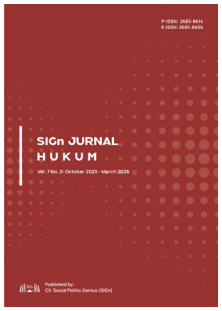

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Article Title

Measuring Judicial Accountability in the Algorithmic Era: Juridical Implications of Using Judicial Assistants and Black Box Risks in Constructing Judgment Arguments

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ABSTRACT

Although the Supreme Court of the Republic of Indonesia has adopted Artificial Intelligence technology for administrative functions, the potential use of Artificial Intelligence as a Judicial Assistant in drafting judgment arguments triggers serious dogmatic concerns. These concerns relate to the degradation of human legal reasoning amidst a national legal vacuum (rechtsvacuüm). This study aims to deconstruct the concept of judicial accountability, which fails to address algorithmic error. Furthermore, this study tests the validity of Black Box-based rulings vis-à-vis the principle of reasoned decision in Law Number 8 of 1981, and formulates a preventive regulatory model. Utilizing a normative-juridical research method and a comparative law approach regarding regulatory frameworks in the European Union, the United States, and China, this study finds that conventional legal doctrines face a liability gap due to the unforeseeable autonomous behavior of Artificial Intelligence. The analysis indicates that reliance on algorithms with opaque characteristics—as demonstrated by the COMPAS case in the United States—fundamentally violates the defendant's right to explanation. This potentially triggers "the death of standards." In this condition, judicial discretion is replaced by the rigidity of machine micro-directives. Furthermore, the practice of relinquishment by judges for the sake of administrative efficiency threatens independence and judicial wisdom. This study concludes the urgency of adopting a hybrid regulatory model integrating technical efficiency with the strict User Control principle from the European Ethical Charter. This serves to ensure technology remains a human-supervised servant of justice, not a master dictating rulings.

Keywords: *Artificial Intelligence; Black Box; Judicial Accountability; Judicial Wisdom; Reasoned Decision.*

INTRODUCTION

The massive integration of Artificial Intelligence into the global judicial ecosystem marks the dawn of a new era of legal automation. This era not only offers procedural efficiency but also disrupts the core of the judicial function. As noted by Getman et al. (2023), Artificial Intelligence has evolved from a mere data retrieval tool into a sophisticated instrument capable of influencing legal decision-making. This phenomenon shifts the paradigm from using technology solely for administrative purposes to machine intervention within the judge's cognitive realm. However, behind the promise of case acceleration lies a latent risk: the erosion of human values in law. Xu (2022) warns of the real danger when human judges begin sharing the deliberation space with algorithms. The danger is that the logic of efficiency will override substantive justice. This situation is exacerbated by the theoretical prediction of Casey and Niblett (2017) regarding "the death of standards." In this prediction, the flexibility of judicial discretion risks being replaced by the rigidity of algorithmic micro-directives based solely on statistical probability rather than conscientious moral consideration.

The fundamental issue arising from this symbiosis between judge and machine lies in the diametrical clash between the technical characteristics of Artificial Intelligence and fundamental judicial principles. On the one hand, advanced Artificial Intelligence systems often operate as Black Boxes (Kurniawan & Kurniawan, 2025).

Their decision-making processes are opaque and elusive even to their creators (Fagan & Levmore, 2019). On the other hand, the principle of due process of law and human rights demand radical transparency (Suhartono & Panjaitan, 2025). Every court ruling must be accompanied by clear, testable legal reasoning or a reasoned decision. Goodman and Flaxman (2017) emphasize that regulations in the European Union have begun to demand a right to explanation for subjects affected by algorithmic decisions. However, implementing this right faces severe technical challenges, especially given the empirical evidence presented by Angwin et al. (2016) of systemic racial bias in algorithms within the Correctional Offender Management Profiling for Alternative Sanctions (COMPAS) system in the United States. This evidence demonstrates that machine neutrality is a dangerous myth when uncritically adopted in the courtroom.

