Ethics of Artificial Intelligence Usage in the Judiciary to Uphold Efficiency and Justice

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ABSTRACT

The rapid advancement of Artificial Intelligence (AI) has extended into the judiciary, offering opportunities to enhance efficiency, reduce case backlogs, and support legal practitioners in decisionmaking processes. However, alongside these benefits emerge profound ethical concerns, particularly regarding fairness, accountability, and transparency in legal systems. This research addresses the pressing issue of how AI can be ethically applied in the judiciary without undermining justice and human dignity. The study's primary objective is to identify ethical challenges in the integration of AI, propose normative solutions, and provide guiding principles for policymakers, legal practitioners, and technology developers. Employing a normative legal research methodology, the study uses a conceptual approach to examine core principles of justice, ethics, and technology, while a comparative approach evaluates practices in countries such as the United States, Estonia, and China. Data were collected through library research, analyzing legislation, policy documents, case studies, and scholarly works, and were examined using prescriptive analysis to generate actionable recommendations. The findings highlight that while AI offers efficiency and consistency, it poses risks of algorithmic bias, the "black box" problem, limited technological literacy among legal professionals, and the absence of comprehensive regulations in countries like Indonesia. The study concludes that AI in the judiciary must be governed by ethical principles of fairness, transparency, and accountability, supported by strong regulatory frameworks, regular audits, and capacity building for legal actors. Ultimately, the research underscores that AI should function as a supportive tool that upholds justice and public trust, rather than one that threatens the integrity of judicial systems.

Keyword: Artificial Intelligence, Ethics, Fairness, Judiciary.

INTRODUCTION

In recent years, the development of Artificial Intelligence (AI) has reached various sectors, including the legal and judicial fields (Mufti et al., 2024). AI is now being used to assist decisionmaking, simplify administrative processes, and provide datadriven predictions on legal case outcomes. This technology promises not only greater efficiency but also a faster resolution of legal processes that are often time consuming and complex. However, the adoption of AI in the judicial system has sparked serious ethical concerns, particularly regarding fairness and justice. This has led to a lengthy debate between those

who are optimistic about AI's benefits and those who are skeptical of its potential risks to the judicial system (Y. F. Amelia et al., 2024)

Proponents of AI argue that this technology can address many of the challenges faced by traditional judicial systems. AI can analyze legal documents quickly, provide relevant case precedents, and reduce the workload of judges and lawyers. For instance, AI tools like Ross Intelligence and Legal Analytics have been utilized to help attorneys identify similar cases in a fraction of the time required for manual research. Furthermore, countries like Estonia and China have implemented AIbased systems to handle minor disputes and offer legal advice to the public. Data indicates that these technologies have reduced case resolution times by up to 40% in some jurisdictions, making them a positive step toward judicial reform.

On the other hand, the use of AI in the judiciary presents significant challenges. One major concern is algorithmic bias, which can lead to unjust outcomes, particularly for vulnerable groups. For example, the COMPAS criminal prediction system used in the United States was found to exhibit bias against minorities, especially Black individuals. This highlights that AI algorithms are not entirely neutral and can produce harmful consequences if not properly monitored. Additionally, the lack of transparency in AI processes raises questions about the validity and legitimacy of decisions made by these technologies. In the context of justice, decisions made by AI must be ethically and legally accountable, as they directly impact human rights and lives (Syahril et al., 2024)

The central issue addressed in this study is how to ensure that the ethical use of AI in the judiciary upholds core principles of justice while improving efficiency. Unregulated AI usage could undermine the integrity of judicial systems and erode the humanistic values essential to legal processes. Therefore, a comprehensive examination of AI's application in the judiciary, particularly from the perspective of legal ethics, is crucial (Rizki & Salam, 2023)

The rapid development of artificial intelligence (AI) has brought significant changes across various sectors, including the judiciary. While its potential benefits are undeniable, the use of AI also raises serious concerns regarding justice, transparency, and accountability in judicial systems. For instance, decisions generated by AI in legal processes are often difficult for humans to fully understand due to the complex and "black box" nature of AI algorithms. This lack of transparency has the potential to undermine trust in the legal decisionmaking process.

