

AI-Legislation in Indonesian Legal System: A Legal Analysis and Reformulation of AI-Based Legislative Planning

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Abstract

This study aims to find out and analyze the potential use of AI at the pre-drafting stage of law, as well as formulate an initial model of AI integration as an initial testing mechanism for proposed regulations before being included in the National Legislation Program (Prolegnas) and Regional Legislation Program (Prolegda). The study offers novelty through the concept of AI-Legislation, an artificial intelligence-based system designed to automatically and predictively test the feasibility of legal substance before entering the regulatory drafting stage. This research uses a juridical-normative approach that is developed in a reflective-critical manner. Primary data is obtained through laws and regulations, judicial decisions, as well as Prolegnas and Prolegda documents. Meanwhile, secondary data is in the form of scientific articles (journals), books, and other literature materials. The data analysis techniques used are descriptive-critical with a framework analysis approach to build a conceptual framework of AI-Legislation in three layers, namely automatic analysis, policy prediction, and institutional integration. The research findings show that AI can help in mapping regulatory needs, detecting legal conflicts, and harmonizing norms with greater precision. AI-Legislation fundamentally shows a paradigm shift from the classical legislative model to smart-modern legislation. AI implementation faces challenges in terms of digital infrastructure readiness, technological literacy among government officials, and legal validity of AI recommendations. Therefore, the study recommends the integration of the AI testing phase as an initial requirement in the legislative planning process, as well as the need to establish national governance and regulations governing the use of AI in the legislative regulatory development cycle.

Keywords: *Artificial Intelligence, Legislation, Law-making, Legal Instruments, Empirical-Normative Method, Regulatory Reform.*

Abstrak

Penelitian ini bertujuan untuk mengetahui dan menganalisis potensi penggunaan AI pada tahap pra-penyusunan hukum, serta merumuskan model awal integrasi AI sebagai mekanisme uji coba awal terhadap peraturan yang diusulkan sebelum dimasukkan ke dalam Program Legislasi Nasional (Prolegnas) dan Program Legislasi Daerah (Prolegda). Studi ini menawarkan kebaruan melalui konsep AI-Legislation, sistem berbasis kecerdasan buatan yang dirancang untuk secara otomatis dan predikatif

menguji kelayakan substansi hukum sebelum memasuki tahap penyusunan peraturan. Penelitian ini menggunakan pendekatan yuridis-normatif yang dikembangkan secara reflektif-kritis. Data primer diperoleh melalui Undang-Undang dan peraturan, putusan pengadilan, serta dokumen Prolegnas dan Prolegda. Sementara data sekunder berupa artikel ilmiah (jurnal), buku, dan bahan pustaka lainnya. Teknik analitis data yang digunakan adalah deskriptif-kritis dengan pendekatan analisis kerangka kerja untuk membangun kerangka konseptual AI-Legislasi dalam tiga lapisan yaitu analisis otomatis, prediksi kebijakan, dan integrasi institusional. Temuan penelitian menunjukkan bahwa AI dapat membantu dalam pemetaan kebutuhan regulasi, deteksi konflik hukum, dan harmonisasi norma dengan presisi yang lebih tinggi. AI-Legislation secara fundamental menunjukkan pergeseran paradigma dari model legislatif klasik ke legislasi cerdas-modern. Implementasi AI menghadapi tantangan dalam hal kesiapan infrastruktur digital, literasi teknologi di kalangan pejabat pemerintah, dan validitas hukum rekomendasi AI. Oleh karena itu, penelitian ini merekomendasikan integrasi fase pengujian AI sebagai persyaratan awal dalam proses perencanaan legislatif, serta kebutuhan untuk menetapkan tata kelola nasional dan regulasi yang mengatur penggunaan AI dalam siklus pengembangan regulasi legislatif.

Kata Kunci: Kecerdasan Buatan, Legislasi, Penyusunan Hukum, Produk Hukum, Metode Empiris-Normatif, Reformasi Regulasi

INTRODUCTION

In recent years, the quality of legal products in Indonesia has come under intense scrutiny from various groups.¹ The large number of laws and regional regulations that have been struck down by the Constitutional Court, overturned by the Supreme Court, or revoked by the Ministry of Home Affairs is an indicator of weak legislative planning. More than 3,000 local regulations and over 300 laws have been annulled in the last five years by the judicial and executive branches, highlighting the urgency of legislative reform based on data, substantive evaluation, and broader public engagement. Issues such as the lack of harmonisation of norms, overlapping authorities, and inconsistent legal substance indicate that the existing legislative system is unable to effectively address the challenges of the era.² However, the public's need for regulations that are swift, accurate, and evidence-based continues to

¹ Eka N.A.M Sihombing, "Questioning of Civil Servants Shift Appeal Provisions in Neighbourhood of Local Government of Nias Barat Regency," *Jurnal Penelitian Hukum De Jure* 16, no. 1 (August 26, 2016): 95–104, <https://doi.org/10.30641/dejure.2016.V16.95-104>.

² Marulak Pardede et al., "Perspectives of Sustainable Development vs. Law Enforcement on Damage, Pollution and Environmental Conservation Management in Indonesia," *Journal of Water and Climate Change* 14, no. 10 (October 1, 2023): 3770–90, <https://doi.org/10.2166/wcc.2023.417>.

grow in line with rapid social and technological developments. Slow and manual law-making is not only outdated but also lacks social legitimacy in the face of an increasingly informed and participatory public. Slow and manual law-making is not only outdated but also lacks social legitimacy in the face of an increasingly informed and participatory public.

Much legal and public policy literature emphasises the importance of reform in the legislative process, particularly at the initial planning stage.³ One of the weaknesses of Indonesian legislation is the lack of systematic mechanisms for the initial review of legal substance. The use of AI at the legislative planning stage has the potential to provide solutions to various classic legislative problems in Indonesia. AI has the capability to swiftly and accurately scan thousands of legal documents, identify conflicting norms, and provide data-driven recommendations. This study found that AI can be utilised as an initial screening system for draft regulations before they are included in the National Legislative Programme (Prolegnas) or Regional Legislative Programme (Prolegda), thereby minimising the risk of future annulment. However, this significant potential has not yet been optimally implemented due to the lack of a legal framework explicitly legitimising the use of AI in the legislative process, as evidenced by Law No. 12 of 2011, which still relies on manual and administrative approaches. Therefore, this study aims to formulate an AI-Legislation model as a framework for evaluation and digital integration within national legislation, as well as to propose normative reforms to ensure that Indonesian law does not lag behind the technological transformation that has now become a global inevitability.