In the national legal context, the Supreme Court of the Republic of Indonesia has shown progressiveness in adopting technology, as evidenced by the use of the "*Smart Majelis*" application for automated panel selection based on workload and expertise. Currently, the use of Artificial Intelligence is limited to administrative and decision-support functions, such as preventing sentencing disparity by providing information on similar cases. However, the opportunity to expand the role of Artificial Intelligence as a Judicial Assistant in drafting judgment arguments is growing alongside promising technological advancements. Nevertheless, this condition presents a worrying legal vacuum (*rechtsvacuüm*). Technological infrastructure evolves far more rapidly than regulatory infrastructure. The absence of a positive legal framework specifically regulating the boundaries of interaction between judges and Artificial Intelligence in the formulation of the decision's reasoning (*ratio decidendi*) creates a risk gap. This risk could undermine the integrity of future court rulings.

These concerns become increasingly relevant and urgent when linked to potential clandestine misuse of technology by judges to meet strict administrative demands. The Decree of the Chief Justice of the Supreme Court Number 359/KMA/SK/XII/2022, although aiming for a noble standard of automation, may inadvertently serve as an entry point for unethical automation. In a hypothetical scenario, a judge uses Artificial Intelligence to deduce legal facts from trial records and to instantly draft legal considerations in accordance with the standard format required by said Decree. Thus, what Millar and Kerr (2016) term relinquishment has essentially occurred. In this condition, the judge no longer acts as an adjudicator performing legal findings (*rechtsvinding*) through dialectical panel deliberation. The judge is reduced to a mere verifier of a legitimizing machine output without critical thinking. This ultimately nullifies the essence of direct evidentiary proceedings in court.

The dogmatic implications of such a scenario are severe, particularly regarding judicial accountability. Conventional legal doctrine, including tort law, is built upon the assumption that the wrongdoer is a legal subject possessing free will. However,

Karnow (2016) highlights that applying traditional liability theory hits a dead end when applied to embodied machine intelligence. This is because autonomous algorithmic behavior is often unforeseeable. If a ruling drafted by Artificial Intelligence contains logical flaws or factual biases undetected by the human judge, the current Indonesian legal system lacks adequate instruments to attribute fault. Is this judicial negligence, a technological product defect, or a digital superior force (*force majeure*)? This ambiguity potentially creates impunity that harms justice seekers and erodes judicial authority.

Furthermore, uncontrolled Artificial Intelligence integration threatens the sociological aspect of judicial legitimacy: public trust. Fine and Marsh (2024) found that public perception of justice is heavily influenced by the belief that rulings result from a wise human authority figure. Sourdin (2018) reinforces this argument by questioning the "Judge vs. Robot" dichotomy. She emphasizes that non-cognitive aspects, such as empathy, intuition, and understanding of social context, are elements of judicial wisdom that cannot be simulated by machines. Excessive reliance on Artificial Intelligence risks dehumanizing the judicial process. Human fate is determined by cold, mathematical calculations, negating the human nuances that are often key to fair and civilized dispute resolution. Kurum (2024) also warns of ethical boundaries that must be maintained to ensure technology remains a servant of justice, not its master.

Given the complex and multidimensional nature of these issues, this research has three constitutive objectives designed to make a significant scientific contribution. *First*, to deconstruct the concept of judicial accountability in the Indonesian legal regime, which currently does not cover algorithmic error. *Second*, to test the validity of using Black Box Artificial Intelligence in drafting judgment arguments *vis-à-vis* the principle of reasoned decision as mandated by Article 197 of Law Number 8 of 1981 and Article 53 of Law Number 48 of 2009. *Third*, to formulate a hybrid regulatory model adopting the User Control principle from the European Ethical Charter to fill the *rechtsvacuüm* in Indonesia. This serves to prevent the future erosion of judicial independence. This research is expected to provide policymakers with a theoretical and practical foundation for designing a legal architecture that harmonizes technological innovation with the protection of human rights within the judicial system.

METHOD

This study employs normative legal research, including the statute, conceptual, and comparative approaches (Qamar & Rezah, 2020). This methodological choice is based on the object of study's futuristic, anticipatory nature. This is because the Judicial Assistant technology for drafting judgment arguments has not been officially implemented in the Indonesian judicial system. However, the opportunity to apply it has opened up through the Supreme Court's existing technological infrastructure.

Therefore, the research focus is not directed at empirical testing of the effectiveness of nonexistent technology. Instead, the focus is directed at a dogmatic analysis of the *rechtsvacuüm* and its juridical implications for fundamental judicial principles. The comparative approach is specifically used to examine regulatory and ethical frameworks from the European Union, the United States, and China. This study serves as benchmarking material in formulating an ideal regulatory model for Indonesia.