Additionally, the issue of algorithmic bias is a critical concern. When the data used to train AI systems is not fully representative or contains discriminatory patterns, these systems can perpetuate or even amplify existing societal inequalities. For example, in some countries, AI algorithms used to assist in sentencing or parole decisions have been found to exhibit bias against certain racial or ethnic groups. This phenomenon illustrates that technology designed to enhance justice can, in some cases, produce the opposite effect if not carefully managed and monitored (Putranti & Anggraeny, 2022)

Furthermore, existing regulations often fail to keep pace with the rapid evolution of technology. Many jurisdictions, including Indonesia, lack specific legal frameworks to govern the use of AI in the judiciary. This regulatory gap creates uncertainties and opens the door to potential misuse of technology, whether intentional or unintentional. Without clear guidelines, AI may be applied without adequately addressing its ethical and legal implications. Another pressing issue is the low level of technological literacy among key users of judicial systems, such as judges, prosecutors, and lawyers. Many of these

professionals may not fully understand how AI works, making it challenging for them to identify errors or inaccuracies in AIgenerated decisions. This could lead to overreliance on technology, reducing the necessary human oversight in judicial processes (Yudoprakoso, 2019)

Given these challenges, this research seeks to examine the ethical issues arising from the use of AI in the judiciary in depth. It also aims to explore the steps needed to create a regulatory framework that ensures fairness, transparency, and accountability. This study is crucial not only for enhancing our understanding of AI's impact on the legal system but also for proposing concrete solutions rooted in the principles of justice for the judiciary of the future (Batubara & Ismail, 2024).

This study applies the ethical frameworks of utilitarianism and deontology as its analytical foundation. Utilitarianism focuses on maximizing benefits for the greatest number of people, suggesting that AI adoption is acceptable if it provides efficiency and justice for society at large. In contrast, deontology emphasizes moral duties and fundamental principles, asserting that AI implementation in the judiciary must adhere to ethical standards that respect human dignity and transparency. Combining these two theories offers a balanced perspective on AI's role in judicial contexts.

The novelty of this research lies in its comprehensive analysis, integrating technical, legal, and ethical dimensions to discuss AI in the judiciary. While previous studies have often centered on the technical aspects or practical benefits of AI, this research delves deeper into how the technology can be applied without compromising ethical and legal principles. In Indonesia, discussions on the ethics of AI in the judiciary remain scarce, making this study a valuable reference for future policy and regulation development. The importance of this research cannot be overstated, as the judiciary is a cornerstone of justice and the rule of law in society. Any innovation introduced into this system must be carefully designed to avoid undermining its fundamental values. By understanding both the potential and challenges of AI in the judiciary, this study aims to provide relevant recommendations for policymakers, legal practitioners, and technology developers.

The objectives of this research are to identify the ethical challenges associated with AI use in the judiciary, propose solutions grounded in ethical theories, and establish guiding principles for the development and implementation of AI in legal systems. Additionally, it seeks to broaden public understanding of the ethical implications of technology in judicial processes. In conclusion, this research aims to make a meaningful contribution to the development of a judicial system that is not only more efficient but also steadfast in its commitment to justice. By taking a holistic approach, this study endeavors to address the challenges of modern times while preserving the integrity of the legal framework that underpins society.

METHODOLOGY

This study employs normative legal research, focusing on the analysis of legal documents, legal theories, and relevant literature on the topic (Marzuki, 2017). The research adopts both a conceptual approach and a comparative approach. The conceptual approach aims to understand the fundamental concepts related to ethics, justice, and the use of Artificial Intelligence (AI) in judicial systems. Meanwhile, the comparative approach analyzes the practices of AI usage in the judiciary of several countries, such as the United States, Estonia, and China, which have pioneered the

adoption of this technology. This comparison provides a comprehensive understanding of the benefits, challenges, and impacts of AI implementation in the judicial system.

The data collection method relies on library research, examining various sources such as legislation, policy documents, academic journals, articles, and case reports relevant to the subject. The primary focus is on regulations governing AI usage, ethical legal theories, and practical experiences in implementing AI in judicial systems. The analysis employs a prescriptive analytical method. This method aims to provide practical and applicable recommendations based on the findings. Prescriptive analysis ensures that the study does not merely serve as an academic discussion but also offers concrete solutions to ethical challenges arising from AI usage in the judiciary. The results of this research are expected to make a significant contribution to the development of regulations and policies that ensure AI implementation in judicial systems aligns with the principles of justice and transparency. Additionally, it will offer guidance for policymakers, legal practitioners, and technology developers to promote responsible and ethical use of AI in the judiciary.