Previous studies on AI and legislation have been conducted across the globe; countries are beginning to integrate artificial intelligence (AI) into their legal systems, as mentioned in Wisnu Nugraha's research.⁴ In Europe, as explained by Atabek Atabekov's research on artificial intelligence in contemporary society, the focus is on legal status and definitions, as well as application in the public sector. Specifically in the Netherlands and Estonia, AI is used to check the consistency and

³ Muslimah Muslimah, "Politik Hukum Perencanaan Program Legislasi Nasional Di Indonesia," *Akmen Jurnal Ilmiah* 12, no. 4 (2025), <https://ejournal.nobel.ac.id/index.php/akmen/article/view/475>.

⁴ Wisnu Nugraha, "Fungsi Legislasi Menurut Undang-Undang Dasar Tahun 1945 (Studi Kasus Badan Legislasi DPR RI Periode 2004-2009)," *Binamulia Hukum* 7, no. 2 (2023): 157–168, <https://doi.org/10.37893/jbh.v7i2.322>.

interoperability of regulations.⁵ Research by Capraro et al. discusses generative AI platforms and their potential for simulating policy outcomes.⁶ Yabes Abraham et al. note that the United States has developed AI-based platforms to assist with legislative tracking and policy simulation.⁷ In Asia, as in Singapore—as per Hachkevych’s research⁸—and South Korea—as per Bokhari and Myeong’s research—countries are beginning to adopt AI systems in e-government that encompass legislative functions.⁹ Even in South Africa, as per Naidoo et al.’s research, initial experiments with AI in public policy-making are being introduced to support transparency and efficiency in legal governance.¹⁰ This study aims to fill a gap in Indonesia regarding AI and legislation, as to date there is no literature that explicitly develops a conceptual framework or legal governance framework to legitimise AI within the legislative cycle.

Based on the above, this research aims to analyse the opportunities and challenges of using artificial intelligence in the planning and drafting of legal instruments in Indonesia, as well as to propose an initial formulation of the concept of AI-Legislation as a support system for smart legislation. Furthermore, this study proposes amendments to strategic provisions within Law No. 12 of 2011 to accommodate digital transformation within the legislative system. By adopting a technology-

⁵ Atabek Atabekov, “Artificial Intelligence in Contemporary Societies: Legal Status and Definition, Implementation in Public Sector across Various Countries,” *Social Sciences* 12, no. 3 (March 15, 2023): 178, <https://doi.org/10.3390/socsci12030178>.

⁶ Valerio Capraro et al., “The Impact of Generative Artificial Intelligence on Socioeconomic Inequalities and Policy Making,” ed. Michele Gelfand, *PNAS Nexus* 3, no. 6 (May 31, 2024), <https://doi.org/10.1093/pnasnexus/pgae191>.

⁷ Yabes Abraham Hau Wele, Yosef Mario Monteiro, and Rafael Rape Tupen, “Fungsi Legislasi Dewan Perwakilan Daerah Dalam Pembentukan Undang-Undang,” *Federalisme: Jurnal Kajian Hukum Dan Ilmu Komunikasi* 1, no. 3 (August 13, 2024): 102–15, <https://doi.org/10.62383/federalisme.v1i3.53>.

⁸ A. Hachkevych, “Organizational and Legal Support for the Introduction of Artificial Intelligence in Singapore,” *Analytical and Comparative Jurisprudence*, no. 2 (May 11, 2024): 418–28, <https://doi.org/10.24144/2788-6018.2024.02.71>.

⁹ Syed Asad Abbas Bokhari and Seunghwan Myeong, “The Impact of AI Applications on Smart Decision-Making in Smart Cities as Mediated by the Internet of Things and Smart Governance,” *IEEE Access* 11 (2023): 120827–44, <https://doi.org/10.1109/ACCESS.2023.3327174>.

¹⁰ S Naidoo et al., “Artificial Intelligence in Healthcare: Proposals for Policy Development in South Africa,” *South African Journal of Bioethics and Law*, May 19, 2022, 11–16, <https://doi.org/10.7196/SAJBL.2022.v15i1.797>.

based approach, Indonesia has the opportunity to break free from the constraints of traditional legislation and move towards a modern legislative model that is smart, adaptive, efficient, and evidence-based, as has already begun to be implemented in various countries around the world.

RESEARCH METHOD

This study employs a legal-normative approach developed through reflective-critical analysis to examine the reality of Indonesia's legislative stagnation within the framework of conventional administrative law.¹¹ This approach aims to critique the legal system's delay in responding to digital innovation. This approach is carried out to reveal the views of written and unwritten legal sources to provide guidance and direction on legal events that occur in people's lives.¹² Primary data was obtained from laws and regulations, court decisions, and Prolegnas and Prolegda documents. Secondary data consists of scholarly articles (journals), books, and other reference materials¹³. The data analysis technique employed is descriptive-critical, utilising a framework analysis approach to construct a conceptual framework for AI-Legislation across three layers: automated analysis, policy prediction, and institutional integration.¹⁴ This model is not constructed in a vacuum, but rather through a direct confrontation between the idealism of

¹¹ Kefi Miftachul Ulum et al., "Integration Of Islamic Philanthropy With Financial Technology: The Case Study of Waqf towards Sustainable Funding in Indonesia," *Jurisdictie: Jurnal Hukum Dan Syariah* 16, no. 1 (July 1, 2025): 77–123, <https://doi.org/10.18860/j.v16i1.30447>; Doli Witro et al., "Analisis Implementasi Akad Ijarah Di Perbankan Syariah Berdasarkan Regulasi Dan Fatwa," *Asy-Syari'ah* 23, no. 2 (2021): 279–96, <https://doi.org/10.15575/as.v23i2.14141>.

¹² Muhamad Izazi Nurjaman et al., "Sharia Economic Law Perspective on Online Meeting Premium Account Leasing," *Journal of Islamic Economic Laws* 5, no. 2 (2022): 323–44, <https://doi.org/10.23917/jisel.v5i2.18750>.

¹³ Elvi Nilda et al., "Ecological Awareness in Buying and Selling: Fiqh Al-Bi'ah Analysis on Plastic Bag Use at Tanjung Bajure Market, Indonesia," *Jurnal Ilmiah Mizani: Wacana Hukum, Ekonomi Dan Keagamaan* 12, no. 2 (July 15, 2025): 71–87, <https://doi.org/10.29300/mzn.v12i2.7822>; Rahmad Setyawan et al., "Reforming Islamic Family Law in Indonesia through Syibhul Iddah for Husbands: State Policy and Penghulu Perspectives," *El-Mashlahah* 15, no. 2 (December 11, 2025): 279–302, <https://doi.org/10.23971/el-mashlahah.v15i2.9253>; Sofian Al-Hakim, Doli Witro, and Muhamad Izazi Nurjaman, "Law of Usury (RIBA) According to Masyarakat Tanpa Riba (MTR): Perceptions, Attitudes, and Movements," *Asy-Syari'ah* 26, no. 1 (2024): 41–62, <https://doi.org/10.15575/as.v26i1.29639>.

