>>.

¹⁰ Galih Orlando, 'Efektivitas Hukum Dan Fungsi Hukum Di Indonesia', *Tarbiyah Bil Qalam : Jurnal Pendidikan Agama Dan Sains*, 6.1 (2022), pp. 49–58, doi:10.58822/tbq.v6i1.77.

order's outcome is treated as correct, not at the level of whether the process was transparent, it is invisible to a purely procedural audit.¹¹

This is the clearest illustration of why procedural and substantive justice must be tracked separately rather than folded into a single "fairness" checklist, as the author's earlier study implicitly did when it grouped transparency, bias auditing, and accountability together as a single set of ethical safeguards.¹² A system can pass every procedural test, full explainability, documented audit trail, appeal rights, while still substantively privileging one of Indonesia's three legal orders over the others in a given matter. Detecting that failure requires a substantive review conducted by someone competent in the relevant body of law, not merely a technical audit of the algorithm's process.

The author's own position is that normative-order bias deserves more weight in the Indonesian debate than it currently receives, precisely because it is the risk least likely to be caught by the safeguards most commonly proposed. Explainable AI (XAI), audit trails, and appeal rights, the standard toolkit recommended in both comparative literature and the author's earlier study, are procedural instruments; they can show that a recommendation was generated consistently and can be traced, but they cannot show that the substantive legal standard applied was the correct one among civil, adat, and Islamic law where more than one could plausibly govern. Closing this gap requires a substantive check that is logically independent of, and therefore additional to, procedural transparency, not a more thorough version of it.

3.3 Reconciling the Two Tracks: A Dual-Track Governance Model

The theoretical analysis above supports a governance model organized around two distinct, interlocking pillars rather than one undifferentiated set of recommendations.¹³ The procedural pillar should mandate, for every AI-assisted stage of adjudication, disclosure to litigants that an algorithmic step has occurred (addressing voice), documented consistency of rule application (addressing neutrality), public information about system provenance and purpose (addressing trustworthiness), and interface and process design that preserves litigants' standing as participants (addressing respect). The substantive pillar should require, independently of procedural compliance, periodic review of AI outputs for coherence with the substantive content of civil law, adat, and Islamic law as applicable, conducted by panels that include expertise in each relevant normative order, and outcome-level bias testing that compares AI-influenced decisions against a substantive, not merely procedural, standard of correctness.

The Rawlsian classification of judicial AI as an instrument of imperfect procedural justice implies a further, structural constraint: because no procedure, however well-designed,

¹¹ Praise Junta W.S Siregar, 'Perbandingan Sistem Hukum Civil Law Dan Common Law Dalam Penerapan Yurisprudensi Ditinjau Dari Politik Hukum', *Dharmasiswa*, 2.2808–9456 (2022), pp. 1027–36 <<https://scholarhub.ui.ac.id/dharmasiswa/vol2/iss2/37>>.

¹² Nyoman Gede, 'Makna Hukum Dan Kepastian Hukum', *Kertha Widya: Jurnal Hukum*, 2.1 (2014), pp. 1–26 <<https://ejournal.unipas.ac.id/index.php/KW/article/view/426/351>>.

¹³ Kusnu Goesniadhie S., 'Perspektif Moral Penegakan Hukum Yang Baik', *Jurnal Hukum Ius Quia Iustum*, 17.2 (2010), pp. 195–216, doi:10.20885/iustum.vol17.iss2.art2.

guarantees a substantively correct outcome, final authority over substantive determinations must remain with a human judge, and AI's institutional role should be confined to stages closer to pure procedural justice, administrative triage, document organization, pattern surfacing, where an independent standard of correctness either does not apply or is not solely determinative. This is a narrower and more theoretically grounded version of the "assistive tool, not substitute" position advanced in the earlier study; here it follows deductively from the classification of adjudication as imperfect procedural justice, rather than being asserted as a general ethical preference.¹⁴

Comparative practice is consistent with this dual-track logic even where it is not framed in these theoretical terms. Estonia confines AI to small-claims matters and preserves a human appeal route, which functions as a substantive backstop against the limits of imperfect procedural justice. Singapore restricts AI to administrative tasks, effectively keeping algorithmic involvement within the domain closer to pure procedural justice. Neither jurisdiction's practice, however, was designed with Indonesia's legal pluralism in mind, which is why the substantive pillar proposed here, panels spanning civil, adat, and Islamic law expertise, has no direct comparative precedent and represents this article's most distinctive contribution beyond the earlier survey.