RESULTS AND DISCUSSION
1. Ethical Principles in the Use of Artificial Intelligence (AI) in the Judiciary to Ensure Justice and Transparency

The integration of Artificial Intelligence (AI) into the judicial system has sparked both optimism and concern (Martinelli et al., 2023). On one hand, AI offers the promise of increased efficiency, consistency in decisionmaking, and the potential to reduce the backlog of cases in many courts. On the other hand, it raises significant ethical concerns, particularly about ensuring that the principles of justice and transparency are upheld. There are 5 main principles of the Principles in the Use of Artificial Intelligence (AI) in the Judiciary to Ensure Justice and Transparency, consisting of:

a. Justice as the Foundation of AI in the Judiciary; Justice is the cornerstone of any judicial system. It is not only about the outcome of legal decisions but also about the fairness of the processes leading to those decisions. AI has the potential to contribute to substantive justice by reducing inconsistencies in rulings. For instance, algorithms can analyze large volumes of past legal cases to identify patterns and provide recommendations that align with established precedents (Nuhi et al., 2024). However, one of the significant challenges is the potential for bias in the data used to train AI systems. If the training data contains historical biases whether based on race, gender, or socioeconomic status—the AI may perpetuate or even amplify these biases. For example, studies have shown that risk assessment algorithms like COMPAS, used in the United States, disproportionately assigned higher risk scores to individuals from certain racial groups. Such outcomes undermine the very essence of justice and highlight the need for careful scrutiny. Approaches to Ensure Justice in AI Implementation, Improving Data Quality: Ensuring that the data used to train AI systems is free from systemic biases is crucial. This involves rigorous data auditing and preprocessing to eliminate discriminatory patterns (Rama et al., 2023). Algorithmic Audits: Regular evaluations of AI algorithms must be conducted to detect and address any forms of bias or inequity in their outputs.

b. Transparency as a Pillar of Trust in AI Systems; Transparency is an essential component of a fair judicial process. It ensures that all parties involved can understand and trust the mechanisms by which decisions are made. However, one of

the biggest challenges with AI is the "black box" nature of many algorithms, where the decisionmaking process is opaque and difficult to interpret. This lack of transparency can erode public trust and lead to skepticism about the fairness of AIdriven judicial outcomes (Martinelli et al., 2023).

c. Analysis Through the Lens of Utilitarianism; Utilitarianism, as a moral theory, posits that actions are considered ethical if they produce the greatest good for the greatest number. From this perspective, the adoption of AI in the judiciary can be justified if its benefits such as faster case resolutions, reduced administrative burdens, and enhanced consistency in rulings outweigh the potential risks (Hadi & Guntara, 2022). However, utilitarianism also requires a careful evaluation of potential harms. If the implementation of AI leads to systemic biases or compromises fundamental rights, the negative impact may outweigh the benefits. For example, an overly mechanistic reliance on AI could marginalize human judgment, particularly in cases requiring nuanced consideration of individual circumstances (Disemadi, 2021).

d. Analysis Through the Lens of Deontology; Deontology, in contrast to utilitarianism, emphasizes the intrinsic morality of actions rather than their consequences. This theory asserts that actions must adhere to established moral principles and duties, regardless of their outcomes. In the context of AI in the judiciary, deontology underscores the importance of upholding human dignity, fairness, and individual rights. For instance, even if AI could deliver efficient and consistent rulings, its use would still be deemed unethical if it violated principles such as transparency or accountability (Wijayanti & Kharisma, 2024). Deontology insists that the means must be as justifiable as the ends, making it essential to design AI systems that respect these core ethical values.

e. Prescriptive Solutions for Ethical AI in the Judiciary; Based on the challenges and theoretical analyses above, several practical recommendations can be proposed to ensure the ethical use of AI in judicial systems: Establishing Ethical Regulations: Governments and judicial bodies should develop comprehensive guidelines and regulations to govern the use of AI in the judiciary. These regulations must emphasize justice, transparency, and accountability as foundational principles. Multidisciplinary Collaboration: The development and implementation of AI systems in the judiciary should involve collaboration among legal experts, ethicists, and AI developers to ensure that technological advancements align with ethical and legal standards. Education and Training: Judges, lawyers, and other legal professionals must receive training on the capabilities, limitations, and ethical implications of AI to make informed decisions about its use in legal processes.