¹⁴ Akhmad Adi Purawan, "Review on the Establishment of Legislation in Indonesia," *Mimbar Hukum* 26, no. 3 (2014): 534–45, <https://doi.org/10.22146/jmh.16030>.

intelligent systems and the resistance of conventional legal structures. Thus, this method does not merely describe, but critiques and reformulates the methodological landscape of legislation to make it more adaptive to digital demands and predictive justice.¹⁵ To ensure the validity of the data in this study, triangulation techniques were employed as a verification mechanism. Triangulation was carried out in three main forms: source triangulation, methodological triangulation, and analytical triangulation. Firstly, source triangulation was conducted by comparing data obtained from various informants, particularly regulatory designers at central and regional levels. Secondly, methodological triangulation was carried out by combining data collection techniques. Thirdly, analytical triangulation is applied through the use of a descriptive-critical approach combined with a framework analysis. Through the application of this triangulation, this research not only enhances the validity of the data but also strengthens the critical argumentation in formulating an adaptive, accountable, and contextual AI-Legislation model within the Indonesian legal system.

RESULT AND DISCUSSION

The Potential of Using AI in Planning Stage of Legal Product Preparation

The use of AI in legislation AI in legislation can detect norm conflicts, estimate potential judicial review, and simulate policy impacts before regulations are enacted.¹⁶ Just as smart locking provides selective access control, an AI-legislation system can filter which regulations are worthy of inclusion in the National Legislation Program (Prolegnas) or Regional Legislation Program (Prolegda) based on an analysis of objective needs and sectoral risks. Therefore, integrating AI into legislation is not a futuristic trend, but a logical step in line with the direction of broader societal transformation. Highlighting the global dynamics of technology provides a contextualizing entry point for why legislation must not ignore this sweeping tide of change. If law is an instrument for regulating public life, then it must also adapt to a new way

¹⁵ Ahmad Yani, “Periodic Review Terhadap Undang-Undang Untuk Mewujudkan Good Legislation,” *Jurnal Civic Hukum* 7, no. 2 (2022): 138–47, <https://doi.org/10.22219/jch.v7i2.22555>.

¹⁶ Andrew Coan and Harry Surden, “Artificial Intelligence and Constitutional Interpretation,” *University of Colorado Law Review*, 2024, <https://doi.org/10.2139/ssrn.5018779>.

of life, one that is intelligent, fast, and data-driven.¹⁷ It is not enough for law to merely pursue substantial justice; it must also be present in a way that is efficient and credible in the eyes of a digital society. This concept finds its relevance again when we emphasize that AI in legislation should not be seen as technological domination over humans, but rather as an epistemological partner in shaping more resilient regulations. Just as smart living cannot be separated from the ethics of privacy, and smart working remains dependent on the human capacity for critical thinking, smart legislation will only succeed if guided by the principle of legal prudence and constitutional values. Without it, intelligent systems will become blind fast but unwise, efficient but unfair.¹⁸

Smart legislation is a middle ground between human precision and machine speed; between ethical deliberation and algorithmic efficiency; between legal tradition and technological innovation. This is where we close the narrative circle: from global digital transformation to the fundamental question of the future of Indonesian law—will it become intelligent and responsive law, or will it be left behind as an analog legacy in an increasingly digital world. It's no surprise that the spirit of building smart legislation is also emerging. It's no longer just about document digitization or legal automation, but rather about legislation that can respond quickly, analyze with precision, and predict with accuracy that surpasses human intuition. Legislation is now required to be not only formally legal, but also systemically intelligent.

As part of a critical reflection on the integration of AI into the legislative system, one thing that must not be overlooked is how technology itself has transformed the character of the public served by the law.¹⁹ Today's society, living in an ever-evolving digital ecosystem, is no longer the same as it was two decades ago. The public's collective intelligence has increased dramatically due to access to open, dynamic, and instant information. With devices in their hands, the public is able to

¹⁷ Eiichiro Watamura, Yichen Liu, and Tomohiro Ioku, "Judges versus Artificial Intelligence in Juror Decision-Making in Criminal Trials: Evidence from Two Pre-Registered Experiments," ed. Bartosz Wojciech Wojciechowski, *Plos One* 20, no. 1 (January 30, 2025): e0318486, <https://doi.org/10.1371/journal.pone.0318486>.

¹⁸ Ayu Simanjuntak et al., "Dampak Teknologi Dan Inovasi Pada Keadilan Dalam Penegakan Hukum Di Era Digital," *Journal on Education* 6, no. 1 (2023): 9212–19, <https://doi.org/doi.org/10.31004/joe.v6i1.4415>.

¹⁹ Ayuni Nilam Cahya, M Amir Maksum, and Tubagus Akbar Satria Primadana, "Transformasi Budaya Hukum Dalam Era Digital (Implikasi Penggunaan AI Dalam Perkembangan Hukum Di Indonesia)," *Ikraith-Humaniora* 8, no. 2 (2014): 361–73, <https://doi.org/10.37817/ikraith-humaniora.v8i2361>.

track the legislative process, analyze articles individually, and even correct the legal arguments used by lawmakers. In short, the public is now an actor interpreting the law, no longer merely an object subject to norms.

In recent years, Indonesia has faced the harsh reality of a legislative crisis marked by the rampant revocation of legal products, both through judicial review by the Constitutional Court and the Supreme Court, and executive review by the Ministry of Home Affairs.²⁰ This fact is not merely an administrative anomaly, but an acute symptom of the weak foundation of national and regional legislative planning. Behind the pile of revoked articles lies a systemic failure to filter substantial, relevant, and harmonized legal norms before they become binding regulations for the public.²¹

The main problem lies not merely in the drafting, but rather in the pre-legislation stage the crucial phase where the urgency of a regulation must be thoroughly and objectively tested for its feasibility. Unfortunately, this stage is still carried out manually, sectorally, and often politically. Legislation is formed not based on the objective needs of the community, but rather due to the compulsion of power, overlapping authority between institutions, or even the pressure of interests.²²

In this context, artificial intelligence (AI) offers not only a technological solution but also an epistemological opportunity to transform legal thinking in Indonesia. AI-Legislation presents a rational proposition: a data-driven system capable of automatically scanning for norm conflicts, predictively simulating potential regulatory implications, and ranking the feasibility of a regulation based on harmonization scores and public urgency. This idea reflects a paradigm shift from perception-based legislation to evidence-based legislation.