The data sources used in this research are secondary data, consisting of primary and secondary legal materials (Sampara & Husen, 2016). Primary legal materials include legislation relevant to judicial power and procedural law. These regulations are the 1945 Constitution, Law Number 8 of 1981, Law Number 48 of 2009, Decree of the Chief Justice of the Supreme Court Number 359/KMA/SK/XII/2022, and other related regulations. Secondary legal materials cover international legal instruments such as the European Ethical Charter on the Use of Artificial Intelligence in Judicial Systems. Additionally, secondary legal materials encompass cutting-edge scientific literature that critically discusses the interaction between Law and Artificial Intelligence. The use of these authoritative references aims to dissect theoretical concepts such as algorithmic bias, the black box problem, and judicial accountability, which lie at the heart of the research problem.

Data collection techniques are conducted through systematic and structured library research. This procedure begins with an inventory of Indonesian positive legal norms to map existing rules regarding judgment drafting procedures and judicial obligations. The next step is to conduct a global literature search to identify new legal doctrines evolving in response to Artificial Intelligence technology. Furthermore, the search also includes case studies on the implementation of Artificial Intelligence in other jurisdictions, such as the COMPAS system in the United States and Internet Courts in China. The collected data is then selected, classified, and systematized based on relevance to the problem formulation. This is to ensure the validity and reliability of the arguments constructed (Irwansyah, 2020).

Analysis of legal materials is conducted qualitatively and prescriptively, using legal interpretation techniques and deductive reasoning. Grammatical and teleological interpretation techniques are used to interpret articles in Law Number 8 of 1981 and Law Number 48 of 2009. The objective is to determine whether the norms "judges must explore legal values" and "decisions must be accompanied by clear reasons" can accommodate or precisely prohibit the use of opaque Artificial Intelligence. Furthermore, this analysis is sharpened by using the Legal Liability Theory developed by Karnow (2016) and the concept of Relinquishment from Millar and Kerr (2016). These theories and concepts serve as analytical tools to assess the state of judicial accountability in Artificial Intelligence use cases. Additionally, the Theory of Justice and global ethical principles, such as User Control, serve as parameters for testing

the moral and constitutional validity of potential judicial automation. The analysis results are then synthesized to formulate legal prescriptions in the form of a hybrid regulatory model harmonious with the Indonesian legal system.

RESULTS AND DISCUSSION

A. Deconstructing Judicial Accountability within the *Rechtsvacuüm* of Artificial Intelligence Usage

The integration of Artificial Intelligence technology into the judicial deliberation room presents serious dogmatic challenges regarding the concept of judicial accountability. In conventional practice, judges bear full responsibility for their rulings based on the assumption that the entire reasoning of the decision (*ratio decidendi*) is the result of conscious human intellectual and conscientious reasoning. However, there is a hypothetical scenario in which a rogue judge uses Artificial Intelligence in secret to deduce legal facts and draft the holding. This is made possible by the current technological infrastructure. This scenario creates what Karnow (2016) terms a liability gap. Traditional tort law doctrines, grounded in negligence or intent, become blunt when confronted with errors produced by autonomous algorithms. The nature of autonomous algorithms is often unforeseeable, even to their creators (Karnow, 2016; Millar & Kerr, 2016).

The condition of legal vacuum (*rechtsvacuüm*) in the Indonesian legal system exacerbates this situation. Article 58 of Law Number 48 of 2009 stipulates that judges may be sanctioned for violating the code of ethics or committing technical judicial errors. However, this provision is designed to ensnare human error, not algorithmic error. When a judge acts merely as an "operator," transferring Artificial Intelligence output into the judgment format without critical verification, the lines blur between the judge's professional negligence and technological product defects. Millar and Kerr (2016) define this phenomenon as relinquishment. Getman et al. (2023) warn that without regulations specifically governing the apportionment of liability between the user (judge) and the system (Artificial Intelligence), the use of this technology risks creating systemic impunity. In such a climate of impunity, fatal errors in rulings cannot be held accountable to anyone.