The integration of AI into the judiciary presents a transformative opportunity to enhance efficiency and consistency. However, it also necessitates a strong commitment to ethical principles to prevent the erosion of justice and transparency. By adopting a balanced approach rooted in utilitarianism and deontology, this discussion highlights the importance of ethical oversight, robust regulation, and stakeholder collaboration. The proposed solutions aim to ensure that AI serves as a tool to uphold, rather than undermine, the fundamental values of the judiciary. This effort is crucial not only for maintaining public trust but also for ensuring that technology serves humanity's highest ideals of fairness and justice (Nurzaman & Fidhayanti, 2024).

When analyzing the ethics of using artificial intelligence (AI) in the judiciary, it becomes evident that while AI offers immense potential to improve efficiency, fairness

must remain the cornerstone of its application. Ethics is not merely an accessory to technological implementation; it is a fundamental element that ensures AI does not compromise the values of justice and human rights. In the judiciary, core principles such as transparency, accountability, and non discrimination must be the foundation upon which AI systems are developed and deployed (Syahril et al., 2024).

However, the challenges are significant. One of the primary concerns is the risk of algorithmic bias, where the decisions generated by AI may reflect the limitations or imbalances in the data it processes. This issue can inadvertently perpetuate or even amplify existing societal biases, leading to unfair outcomes. For instance, if historical data used to train AI systems contains patterns of discrimination, the system may replicate those patterns in its decisionmaking processes. This raises critical questions about how we can ensure that AIdriven decisions uphold the principles of equality and impartiality that underpin the judiciary.

Another challenge lies in the limited understanding of AI technology among judiciary users, including judges, lawyers, and other legal practitioners. Many legal professionals are not wellversed in the technical intricacies of AI, which creates a knowledge gap that can hinder the ethical and effective use of the technology. This lack of understanding not only limits their ability to critically evaluate AI generated outcomes but also increases the risk of overreliance on the technology without proper scrutiny (Kondoahi et al., 2024).

To address these challenges, a collaborative and multidisciplinary approach is essential. Legal experts, technologists, policymakers, and ethicists must work together to develop robust ethical standards and guidelines for AI use in the judiciary (Fadillah, 2024). These standards should be comprehensive, addressing issues such as algorithmic transparency, data quality, and accountability mechanisms. Regular audits of AI algorithms must be conducted to ensure they are free from bias and comply with ethical and legal standards. Additionally, education and training programs for judiciary users are crucial to bridge the knowledge gap and empower them to use AI responsibly and effectively.

It is also vital to recognize the role of public trust in the successful integration of AI into the judiciary. The judiciary is an institution built on the trust of the people it serves (Ravizki & Yudhantaka, 2022). Any perception of bias, lack of accountability, or secrecy in AI driven decisions can erode this trust and undermine the legitimacy of the judiciary. The ethical use of AI in the judiciary is about more than mitigating risks; it is about maximizing the potential benefits of technology while safeguarding the core values of justice. By embedding ethical principles into the design, deployment, and oversight of AI systems, the judiciary can harness the power of AI to improve efficiency and accessibility without compromising fairness and human dignity. If approached wisely, AI has the potential to revolutionize the judiciary in ways that reinforce public confidence in the legal system. However, without a strong ethical foundation, AI could become a double edged sword that risks undermining the integrity of justice. This awareness must drive every decision and policy concerning the use of AI in the judiciary, ensuring that technology serves as a tool to uphold not weaken the principles of justice.

2.   Existing Legal Frameworks and Challenges in Regulating AI in the Judiciary

Artificial Intelligence (AI) has become an influential factor in reshaping judicial systems across the globe, but the absence of comprehensive legal frameworks remains a

pressing concern (Sebayang et al., 2024). Current regulations primarily address broader issues such as data protection, privacy, and administrative procedures, without specifically targeting AI use in courts. The European Union (EU) has taken the lead through the Artificial Intelligence Act, which classifies AI systems according to risk levels and imposes strict requirements on highrisk applications, including judicial processes. By contrast, the United States has no federal legislation specifically governing AI, with only some states implementing partial regulations around algorithmic ethics in criminal justice. Indonesia, meanwhile, still lacks a specific framework for AI regulation, relying largely on the Information and Electronic Transactions (ITE) Law, which focuses on cybersecurity and electronic evidence but fails to address AI's unique implications for judicial decisionmaking (Ravizki & Yudhantaka, 2022)

The absence of a dedicated framework gives rise to multiple challenges. One of the most significant is the lack of standardization across jurisdictions. Because each country adopts its own fragmented approach to regulating AI, there is no universal standard that ensures consistency in how AI is used within judicial systems. This disparity creates uncertainty and undermines the predictability of legal processes. For a judicial system to be trusted, predictability and uniformity are key values, but the current situation reflects uneven adoption and regulation, potentially affecting fairness across borders (Rama et al., 2023).