²⁰ Taopik Iskandar and Hendi Budiawan, "Executive Review Dan Judicial Review Terhadap Peraturan Daerah Sebagai Implementasi Unsur-Unsur Negara Hukum," *Jurnal Ilmiah Galuh Justisi* 10, no. 1 (March 18, 2022): 102–18, <https://doi.org/10.25157/justisi.v10i1.7235>.

²¹ Rasji Rasji, Christopher Howard Wonohadidjojo, and Michelle Audrey Serena, "Kewenangan Judicial Review Mahkamah Konstitusi Terhadap Peraturan Pemerintah Pengganti Undang - Undang," *JALAKOTEK: Journal of Accounting Law Communication and Technology* 1, no. 2 (July 1, 2024): 405–16, <https://doi.org/10.57235/jalakotek.v1i2.2404>.

²² Yovan Iristian, "Pursuit of Fairness: Human Rights and Social Justice in Indonesia's Legal Landscape," *Journal of Progressive Law and Legal Studies* 2, no. 1 (December 25, 2023): 34–48, <https://doi.org/10.59653/jplls.v2i01.530>.

However, this potential clashes with an equally harsh reality. Our legal apparatus, especially those drafting regional regulations, still lacks digital literacy. The digital legislative infrastructure system is not yet integrated. Even more profoundly, there is no single positive legal basis that explicitly recognizes or legitimizes AI analysis results as a legitimate part of the legislative process. Law No. 12 of 2011 only recognizes manual administrative legislative processes and has not addressed the domain of information technology, let alone AI. In other words, Indonesia is currently trying to build a modern legal system with 20th-century tools. While countries like Estonia, South Korea, and even South Africa have piloted AI in their legislative systems, Indonesia remains mired in debates over procedural formalism. Yet, future legal challenges—such as climate change, the digital economy, and conflicts over regional autonomy norms—require precise, adaptive, and swift legal responses.

Conventional legislation will not suffice. The criticism is clear: if the state does not immediately revise the legal foundations for establishing regulations, including recognizing AI as a legitimate legislative instrument, we will continue to be trapped in a cycle of legal revocation, revision, and dysfunction. Moreover, Indonesia will miss a historic opportunity to leapfrog the trap of an outdated legal system toward a predictive and democratic intelligent legal order. The question today is no longer “is AI necessary for legislation?” but “can Indonesian law survive without opening itself to intelligence technology?” The answer to that question will determine whether Indonesian law will continue to be a burden on the state or become the backbone of civilization’s progress.

Challenges and opportunities for integrating AI into Indonesia’s Legislative System

In this context, Van Vollenhoven’s classic adage *het recht hinkt achter de feiten aan* is becoming increasingly relevant, yet increasingly challenging. The law’s lag behind socio-economic dynamics is no longer simply a technical or time-sensitive issue, but rather a manifestation of the legal system’s failure to respond to a society that understands and produces social meaning more quickly than the state can formulate regulations. When the public can disseminate criticism of regulations via social media in seconds, while regulatory planning takes months, the gap in legitimacy and trust becomes wide open.

This is where the role of AI becomes both strategic and controversial.²³ On the one hand, AI can be used to accelerate the legislative process so that it does not continually lag behind developments in social reality. With its ability to read social trends through big data, this system can detect signs of change before they become a normative crisis. However, on the other hand, excessive reliance on AI can raise concerns about a cold and dehumanizing legal formalization, ignoring the complexities of social interpretation that cannot always be explained through statistical data. The integration of AI into legislation must be positioned as an epistemic response to an increasingly digitally savvy and politically participatory society.²⁴ AI must bridge the gap between the law's responsiveness and the public's growing intelligence. Without a serious effort to adapt legislative logic to the characteristics of this new society, Indonesian law will continue to lag behind the times *hinkend achter de feiten aan* and risks losing its substantive authority in public life. The stakes, then, are not simply procedural efficiency, but also collective trust in the law as a tool for ensuring social justice that is vibrant and responsive to the times.

Indonesia, in this landscape, faces both significant opportunities and significant epistemological challenges.²⁵ On the one hand, there is a growing awareness of the need to modernize national legislation, given the numerous legal products annulled by the Constitutional Court due to weak substance or procedural flaws. On the other hand, the gap between the potential of AI and the readiness of existing legislative structures suggests that we are still stuck in a hesitant early adaptation phase. Amidst the fast-moving global climate, Indonesia must consider how AI can be constitutionally and ethically integrated into the legal architecture.²⁶

²³ Nabila Fitri Amelia et al., "Implementasi Artificial Intelligence (AI) Dalam Pembentukan Peraturan Perundang-Undangan Di Indonesia," *Eksekusi: Jurnal Ilmu Hukum Dan Administrasi Negara* 2, no. 1 (December 1, 2023): 56–70, <https://doi.org/10.55606/eksekusi.v2i1.789>.

²⁴ Muhammad Kandriana and Mirham Imamsyah, "Efektivitas Artificial Intelligence Dalam Penegakan Hukum: Telaah Dari Perspektif Filsafat Hukum," *Journal of Science and Social Research* 8, no. 2 (2025): 3193–3202.

²⁵ Andrea Bertolini and Francesca Episcopo, "Robots and AI as Legal Subjects? Disentangling the Ontological and Functional Perspective," *Frontiers in Robotics and AI* 9, no. April (April 5, 2022): 1–15, <https://doi.org/10.3389/frobt.2022.842213>.

²⁶ Denico Doly, "Pemanfaatan Artificial Intelligence Dalam Penegakan Hukum Di Indonesia," *Info Singkat* 15, no. 19 (2023): 1–5.