This condition becomes increasingly complex considering that the Decree of the Chief Justice of the Supreme Court Number 359/KMA/SK/XII/2022 mandates strict format standardization. Ironically, compliance with this formality may serve as a loophole for the entry of an invalid substance. If Artificial Intelligence produces biased or erroneous factual conclusions but packages them in a format consistent with said Decree, a judge might be tempted to adopt them for time efficiency. This underscores that, in the current context of *rechtsvacuüm*, the Indonesian

legal system lacks a safeguard mechanism to detect, let alone prosecute, "legal smuggling" facilitated by Artificial Intelligence. This ultimately undermines the principle of the judiciary's public accountability (Karnow, 2016; Getman et al., 2023).

Ultimately, this phenomenon demands a fundamental deconstruction of the concept of "professional misconduct" of judges within the Indonesian legal regime. Classical liability theory, which attaches fault to human malicious intent (*mens rea*) or negligence (*culpa*), is no longer adequate to capture the nuances of hybrid interaction between humans and machines (Sutopo & Panjaitan, 2025). As explained by Millar and Kerr (2016), when an expert (such as a judge) delegates cognitive tasks to expert robots and effectively releases control over the results, they create a liability vacuum. In this context, "fault" is no longer merely an active wrongful act, but a passive failure to perform adequate verification of algorithmic output. Therefore, a juridical redefinition is required to expand the scope of "judicial negligence" in Law Number 48 of 2009 and the Code of Judicial Ethics. This expansion includes algorithmic negligence, namely the judge's failure to understand the limitations, biases, and potential errors of the Artificial Intelligence tools used. Without expanding this doctrine, the judicial system will remain vulnerable. Technology becomes a scapegoat for injustice that is actually rooted in the absence of an adaptive legal framework (Karnow, 2016; Millar & Kerr, 2016).

B. The Validity of Black Box Rulings *Vis-à-vis* the Principle of Reasoned Decision

The Black Box issue in the use of Artificial Intelligence constitutes a fundamental paradox pitting technological efficiency against the basic principle of judicial transparency. Most cutting-edge Artificial Intelligence algorithms, particularly those based on Deep Learning or Neural Networks, operate with highly complex non-linear logic (Wibowo, 2025). In these systems, the processing of input data into decision outputs cannot be explained by linear causality, even according to their designers (Sourdin, 2018; Fagan & Levmore, 2019). In the context of drafting court rulings, this opacity clashes with the judge's obligation to present a reasoned decision. Article 197 section (1) point d of Law Number 8 of 1981 explicitly requires that a conviction ruling must contain:

> *"Considerations arranged concisely regarding facts and circumstances along with evidence obtained from the examination in court which serve as the basis for determining the defendant's guilt."*

Furthermore, judges are responsible for examining and adjudicating cases, as Article 53 section (2) of Law Number 48 of 2009 stipulates:

> *"The determination and ruling as referred to in section (1) must contain the judge's legal considerations based on proper and correct reasons and legal grounds."*

If a judge uses a Judicial Assistant to formulate legal considerations without understanding the algorithm's logic, the ruling is essentially formally and materially defective. Goodman and Flaxman (2017) emphasize the importance of the right to explanation in their analysis of the European Union's General Data Protection Regulation (GDPR). Every legal subject has the right to know the logic behind automated decisions that significantly impact their lives. In the Indonesian judicial context, a judge's inability to explain why Artificial Intelligence recommends a particular verdict (e.g., 5 years' imprisonment instead of 3) violates the defendant's right to present a defense and to effective legal remedies. A ruling based on a Black Box is inherently an arbitrary decision because it negates the principle of hear the other side (*audi et alteram partem*), namely the right to be heard and to understand the basis of punishment (Angwin et al., 2016; Goodman & Flaxman, 2017; Simamora et al., 2024).

The danger of reliance on Black Box algorithms is not merely a theoretical hypothesis but has been proven empirically. An in-depth investigation by Angwin et al. (2016) of the Correctional Offender Management Profiling for Alternative Sanctions (COMPAS) system in the United States revealed shocking findings. The algorithm was systematically biased against black defendants. COMPAS tended to assign higher recidivism risk scores or false positives to black defendants compared to white ones, even though race was not explicitly included as a variable. This bias arises from historical data used to train Artificial Intelligence, reflecting past social inequalities and prejudices. If similar technology is implemented in Indonesia without strict transparency filters, there is a significant risk that court rulings will replicate hidden biases—such as those related to socio-economic status or gender—hiding behind the mask of machine objectivity (Angwin et al., 2016; Sourdin, 2018).