Another critical issue involves accountability gaps. When AI systems produce errors or biased outcomes, the central question becomes: who should be held responsible? Is it the developer, the judicial institution implementing the system, or the AI tool itself? These uncertainties pose a threat to justice because affected parties lack clear legal avenues to seek redress. Without welldefined accountability mechanisms, victims of erroneous or discriminatory AI based decisions may find themselves trapped in a regulatory vacuum where justice cannot be served effectively. This gap reflects one of the most pressing regulatory dilemmas in integrating AI into courts.

Equally important are transparency concerns, often referred to as the "black box" problem. Many AI systems operate with opaque algorithms, making it nearly impossible for stakeholders to fully understand how decisions are reached (Fatmawati & Raihana, 2023). This lack of transparency creates barriers to accountability and undermines the legitimacy of AIdriven judgments. It also raises ethical concerns, as decisions that affect people's rights and freedoms must be subject to scrutiny and justification. In addition, ethical dilemmas arise because AI systems are incapable of comprehending complex human values, cultural sensitivities, or moral nuances. This limitation becomes especially problematic in contexts involving indigenous rights, cultural disputes, or other sensitive legal matters where human judgment is irreplaceable (Amelia et al., 2024)

Finally, the judiciary faces the risk of overreliance on AI. As courts and legal practitioners seek efficiency, there is a danger that judges may defer excessively to AIgenerated recommendations, gradually abdicating their responsibility to apply human judgment. Such overreliance may reduce justice to a mechanistic process, stripping it of its humancentered nature. Courts are not mere administrative bodies but institutions entrusted with balancing fairness, empathy, and context elements that AI cannot replicate. Thus, while AI offers great potential for efficiency and consistency, the absence of comprehensive regulation exposes judicial systems to significant risks, from biased decisionmaking to the erosion of public trust.

3.   Theoretical Perspectives and Comparative Legal Frameworks

The regulation of AI in judicial contexts requires not only legal innovation but also the application of theoretical principles to balance its benefits with inherent risks. One key principle is the precautionary principle, which argues that in the face of uncertainty and potential harm, regulatory measures should err on the side of caution. Applied to AI, this means adopting strict guidelines and oversight mechanisms even before concrete evidence of harm emerges (Amelia, 2024). Proactive governance, under this principle, ensures that the judiciary does not become a testing ground for technologies that could inadvertently cause injustice or amplify systemic biases.

Complementing this is the riskbased approach, which advocates for a tiered framework depending on the level of risk associated with a particular AI system. For example, lowrisk AI systems such as those used for scheduling or document management may require minimal oversight. On the other hand, highrisk applications, such as predictive sentencing tools or risk assessment algorithms, must undergo rigorous audits, transparency requirements, and constant human oversight. This approach provides flexibility while ensuring that the most sensitive judicial uses of AI are subject to the highest regulatory standards (Ghazmi, 2021).

A comparative analysis of international frameworks provides valuable insights. The European Union's Artificial Intelligence Act exemplifies a structured, riskbased regulatory model that enforces strict transparency and accountability for highrisk systems. Its emphasis on human oversight sets a benchmark for ensuring that AI serves as a supportive tool rather than an autonomous decisionmaker in courts. In contrast, the United States adopts a fragmented approach, with some states introducing measures for algorithmic transparency and bias mitigation but no overarching federal legislation. While this allows for flexibility, it also results in gaps in enforcement and inconsistency across jurisdictions (Priowirjanto, 2022).

For Indonesia, these comparative insights point toward the adoption of a hybrid model. By combining the structured riskbased system of the EU with the flexibility of U.S. statelevel approaches, Indonesia can develop regulations that are both robust and contextsensitive. Such a model would involve drafting national guidelines for judicial AI use, fostering crosssector collaboration between legal experts, policymakers, and technologists, and creating safeguards that protect individual rights without stifling innovation. In doing so, Indonesia could avoid the pitfalls of regulatory fragmentation while ensuring AI adoption aligns with local social and cultural contexts (Amboro & Komarhana, 2021).