Data on legal products in the last five years that have been tested by the Constitutional Court (MK), the Supreme Court (MA), and those revoked by the Ministry of Home Affairs (Mendagri):

Table 1. Trends in Judicial Review and Revocation of Legal Products in Indonesia (2016–2023)

Year	Type of Legal Product	Description	Source
2019-2023	Law (UU) reviewed by the MK	Several laws were declared to be in conflict with the 1945 Constitution and are no longer valid, for example the 2017 Election Law.	MK testing data until 2023
2016-2021	Regional Regulations (Perda) revoked by the Minister of Home Affairs	A total of 3,143 regional regulations were revoked because they hampered investment and public services.	Official announcement of the Ministry of Home Affairs 2016 and report on the revocation of the Regional Regulation
2017	The Constitutional Court's ruling revokes the Minister of Home Affairs' authority to cancel regional regulations.	The Constitutional Court revoked the Minister of Home Affairs' authority to cancel regional regulations, and the judicial review of regional regulations was transferred to the Supreme Court.	Constitutional Court Decision and Analysis Regarding the Authority to Cancel Regional Regulations
2018-2022	Minister of Home Affairs Regulation revoked by the Minister of Home Affairs	111 Ministerial Regulations of the Home Affairs were revoked in the first stage, 159 in the second stage, related to deregulation and simplification.	Ministry of Home Affairs Report Regarding the Revocation of the Minister of Home Affairs Regulation and Regional Regulation
2022	New Legal Products (UU, Perppu)	Examples of new laws include the Personal Data Protection Law, the Job Creation Law, and the Job Creation Perppu.	Legal product inventory data in 2022

Explanation:

- a) Legal products reviewed by the Constitutional Court are usually laws subject to material review against the 1945 Constitution. The Constitutional Court can annul laws if they conflict with the constitution, such as the 2017 Election Law, which has been reviewed several times and partially annulled.
- b) The Minister of Home Affairs' revocation of regional regulations was carried out extensively, especially in 2016-2017, with the aim of deregulation and accelerating investment. However, since the 2017 Constitutional Court ruling, the Minister's authority to annul regional regulations has been limited and transferred to the Supreme Court.
- c) The revoked regulations were also part of the Ministry of Home Affairs' deregulation efforts to simplify regulations that hinder services and investment.
- d) The Supreme Court (MA) played a role in reviewing and annulling regional regulations following the Constitutional Court's ruling revoking the Minister of Home Affairs' authority to annul regional regulations.

In the face of the wave of the digital revolution that is overhauling the foundations of global public administration, the discourse of integrating artificial intelligence (AI) into Indonesia's legislative system is no longer merely a futuristic idea. It has become an inevitability that demands the presence of the state both normatively and operationally. Ideally, AI promises a radical transformation in the legislative process, from the ability to systematically scan for normative disharmony, manage overlapping regulations between institutions, and simulate policy impacts with predictive precision unattainable by manual human labor.²⁷ However, when this ideal meets the political and technocratic realities in Indonesia, the emerging picture is a complex and multi-layered structural unpreparedness.

One striking early finding is AI's ability to detect normative duplication and legal disharmony. In a pre-legislation simulation model based on AI-Legislation, the system proved capable of sifting through academic texts and draft regulations to identify horizontal conflicts

²⁷ Pete Furlong et al., "A New National Purpose: AI Promises a World-Leading Future of Britain," Tony Blair Institute For Global Change, 2023, <https://institute.global/insights/politics-and-governance/new-national-purpose-ai-promises-world-leading-future-of-britain>.

between articles, as well as potential vertical inconsistencies with higher-level laws. Amidst the increasing number of legal annulments by the Constitutional Court, which continues to be recorded in the official MKRI database, this should be a strong impetus for legislators to reform the traditional approach to legislation, which has tended towards a normative-formalistic approach.²⁸ However, herein lies the fundamental irony: no matter how AI might offer a roadmap to more precise and accountable legislation, the lack of digital literacy among regulatory officials is the primary obstacle hindering the realization of this potential.

This situation is exacerbated by the lack of infrastructure preparedness for a digital legislative system in Indonesia. In many regions, the process of drafting regional regulations is still carried out conventionally handwritten, retyped, and drafted in a work environment that is barely digitized.²⁹ Even at the central level, while information systems such as the National Disaster Management Agency (JDIHN) and e-Legislation have begun to be developed, there is no comprehensive integration that allows for data synchronization between ministries and institutions. Without a solid data foundation, AI no matter how sophisticated the algorithms installed is little more than a clumsy and limited digital typist. Therefore, developing AI in the context of Indonesian legislation requires more than just software adoption; it demands a complete reconfiguration of the legal system, including the work ethic of the legal bureaucracy, which has become too comfortable with the manual status quo.

More crucially, there is a legal vacuum that has not been addressed by the state: there is not a single norm in Law No. 12 of 2011 concerning the Formation of Legislation that provides explicit legitimacy for AI output in the legislative process. The Indonesian legal system still views legislation as the result of human deliberative processes, both in substantive and formal dimensions. As a result, AI output produced during the pre-legislative stage lacks normative force it cannot be used as a basis for legal argumentation, cannot be used as a reference in substantive harmonization, and ultimately, is not recognized in the

²⁸ Muh Sadli Sabir and Muh Hamka Mauladi, “Analisis Perbandingan Kewenangan Executive Review Dan Judicial Review Terhadap Pembatalan Peraturan Daerah Di Indonesia,” *JISH: Jurnal Ilmu Syariah Dan Hukum* 3, no. 1 (May 29, 2024): 29–42, <https://doi.org/10.36915/jish.v3i1.341>.

²⁹ Feby Milenia Yahya Krisna Putri et al., “Thinking the Future Potential of Artificial Intelligence in Law Enforcement,” *Perspektif Hukum* 24, no. 2 (November 30, 2024): 269–94, <https://doi.org/10.30649/ph.v24i2.319>.

regulatory enactment process. Within the logic of Indonesian positive law, this lack of recognition makes AI seem like a foreign entity in the national legislative forum, intelligent but silenced by formalism.

By comparison, the United Arab Emirates has progressively adopted AI systems in lawmaking through its Smart Legislative System. This system is not only used to expedite drafting but also capable of simulating the legal and social impacts of a policy before it is enacted. In fact, the country has established an AI ethics charter that encompasses the principles of human oversight, algorithmic transparency, and accountability for results.³⁰ In this context, Indonesia appears to be lagging far behind, not because it lacks intellectual capacity, but because it lacks institutional awareness to open itself to technology that threatens the entrenched norms of legal bureaucracy.³¹

The root of this problem is not merely technical, but epistemological. Indonesian legislation, in many cases, is still rooted in power construction and political compromise, rather than data analytics and social objectivity.³² In such a system, AI, which operates with predictive logic and rational reasoning, will have no place, as it tends to disrupt the “comfort” of the legislative process, which is procedural but often lacks substantive principles. This is the epistemic crisis in Indonesian law: modern technology that promises transparency, efficiency, and accuracy is actually viewed with suspicion, as it is seen as disrupting the balance of power in legislative forums.

AI-Legislation Model Design: Can It Be Tested and Integrated into the National Legislative Programme?

To realize a data-driven legislative system oriented toward preventing regulatory disharmony, an AI-Legislation model is needed that can function as an initial filter before a draft regulation is included

³⁰ Dian Narwastuty et al., “Teknologi Menggugat Hukum: Reformasi Peradilan, Pendidikan, Dan Advokasi Di Era Digital,” *Prosiding Mimbar Justitia Seminar Nasional & Call for Paper “Membangun Daya Saing Generasi Z Sinergi Antara Pendidikan Tinggi Hukum, Teknologi, Dan Dunia Kerja Menyongsong Indonesia Emas 2045.”* *Fakultas Hukum Universitas Suryakencana* 2, no. 1 (2025): 1–11, <https://jurnal.unsur.ac.id/index.php/pmj/article/view/5751>.