3.4 Regulatory Review: Positioning the Dual-Track Model within Indonesia's Current Legal Architecture

The dual-track model proposed above is not being fitted onto a regulatory vacuum; Indonesia already has several instruments that touch different corners of the problem, and the author's assessment is that their central defect is not absence but misalignment, each instrument addresses one track, procedural or administrative, while none addresses the substantive track at all. This section reviews the relevant instruments directly against that gap.

The foundational procedural guarantee is Law No. 48 of 2009 on Judicial Power (Undang-Undang Nomor 48 Tahun 2009 tentang Kekuasaan Kehakiman), which enshrines judicial independence and the principle that judgments must be grounded in law and the judge's own legal reasoning.¹⁵ Read against Rawls' typology, this provision is best understood as Indonesia's positive-law affirmation that adjudication is not pure procedural justice, the law does not treat whatever a procedure outputs as, by definition, correct, but rather presupposes an independent standard of lawful correctness that the judge is personally responsible for reaching. This is a strong textual anchor for the argument advanced in Section 3.3 that final substantive authority must remain with a human judge: it is not only a theoretical inference from Rawls' framework but a position already implicit in Indonesian judicial-power law, which the author reads as reinforcing rather than merely permitting the dual-track model.

¹⁴ Muh. Sadli Sabir and others, 'Pengawasan Kode Etik Profesi Penegak Hukum (Komisi Yudisial, Komisi Kepolisian Nasional, Komisi Kejaksaan, Komisi Pemberantasan Korupsi, Dan Dewan Pengawas KPK)', *Ethics and Law Journal: Business and Notary*, 1.3 (2023), pp. 210–35, doi:10.61292/eljbn.v1i3.85.

¹⁵ Dachran Busthami, 'Kekuasaan Kehakiman Dalam Perspektif Negara Hukum Di Indonesia', *Masalah-Masalah Hukum*, 46.4 (2018), p. 336, doi:10.14710/mmh.46.4.2017.336-342.

The procedural track is partially occupied by Supreme Court Regulation (Peraturan Mahkamah Agung, Perma) No. 1 of 2019 on Electronic Case Administration and Court Proceedings, as amended by Perma No. 7 of 2022, which forms the legal basis for e-Court and e-Litigation. Examined closely, however, these regulations govern the digitization of case administration, filing, payment, summons, and electronic hearings, and contain no provision contemplating that a document, triage decision, or draft recommendation might itself be algorithmically generated. The regulatory silence identified analytically in Section 3.1, the absence of any disclosure or contestation right specific to algorithmic involvement, is therefore not an oversight within these instruments but a reflection of the fact that they were never designed to reach that question. Any procedural pillar of a future judicial-AI framework would need to amend or supplement Perma No. 7 of 2022 directly, rather than relying on it as an implicit source of AI governance, a distinction the author considers important because several commentators, including the author's own earlier study, cited e-Court and e-Litigation as evidence of Indonesia's readiness for judicial AI without registering that these regulations do not in fact regulate the algorithmic component at all.¹⁶

The only instrument in force that addresses AI specifically, Circular Letter of the Minister of Communication and Information Technology (Surat Edaran Menkominfo) No. 9 of 2023 on the Ethics of Artificial Intelligence, sets out principles of inclusivity, accountability, and transparency for AI development and use. Two limitations are decisive for present purposes.¹⁷ First, it is addressed to business actors and electronic system operators, public and private, not to judicial institutions specifically, and the judiciary is not its intended primary subject. Second, and more importantly for the argument of this article, a circular letter is a form of soft regulation with no binding legal force and no sanction mechanism; it can inform ethical expectations but cannot, by itself, create the disclosure rights, contestation channels, or substantive review panels that the dual-track model in Section 3.3 requires. The author's assessment is that SE Menkominfo No. 9/2023 currently functions, at most, as a general procedural-ethics reference point, useful for the procedural pillar's principles of transparency and accountability, but it supplies nothing for the substantive pillar, since it contains no mechanism for reviewing whether an AI system's outputs cohere with Indonesia's plural bodies of substantive law.