Ultimately, this comparative perspective demonstrates that legal frameworks for AI cannot be copied wholesale from other jurisdictions. Instead, regulations must be contextualized to reflect national realities while drawing from international best practices. For Indonesia, adopting a framework that balances strict oversight with adaptability will be essential. This ensures that AI is integrated into the judicial system in a way that enhances fairness and efficiency while preserving the judiciary's integrity and independence (Noerman & Agustanti, 2023).

4.   Prescriptive Solutions and the Urgency of a Comprehensive Legal Framework

Addressing the challenges of AI regulation in the judiciary requires clear and practical solutions. The first priority is to establish robust accountability mechanisms. Laws must explicitly define the responsibilities of AI developers, judicial institutions, and

policymakers to ensure that liability is clearly assigned in cases of error or bias. In addition, legal channels must be created for individuals harmed by AIdriven decisions to challenge outcomes and seek redress. This would restore public confidence by ensuring that justice is not compromised when technology fails (Rahmahafida & Sinaga, 2022)

Second, mandatory transparency standards must be enforced. All AI systems used in courts should be required to explain the logic behind their decisions and allow for independent audits. Such transparency would not only enhance accountability but also strengthen the legitimacy of judicial outcomes by ensuring that decisions are explainable and subject to scrutiny. Without transparency, AI driven rulings risk being viewed as arbitrary, undermining both the judiciary and public trust in the legal system (Prastyanti & Aryono, 2024)

Third, judicial AI systems must undergo continuous auditing and testing. These audits should evaluate whether the systems meet ethical and legal standards, detect biases, and measure accuracy. Importantly, audits should be ongoing rather than one off events, ensuring that the system evolves in line with both technological advancements and societal expectations. Independent oversight bodies should be tasked with conducting these audits to guarantee impartiality and maintain longterm reliability (Sebayang et al., 2024).

Fourth, there must be an investment in education and training for legal professionals. Judges, lawyers, and court administrators need to understand the capabilities and limitations of AI systems to make informed decisions about when and how to use them. Training reduces the risk of overreliance on AI and empowers human actors to identify errors or biases. Moreover, equipping judicial actors with AI literacy ensures that the human element of justice remains central, even as technology plays a supportive role (Amboro, 2021).

Finally, policymaking around AI must be inclusive and participatory. Developing regulations without consulting diverse stakeholders including marginalized communities risks reinforcing inequality and overlooking cultural values. A collaborative process ensures that regulations reflect societal needs and uphold justice for all groups. For Indonesia, this inclusivity is particularly important given its diverse cultural and legal contexts. By creating a framework that emphasizes accountability, transparency, ethics, and inclusivity, Indonesia can harness the benefits of AI to strengthen judicial integrity. The urgency of this task cannot be overstated, as delaying regulation risks entrenching bias, eroding public trust, and weakening the legitimacy of the judicial system (Noerman & Agustanti, 2023; Rama et al., 2023)

CONCLUSION

In the exploration of the ethical use of artificial intelligence (AI) in the judiciary, it becomes clear that there is an urgent need to ensure AI's implementation aligns with fundamental legal ethics principles. Transparency, accountability, and a commitment to justice emerge as key issues that must be addressed. While AI offers significant advantages such as efficiency and objectivity, it also faces challenges, including risks of algorithmic bias, limited understanding among users, and the "black box" nature of its decisionmaking processes, which are difficult to explain to the public. Based on the analysis, ethical principles such as fairness, nondiscrimination, and accountability should form the cornerstone of AI development and application in the judiciary. These efforts

are essential not only to preserve the integrity of the legal system but also to strengthen public trust in judicial institutions amid the rapid evolution of technology.

The regulation of AI use in the judiciary remains fraught with challenges, ranging from the lack of specific legal frameworks to issues of accountability and transparency. This study highlights that a riskbased approach and the precautionary principle offer viable solutions for developing fair and adaptive regulations. Such frameworks must include clear accountability mechanisms, transparency in decisionmaking processes, and regular audits to prevent misuse of the technology. Moreover, valuable lessons can be drawn from jurisdictions such as the European Union and the United States, which have developed evidencebased and riskfocused regulatory models. Indonesia can adopt similar approaches while tailoring them to local needs. This research emphasizes the importance of crosssector collaboration to establish a legal framework that not only regulates but also fully harnesses AI's potential to enhance fairness and strengthen the integrity of the legal system.

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