³¹ Naufal Kurnia Ramadhani and Muhammad Rizal Rustam, “Penggunaan Artificial Intelligence Dalam Optimalisasi Pengawasan Dan Perlindungan Hukum Bagi Anak Dalam Sistem Peradilan Pidana,” *Decisio: Law Journal* 2, no. 2 (June 14, 2025): 30–35, <https://doi.org/10.52249/decisio.v2i2.30>.

³² Idaman Jaya Mendrofa et al., “Urgensi Pembentukan Komisi Etik Kecerdasan Artifisial (Ai) Di Indonesia,” *Ensiklopedia of Journal* 7, no. 2 (2025): 203–15, <https://doi.org/10.33559/eoj.v7i2.2824>.

in the National Legislation Program (Prolegnas) or Regional Legislation Program (Prolegda). This model is built on three main layers: automated analysis, predictive recommendations, and institutional integration. In the first layer, the system automatically analyzes the legal substance in the initial draft regulation, including detecting overlapping legal norms, identifying vertical and horizontal conflicts between regulations, and mapping urgency based on sectoral data. The second layer emphasizes predictive and visualization capabilities, generating regulatory impact simulations using machine learning, displaying visualizations of regulatory risks (such as potential judicial review and implementation obstacles), and ranking regulatory feasibility based on alignment scores, public need, and norm clarity. Meanwhile, the third layer ensures that this model is integrated into the institutional legislative process by integrating the system into the national digital legislation platform, interoperability with national legal databases such as SIPPN, JDIHN, and regional e-Planning, and institutional validation by the House of Representatives (DPR/DPD/DPRD), the National Development Planning Agency (BPHN), and the Ministry of Law and Human Rights through an AI-based dashboard.

To test the effectiveness of this model, pilot projects can be conducted in strategic sectors such as the environment, education, or the digital economy, involving partnerships between legislative institutions, academics, and technology developers in prototype development and regulatory audit-based evaluation. However, optimal implementation requires several prerequisites: a clear legal basis, such as a revision of Law No. 12 of 2011 or a presidential regulation on the digitalization of legislation; increased capacity of civil servants in AI literacy and digital legislation; and standardization of academic manuscript and bill formats to ensure consistent AI system readability. This design represents a paradigm shift from perception- and political-based legislation to legislation based on data, prediction, and evaluation, resulting in regulations that are more measurable, consistent, and resilient to modern social and legal dynamics.

Regarding the challenges and opportunities of integrating artificial intelligence into Indonesia's legislative system, a substantive question arises that deserves critical consideration: is it possible to systematically design an AI-Legislation model and then integrate it into the formal mechanisms of the National Legislation Program (Prolegnas) or Regional Legislation Program (Prolegda)? This question is not merely speculative, but rather a reflection of the real need for a legislative

system that is more adaptive, measurable, and free from the normative overlap that has been a chronic ailment in national lawmaking.

To address this, it is necessary to formulate the architectural design of the AI-Legislation system as a functional model that can be tested for validity and effectiveness. This model is not built solely on a utopian desire to pursue digital modernization, but rather on a rational basis for the importance of initial filtering in the legislative cycle. This means that before a bill is included in the National Legislation Program (Prolegnas) or Regional Legislation Program (Prolegda), it must first pass a series of tests based on three layers of analysis: legal substance, policy prediction, and institutional integration.

The first layer, automated substance analysis, is the heart of this system. Through semantic reading and text mining algorithms³³, AI can filter the content of academic papers and draft regulations to detect overlapping norms, legal conflicts between levels of legislation, and inconsistencies in terms and legal principles. This capability not only accelerates harmonization work, which currently requires significant time and resources, but also prevents legislation from the risk of future judicial review due to substantive flaws.³⁴

Then, at the second level, the AI-Legislation system is required to demonstrate predictive capabilities.³⁵ Through the application of machine learning, this system can simulate various potential impacts of regulations on social, economic, environmental, and political sectors. AI will present a dashboard containing predicted implementation risks, such as potential public rejection, institutional objections, or budget constraints.³⁶ Furthermore, the system can also provide a regulatory feasibility score based on variables such as legal alignment, public urgency, and normative clarity. This predictive function is what truly distinguishes the AI-Legislation model from mere electronic legal

³³ Banjarnahor, "Astri, Inovasi Digital Dan Ekonomi Kerakyatan," 2023.

³⁴ Alek Karci Kurniawan, "Judicial Preview Sebagai Mekanisme Verifikasi Konstitusionalitas Suatu Rancangan Undang-Undang," *Jurnal Konstitusi* 11, no. 4 (May 20, 2016): 632–49, <https://doi.org/10.31078/jk1142>.

³⁵ Oleg V Kubryak, Sergey V Kovalchuk, and Nadezhda G. Bagdasaryan, "Assessment of Cognitive Behavioral Characteristics in Intelligent Systems with Predictive Ability and Computing Power," *Philosophies* 8, no. 5 (August 23, 2023): 75, <https://doi.org/10.3390/philosophies8050075>.

³⁶ Widodo Aan, "AI Dalam Komunikasi Smart City: Transformasi Komunikasi Masyarakat Dengan Pemerintah Di Era Digital," in *Bunga Rampai Future Jakarta Jilid 1: Energi, Transportasi, Hukum, Pertahanan, Keamanan Dan Tata Kelola Pemerintahan* (Jakarta Selatan: Bina Cendekia Academy, 2025), 528–35.

document applications: it provides a futuristic dimension that allows the state to think ahead, rather than getting caught up in reactive procedural legalism.

The third level is the institutional integration dimension, which is the stage where the AI-Legislation system does not exist as a separate technical instrument, but rather is integrated into existing national legislative platforms, such as SIPPN, JDIHN, and e-Planning. In this scheme, AI is no longer a personal tool, but rather functions as a systemic partner for regulatory agencies such as the House of Representatives (DPR), Regional People's Representative Council (DPRD), National Legal Aid Agency (BPHN), and the Ministry of Law and Human Rights.³⁷ This is where legal data interoperability, namely the system's ability to consistently and in real-time absorb, process, and present cross-institutional information, becomes crucial. This function not only strengthens institutional coordination but also promotes transparency and public accountability at every stage of legislation.