A further instrument worth noting is Law No. 27 of 2022 on Personal Data Protection (Undang-Undang Pelindungan Data Pribadi), which governs the lawful processing of personal data and would apply to any AI system trained on litigant data drawn from court records.¹⁸ This law strengthens the procedural pillar's trustworthiness component, since compliance would

¹⁶ R. Tony Prayogo, 'Penerapan Asas Kepastian Hukum Dalam Peraturan Mahkamah Agung Nomor 1 Tahun 2011 Tentang Hak Uji Materiil Dan Dalam Pedoman Beracara Dalam Pengujian Undang-Undang', *Jurnal Legislasi Indonesia*, 13.2 (2016), p. 194 <<https://e-jurnal.peraturan.go.id/index.php/jli/article/view/151/0>>.

¹⁷ Fatmawati and Raihana, 'Analisis Yuridis Terhadap Artificial Intelligence Pada Tindak Pidana Penyebaran Malware Di Indonesia', *Innovative: Journal Of Social Science Research*, 3.20 (2023), pp. 12190–201.

¹⁸ Abdul Hadi and Bima Guntara, 'Pembaharuan Hukum Nasional Dalam Upaya Perlindungan Data Pribadi Di Era Distrupsi Kecerdasan Buatan (Artificial Intelligence)', *Jurnal Hukum Mimbar Justitia*, 8.1 (2022), p. 233, doi:10.35194/jhmj.v8i1.2426.

require institutional accountability for how case data feeding an AI system is collected, stored, and used, but it is, again, a data-governance instrument, not a substantive-fairness instrument: compliant data processing under this law says nothing about whether the resulting AI output is substantively coherent with adat or Islamic-law principles in a given matter.¹⁹

Taken together, the regulatory landscape confirms the article's central claim rather than complicating it: Indonesia has procedural or adjacent instruments, Perma No. 7/2022 for electronic administration, SE Menkominfo No. 9/2023 for AI ethics, and Law No. 27/2022 for data protection, and one strong general procedural principle, judicial independence and reasoned judgment under Law No. 48/2009, but no instrument that performs the specific function the substantive pillar requires: an independent review of whether AI-influenced outcomes are coherent with the substantive content of Indonesia's three legal orders. The author's regulatory recommendation, more precise than the general call for "comprehensive legislation" made in the earlier study, is that this gap should be closed through a dedicated Perma provision establishing a substantive-review mechanism, rather than through further soft-regulation instruments of the SE Menkominfo type, because only a binding Supreme Court regulation can create an enforceable obligation reaching the judiciary itself.

4. Conclusion

This article has argued that evaluating AI use by judges in Indonesia requires distinguishing procedural justice from substantive justice rather than treating both as expressions of a single, generic fairness standard. Rawls' typology shows that judicial adjudication, whether or not AI is involved, is a domain of imperfect procedural justice: an independent standard of a correct outcome exists, but no procedure can guarantee it is reached, which means procedural safeguards alone can never certify an AI-assisted decision as substantively just. Tyler's criteria of voice, neutrality, trustworthiness, and respect provide a diagnostic tool for the procedural dimension, while Dworkin's account of law as integrity and the literature on algorithmic bias provide the corresponding tool for the substantive dimension, one made more demanding in Indonesia's context by the coexistence of civil, adat, and Islamic law. The resulting dual-track governance model, procedural safeguards addressing process quality and a separate substantive pillar addressing outcome coherence across Indonesia's plural legal orders, refines the single regulatory checklist proposed in the author's earlier work into a structure with a clearer theoretical rationale for why both tracks are necessary and why neither is reducible to the other. Future research could operationalize the substantive pillar empirically, for instance by testing how existing AI-assisted case-management tools in Indonesian courts perform when adat or Islamic-law matters are involved, an inquiry the present conceptual analysis identifies as necessary but does not itself undertake.

¹⁹ Citra Rosika and Aldri Frinaldi, 'Penerapan Prinsip-Prinsip Good Governance Dalam Pelayanan BPJS Kesehatan Di Kota Padang', *COMSERVA Indonesian Jurnal of Community Services and Development*, 2.09 (2023), pp. 1902–8, doi:10.59141/comserva.v2i09.587.

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