Therefore, the validity of rulings drafted with the aid of Black Box Artificial Intelligence is legally questionable. From the perspective of Article 197 section (2) of Law Number 8 of 1981, failure to comply with provisions regarding legal considerations may result in the ruling being null and void by law. The use of unexplainable AI recommendations equates to the judge's failure to provide "proper and correct" considerations as mandated by Law Number 48 of 2009. Fagan and Levmore (2019) suggest that, in conditions where decision-determining variables cannot be transparently identified, the law should "retreat" from rigid rules and return to standards that allow for human assessment. Consequently, the integration of Artificial Intelligence in the Indonesian judiciary must not be

left unchecked. It must be subject to the absolute requirement of explainability. Without the capacity for auditability and explainability, every ruling contaminated by Black Box logic is unconstitutional because it violates the right to a fair trial (Goodman & Flaxman, 2017; Fagan & Levmore, 2019).

C. Erosion of Independence and Dehumanization of Justice: The Threat Behind Efficiency

The procedural efficiency promised by Artificial Intelligence often comes at a high cost: eroding judicial independence. In contemporary legal theory discourse, Casey and Niblett (2017) popularized the thesis of "the death of standards." In this thesis, legal flexibility, which allows judges to consider case-by-case nuances, is replaced by the rigidity of algorithmic micro-directives. If Artificial Intelligence is widely applied in drafting rulings, judges risk being reduced to mere rubber stamps, merely legitimizing machine calculations. This phenomenon creates an illusion of legal certainty but essentially eliminates judicial discretion, which is the heart of judicial independence. In a scenario where judges routinely accept Artificial Intelligence-generated draft rulings without criticism—a behavior driven by workload pressure and demands for speed (Decree of the Chief Justice of the Supreme Court Number 359/KMA/SK/XII/2022)—then judicial independence in adjudicating cases "based on law and justice" (Article 24 of the 1945 Constitution) and conscience becomes mere rhetoric.

This threat is exacerbated by a psychological tendency called automation bias. Humans tend to trust machine output more than their own judgment, especially in complex or ambiguous situations (Sourdin, 2018). When judges begin relying on a Judicial Assistant to perform legal reasoning, a subtle yet sure relinquishment of intellectual authority occurs (Millar & Kerr, 2016). Instead of grappling with legal facts through the dialectics of panel deliberation, judges may choose shortcuts by relying on algorithmic predictions deemed "more objective." Xu (2022), in his study of courts in China, notes that while efficiency increased drastically, the role of the human judge became increasingly marginalized, becoming that of a technical administrator. In the long run, this not only erodes judges' judicial skills but also undermines the rule of law. It also undermines the integrity of the judge's profession as a noble profession (*officium nobile*), which should serve as the final gatekeeper of justice (Rezah & Sapada, 2023).

Furthermore, Artificial Intelligence intervention in the private realm of judicial consideration may dehumanize the judicial process. Law, as asserted by Kurum (2024), is not merely a series of rules, but the art of judging. Non-cognitive elements such as empathy, moral intuition, and understanding of social context are vital to judicial wisdom, distinguishing humans from machines. Algorithms,

however sophisticated, operate based on historical data and cold statistical patterns, lacking the ability to understand human suffering or grant mercy. Kiliç (2021) warns that a fully automated judiciary will lose its ethical dimension. Defendants will be reduced to mere data objects, whose fate is determined by mathematical probability. This dehumanization is dangerous because it reduces the complexity of human problems to binary variables. This negates the uniqueness of each case, which often requires a humanist and casuistic approach.

The sociological impact of this erosion of independence and dehumanization is the collapse of public trust in judicial institutions. Fine and Marsh (2024) found a strong correlation between public perceptions of "judicial leadership" and trust in the use of Artificial Intelligence in court. The public tends to accept technology only if they are convinced that human judges remain in full control, or human-in-the-loop, and are responsible for every decision. If the public perceives that court rulings are merely products of a soulless algorithm, the moral legitimacy of such rulings will vanish. The trust of justice seekers is built upon the conviction that their cases are heard and decided by fellow humans possessing wisdom, not by an untouchable Black Box. Therefore, safeguarding judicial independence from algorithmic dominance is not just about maintaining professional autonomy, but an absolute prerequisite for maintaining legal authority in the eyes of society.