However, this seemingly sophisticated model design will never be optimally realized without a series of critical normative and institutional prerequisites. First, there must be a revision of the legal framework underlying the regulatory formation process, particularly Law No. 12 of 2011. This law still operates within an analog paradigm and does not yet provide legal space for digital innovation in the form of AI. Second, systematic efforts are needed to improve the capacity of legislative human resources, not only in terms of technological literacy, but also in how to think about and assess regulatory risks through data and simulations. Third, it is crucial to establish national standards for the format and structure of academic manuscripts and bills, so that AI systems can read and process documents precisely without ambiguous interpretations.

To ensure that this model is not merely an elitist idea far from reality, limited trials (pilot projects) are needed in strategic sectors. For example, draft regulations in the environmental, education, or digital economy sectors could serve as initial laboratories to test the accuracy of AI-Legislation. Partnerships between legislative institutions, legal academics, technology developers, and civil society are crucial to ensure that evaluations are conducted not only technically, but also ethically and politically. Criticism is unavoidable. Some argue that this model carries

³⁷ Fajar Laksono Suroso, "Mahkamah Konstitusi Dan Hukum Acara Pengujian UU Terhadap UUD", *Jurnal Hukum* 7, no. 7 (2018): 1–13.

the dangers of technocracy, namely the dominance of machine logic over the deliberative values that are the soul of democracy. However, such criticisms actually reveal a misconception about the role of AI. AI-Legislation systems are not intended to replace human deliberation, but rather to enrich the quality of that deliberation with data, analysis, and simulations previously impossible to perform manually. In a democratic state governed by the rule of law, AI is not a new ruler, but rather a servant of the collective common sense of lawmakers.

The integration of AI into legislation cannot be understood simply as an attempt to imitate external systems or pursue efficiency alone, but must be positioned as an effort for epistemic transformation. In this context, it is crucial to understand that legislation is not merely a procedural legal process, but rather a space for the articulation of values, conflict, and social consensus. Therefore, the crucial question that must be answered is: is AI capable of correctly articulating legal values? Does this system possess an epistemology compatible with the constitution, the principles of the rule of law, and deliberative democracy?

To address this challenge, this paper proposes the design of an AI-legislation model as a systemic approach that can be tested and integrated into formal mechanisms such as the National Legislation Program (Prolegnas) or Regional Legislation Program (Prolegda). This model is not merely a technical instrument, but a reflective mechanism built on three main layers: automated substantive analysis, predictive recommendations, and institutional integration. In the first layer, the AI system is designed to thoroughly read and map draft legislation, detect overlapping norms, identify vertical and horizontal conflicts, and map regulatory needs based on sectoral data. This is a crucial phase to avoid substantive omissions that often escape the attention of human legislative manuals.

Moving to the second layer, the system begins to demonstrate its predictive intelligence. Here, AI not only reads past data but also builds a simulation model capable of estimating potential public resistance, the risk of judicial review, and the success rate of norm implementation. The system is even capable of assessing the extent to which proposed regulations align with actual societal needs and their potential impact on strategic sectors. This risk visualization provides crucial information for legislators and policymakers, who have often made decisions based on short-term political incentives or factional pressure. The third layer is the pinnacle of institutional integration, where the AI system no longer stands alone as a technological tool but is integrated into the legislative

institutional ecosystem.³⁸ Through interoperability with platforms such as SIPPN, JDIHN, and regional e-Planning, as well as connectivity with institutions such as the House of Representatives (DPR), the Regional Representative Council (DPD), the National Development Planning Agency (BPHN), and the Ministry of Law and Human Rights, the AI-legislation model is able to provide real-time feedback on the legislative planning process.³⁹ Thus, this system becomes part of a national legislative governance system that is data-driven, adaptive, and responsive to social dynamics.

However, behind this promising design, challenges should not be underestimated. First, the absence of a formal legal basis governing the validity and authority of AI output in the legislative process raises serious legitimacy issues. To date, Law No. 12 of 2011 does not recognize the role of AI in the planning and drafting of legislation. Second, the ability of state officials to understand the operation of AI systems, interpret their output, and use it as a basis for decision-making remains very limited. Without digital literacy and a legal epistemology that adapts to technological change, these systems risk becoming “digital ivory towers” enjoyed only by a handful of technocrats but ignored by mainstream legislative structures.

In a global context, scholars such as Balcerzak and Kapelańska-Pręgoska, in their work *Artificial Intelligence and International Human Rights Law*, sharply highlight that unsupervised AI can operate outside ethical frameworks and potentially reproduce social inequality.⁴⁰ They emphasize the importance of a human rights-based approach in every phase of AI development and implementation, including in legislation. UNESCO has even adopted a Recommendation on the Ethics of Artificial Intelligence, which urges countries to ensure that any algorithms and datasets used in public decision-making are tested against

³⁸ Ratih Rahma Dewi, “Problematisasi Artificial Intelligence Sebagai Pemberi Fatwa Dalam Perspektif Hukum Islam,” *Jurnal Analisis Hukum* 7, no. 2 (2024): 209–23, <https://doi.org/10.38043/jah.v7i2.5173>.

³⁹ Irwan Triadi Abqary Faraz Darmawan, “Implementasi Artificial Intelligence (AI) Dalam Proses Perubahan Konstitusi Dan Implikasinya,” *Media Hukum Indonesia (MHI) Published by Yayasan Daarul Huda Krueng Mane* 2, no. 2 (2024): 621–32, <https://doi.org/10.5281/zenodo.12516785>.

⁴⁰ Nathan J. Brown and Julian G. Waller, “Constitutional Courts and Political Uncertainty: Constitutional Ruptures and the Rule of Judges,” *International Journal of Constitutional Law* 14, no. 4 (October 19, 2016): 817–50, <https://doi.org/10.1093/icon/mow060>.

the principles of non-discrimination, accountability, and inclusivity.⁴¹ This principle is particularly relevant for Indonesia, which has a multicultural social structure and a pluralistic legal system—where sensitivity to minority groups, customs, and local wisdom must not be compromised by algorithmic predictive logic.

Therefore, in its efforts to build an intelligent legislative system, Indonesia must not simply adopt technology but must consciously build a legal ecosystem that reflectively accommodates AI. This includes revising the formal legal framework, increasing the capacity of the legislative apparatus, standardizing legislative drafts so that they can be processed precisely by AI systems, and implementing public review of AI work results to ensure transparency and accountability. Even more, Indonesia has the opportunity to build an AI legislative system that is not only efficient but also substantively fair, value-based, and respectful of the principles of a democratic rule of law.