In summary, although Artificial Intelligence offers technical solutions to case backlog problems, its uncontrolled implementation poses an existential risk to the Indonesian judiciary. The latent dangers of "the death of standards," automation bias, and dehumanization demand a cautious attitude, or the precautionary principle. The judicial system must not be trapped in technological fetishism that glorifies speed over justice. The use of technology must be strictly limited to administrative or research purposes. Technology is strictly prohibited from entering the exclusive domain of legal considerations (*ratio decidendi*), which demands human wisdom. Only in this way can the integrity of judges as "representatives of God" on earth be maintained against the onslaught of soulless machine efficiency.

D. Towards a Hybrid Regulation: Adopting User Control Principles and Human Oversight

Addressing the complexity of risks faced, the future Indonesian judicial system must formulate a regulatory model capable of balancing efficiency ambitions with the imperative of justice. Comparative analyses conducted by Lupo (2019) and Drakokhrust and Martsenko (2022) demonstrate the existence of two extreme poles in the regulation of judicial Artificial Intelligence. These two poles are the Chinese "maximum efficiency" model, which tends to be technocratic and

centralized, and the European rights-based approach, which is highly stringent in protecting privacy and individual autonomy. For Indonesia, whose legal system is rooted in the Civil Law tradition yet upholds the humanist values of Pancasila, adopting either model would potentially cause disruption. Therefore, this research proposes a hybrid regulatory model integrating the administrative efficiency of the Chinese model with the strict ethical standards of the European model. This integration is achieved by adopting the principles outlined in the European Ethical Charter on the Use of Artificial Intelligence in Judicial Systems and Their Environment (CEPEJ, 2018).

The main pillar of this hybrid regulatory model is the User Control principle enshrined as the fifth principle in the European Ethical Charter. This principle asserts that judges must always have the power to override Artificial Intelligence recommendations and revert to human judgment when necessary. Indonesian regulations must explicitly prohibit a prescriptive approach that treats Artificial Intelligence output as a final, binding truth. Conversely, Artificial Intelligence must be positioned solely as a supportive tool subject to judicial verification and validation. In practice, this can be achieved by requiring judges to explicitly state in their rulings when they deviate from Artificial Intelligence recommendations, along with the legal reasoning for those deviations. However, the system retains full freedom for judges to depart from these rules in pursuit of substantive justice (CEPEJ, 2018; Lupo, 2019).

Beyond User Control, this regulatory model must also adopt the principle of radical transparency. Given the findings of Angwin et al. (2016) regarding hidden bias, every algorithm used in the judicial system must pass an independent audit before implementation. Regulators must establish technical standards requiring Artificial Intelligence vendors to open their Black Box to auditors appointed by the Supreme Court or the Judicial Commission. This transparency extends not only to the programming code but also to the datasets used to train the algorithm. If it is found that training data contains historical bias against specific vulnerable groups (e.g., women or religious minorities), the algorithm must be rejected or recalibrated. Goodman and Flaxman (2017) emphasize that this transparency is an absolute prerequisite for public accountability and for preventing "responsibility laundering" through technology.

The implementation of this regulatory model also demands continuous human oversight, or human-in-the-loop. It is insufficient to merely grant control to judges at the end of the process; human involvement must occur at every stage, from system design and data input to output evaluation. Xu (2022) suggests establishing a technology ethics council within the judiciary, comprising senior judges, legal experts, and technology experts, to periodically oversee the use of

Artificial Intelligence. This council is tasked with ensuring that technology does not erode judicial competence and is not used as a shortcut to avoid workload. This oversight also functions as a corrective mechanism to detect anomalies or systemic errors that may escape the attention of individual judges handling specific cases.

Finally, this hybrid regulatory model must be reinforced with strict sanctions for misuse of technology. In the "rogue judge" scenario involving the clandestine use of Artificial Intelligence, regulations must establish that using Artificial Intelligence to draft legal considerations without critical verification constitutes a serious violation of the code of ethics. This aligns with the views of Karnow (2016) and Millar and Kerr (2016) that relinquishment to machines constitutes professional negligence. By criminalizing—within the ethical realm—blind reliance on Artificial Intelligence, the legal system sends a strong signal that while technology is welcomed as a servant, it will never be permitted to become a master dictating the fate of justice seekers. This comprehensive regulation is expected to create a modern, efficient, yet humane and just judicial ecosystem.

CONCLUSIONS AND SUGGESTIONS

Based on the dogmatic, comparative, and conceptual analysis detailed in the Results and Discussion Chapter, this research yields three intertwined main conclusions that thoroughly answer the proposed problem formulation. *First*, the absence of specific regulations regarding the use of Artificial Intelligence in the Indonesian judicial system creates a legal vacuum (*rechtsvacuüm*), obscuring the boundaries of judicial accountability. Theoretically, conventional legal doctrines such as negligence and tort law, as embraced in the Indonesian positive legal system, have proven unable to address errors caused by unforeseeable algorithmic failures. Without expanding the doctrine to cover the concept of a liability gap, the use of Artificial Intelligence by judges—whether officially or clandestinely—potentially creates legal impunity. In such a climate of impunity, fatal errors in rulings cannot be attributed to anyone, thereby injuring the sense of justice of the justice seeker.

Second, the use of Black Box algorithms in drafting judgment arguments fundamentally contradicts the principle of due process of law and the validity requirements of a ruling according to criminal procedural law. Article 197 section (1) point d of Law Number 8 of 1981 and Article 53 section (2) of Law Number 48 of 2009 require every ruling to be accompanied by clear reasons and legal grounds or a reasoned decision. However, the opaque technical characteristics of Deep Learning render the logic flow of Artificial Intelligence recommendations unexplainable and unauditable. Therefore, every ruling whose legal considerations are based solely on machine output, without adequate human reasoning verification, is procedurally

defective and potentially null and void by law. This is because it violates the defendant's human right to obtain an explanation of their legal fate.

Third, uncontrolled Artificial Intelligence integration brings an existential threat in the form of the erosion of judicial independence and the dehumanization of the judicial process. As the thesis of "The Death of Standards" argues, reliance on algorithmic micro-directives risks transforming judges from legal finders (*rechtsvinder*) into mere technical administrators. This is exacerbated by the risk of automation bias and relinquishment, where judges surrender their intellectual and moral authority to machines. The long-term impact is the loss of judicial wisdom, a non-cognitive element (such as empathy and moral intuition) that distinguishes humane justice from mathematical calculation. In turn, this will collapse public trust in the integrity of judicial institutions.

Based on the conclusions above, this research recommends strategic and tactical steps for various stakeholders. *First*, it is suggested that the Lawmakers (House of Representatives and Government) immediately revise Law Number 48 of 2009, Law Number 8 of 1981, and other legislation related to judicial procedural law to incorporate norms explicitly regulating the use of technology in the adjudication process. This revision must adopt the principle of strict liability for technology use that impacts human rights, and expand the definitions of "evidence" and "legal considerations" to be compatible yet remain critical of Artificial Intelligence output.

Second, it is suggested that the Supreme Court and Constitutional Court immediately issue a Regulation on Artificial Intelligence Governance in Courts, adopting a hybrid regulatory model. This regulation must contain: (a) A strict prohibition on using Artificial Intelligence to draft legal considerations (*ratio decidendi*) without manual verification; (b) A transparency obligation for judges to declare the use of Artificial Intelligence tools in their rulings; and (c) A periodic algorithm audit mechanism by an independent team to detect bias. Additionally, the judicial training curriculum must be updated with digital literacy and Artificial Intelligence ethics materials to prevent automation bias.

Third, the Judicial Commission is advised to update the Code of Ethics and Code of Judicial Conduct by including a specific clause stating that reliance on automated systems constitutes a serious ethical violation. The Judicial Commission also needs to develop supervision instruments capable of detecting indications of plagiarism from Artificial Intelligence output. *Fourth*, it is suggested to Academics and Legal Researchers to conduct further interdisciplinary research to develop an Explainable AI (XAI) concept that is uniquely Indonesian. This concept must translate algorithmic logic into legal language understandable to the public and in accordance with Pancasila values.

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