The integration of AI into legislation is not the end of a process, but rather the beginning of a new chapter in national legal politics.⁴² Amid the global euphoria surrounding digital transformation, it is crucial for Indonesia to remain on a constitutional path that upholds the rule of law and social justice. AI must be a tool that obeys constitutional principles, not the other way around. Ultimately, in an increasingly digitally intelligent world, the value of justice must remain at the heart of every legislative process, regardless of who formulates it—human or machine.⁴³

Referring to the principle of responsive law, the integration of AI into legislation is not merely the adoption of technology, but rather a fundamental reconstruction of how law is created and implemented.⁴⁴ AI-Legislation is not merely an instrument of technical automation, but a new logical construction in legal politics based on the principles of

⁴¹ UNESCO, “Recommendation on the Ethics of Artificial Intelligence,” *UNESCO*, 2024.

⁴² Risna Wendy Wiraganti, Aji Santoso, and Ajeng Hijriatul Aulia, “Analisis Politisasi Birokrasi Daerah Terhadap Netralitas Kinerja Aparatur Sipil Negara,” *Mendapo: Journal of Administrative Law* 6, no. 1 (February 1, 2025): 22–40, <https://doi.org/10.22437/mendapo.v6i1.39434>.

⁴³ Ajeng Hijriatul Aulia and Abdul Helim, “Eksplorasi Tubuh Perempuan Melalui Human Egg Farm Berdasarkan Kaidah Ad-Dharuru Yuzal Dan Kaidah Mafasid-Maslahah,” *Jurnal Kajian Gender Dan Anak* 9, no. 1 (2025): 46–63, <https://doi.org/10.24952/gender.v9i1.16030>.

⁴⁴ Henry Arianto, “Hukum Responsif Dan Penegakan Hukum Di Indonesia,” *Lex Jurnalica Volume* 7, no. 2 (2010): 115–23.

legal populism, institutional openness, and a focus on contemporary social needs. In the proposed design, AI is tasked with three tasks: (1) automatic analysis of normative substance, (2) predictive simulation of policy impacts and legal risks, and (3) adaptive institutional integration into national and regional legislative systems.

In responsive law, this condition indicates a disconnect between system openness and legal integrity.⁴⁵ As criticized by Nonet-Selznick, law that is too bound by procedure (autonomous legalism)⁴⁶, will lose social relevance; However, laws that are too open without a guiding purpose will fall into political opportunism. Therefore, AI-Legislation must be designed with a foundation of explicit legal values and objectives: justice, social alignment, and public participation as part of the norm-formation mechanism.⁴⁷ At this point, AI-Legislation serves as an epistemic bridge between technological sophistication and constitutional values.⁴⁸ It does not eliminate the role of humans, but rather synergizes them within a more adaptive framework. Just as smart working combines human creativity and machine efficiency, smart legislation is a collaborative form of human ethical deliberation and the predictive precision of AI. Thus, responsive legal politics becomes the logical and ethical basis for transforming legislation into an inclusive and valuable intelligent system.⁴⁹ This approach lies not only in the idea of AI integration, but also in institutional engineering and a paradigm shift in legislation itself: from mere legal-formal to smart legislation based on responsive legal principles, adaptive to the demands of a digital society,

⁴⁵ Rr. Rina Antasari, "Telaah Terhadap Perkembangan Tipe Tatanan Hukum Di Indonesia Perspektif Pemikiran Nonet-Selznick Menuju Hukum Yang Berkeadilan," *Nurani: Jurnal Kajian Syari'ah Dan Masyarakat* 19, no. 1 (January 1, 1970): 103–18, <https://doi.org/10.19109/nurani.v19i1.3344>.

⁴⁶ Ahmadi, "Kontroversi Penerapan Hukum: Telaah Sintesa Hukum Represif, Hukum Otonom, Dan Hukum Responsif," *Al-'Adl* 9, no. 1 (2016): 1–18., <https://doi.org/10.31332/aladl.v9i1.661>.

⁴⁷ Melinda Dina Gussela et al., "Fenomena 'No Viral No Justice' Perspektif Teori Penegakkan Hukum," *Ranah Research : Journal of Multidisciplinary Research and Development* 7, no. 2 (December 5, 2024): 792–800, <https://doi.org/10.38035/rrj.v7i2.1326>.

⁴⁸ Igor Calzada, "Artificial Intelligence for Social Innovation: Beyond the Noise of Algorithms and Datafication," *Sustainability* 16, no. 19 (October 6, 2024): 8638, <https://doi.org/10.3390/su16198638>.

⁴⁹ Sahabuddin Sahabuddin, "Karakteristik Hukum Otonom Dan Implikasinya Di Indonesia (Model Penegakan Hukum Prosedural Pada Sistem Peradilan Pidana)," *Wajah Hukum* 1, no. 1 (February 8, 2018): 112, <https://doi.org/10.33087/wjh.v1i1.22>.

and making AI an instrument, not a substitute, for legal ethics and democratic politics.

CONCLUSION

This study found that the integration of artificial intelligence (AI) into the drafting of legal instruments in Indonesia is a strategic step towards enhancing the quality, accuracy and relevance of regulations. The phenomena of normative disharmony, overlapping jurisdictions and high rates of regulatory repeal highlight fundamental weaknesses in the conventional legislative process, which remains manual, sectoral and lacks data support. Artificial intelligence has significant potential to improve this situation through its ability to map regulatory needs, detect legal conflicts, and propose normative harmonisation in a predictive and evidence-based manner. However, the current legal framework, particularly Law No. 12 of 2011 on the Formation of Legislation, does not provide adequate legal scope for the use of AI in the legislative process.

This study proposes that normative reform is required through several proposed amendments. First, the addition of a new article providing a legal basis for the use of AI to support the legislative planning stage. Second, the revision of Article 16 to incorporate a mechanism for the automatic testing of the substantive legal validity of regulations through an AI system. Third, the addition of an explanatory note to Article 5 to ensure that the principles of transparency and effectiveness encompass the use of artificial intelligence-based information technology. Fourth, the addition of a new article requiring the government to establish national standards regarding the governance of AI use, including aspects of accountability, legal validity, and data security. Fifth, it is recommended that a technical annex or Guidelines for the Use of AI in Legislation be incorporated via subsidiary regulations such as a Presidential Regulation or Ministerial Regulation.

This research contributes to a paradigm shift from the classical legislative model which emphasises manual, administrative, and closed-door processes towards modern smart legislation that prioritises data transparency, algorithmic accuracy, and the use of digital technology. AI-Legislation is not merely a technical tool, but a symbol of systemic transformation in the formation of national law. Therefore, legal policy support, standardised digital governance, and human resource capacity building are required for this integration to be effective and sustainable. Indonesia's legislative reforms will become increasingly adaptive in addressing the complexities and dynamics of the modern era.

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