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JUDGES VS. ALGORITHMS: THE FUTURE OF JUSTICE AND AI'S CHALLENGE TO INDONESIA'S COURTS

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Abstract: This article explores the integration of artificial intelligence (AI) in the Indonesian judicial system, focusing on its potential to enhance the quality and consistency of legal judgments. As legal-tech adaptation becomes essential in a rapidly evolving landscape, the article examines current innovations introduced by the Supreme Court of Indonesia, such as the E-Court application and AI-based tools such as Smart Majelis and Diktum and comparing legal-tech AI other countries. This research used normative legal methodology, the analysis draws upon a comprehensive review of secondary sources, including primary, secondary, and tertiary legal materials. It highlights the differences between AI-based applications, which can learn and adapt, and non-AI applications, which operate on fixed rules. The proposed future models, including SCC Intelligent and Voluntary Intelligent based on Positives Wetterlijk Theory, aim to streamline judicial processes and improve accessibility for users. Additionally, the article discusses the psychological well-being of judges, emphasizing strategies to mitigate stress through reduced face-to-face interactions and virtual hearings. By leveraging AI's analytical capabilities, the judicial system can reduce cognitive biases and ensure a more consistent application of legal norms. Ultimately, the article asserts that AI serves as a supportive tool to enhance judicial effectiveness without replacing the essential role of judges, promoting a fair and equitable legal environment.

Keywords: Artificial Intelligent; Legal-tech; Psychological well-being

Introduction

In 1956, the Dartmouth Conference officially introduced the concept of "artificial intelligence" (AI). During the conference, the participants proposed that human intelligence could be simulated by machines, laying the foundation for decades of research into creating intelligent systems capable of reasoning, learning, and problem-solving. The conference set the stage for the development of AI as we know it today.(Moor, 2006) Recently, the rapid advancements in technology and artificial intelligence have ushered society into an era of artificial digitalization, exemplified by the proliferation of AI applications such as Google Gemini, Apple Intelligent, and ChatGPT.

The rapid development of AI is reshaping various sectors, including law and justice.(Bhushan, 2024) Courts worldwide are increasingly exploring how AI can enhance judicial processes by improving efficiency, decision-making quality, and the overall integrity of legal systems. Countries such as the United States and China, AI is already being integrated into court systems to streamline case management, reduce workload pressures on judges, and support legal research.(Sitepu and Alhuda Hasnda, 2024)

In Indonesia, the Supreme Court is also adopting AI technology through the implementation of the AI application known as SMART Majelis. This system automates the appointment of judges, moving away from traditional manual processes to reduce the risk of conflicts of interest between judicial panels and litigants. Such innovation is intended to improve the impartiality and integrity of judicial proceedings, addressing some of the longstanding challenges faced by Indonesia's judicial system, such as case backlogs, prolonged legal procedures, and concerns about judicial consistency and bias.

The principle of efficiency (embodied in the legal tenet of simplicity, speed, and cost-effectiveness, known as "asas sederhana, cepat, dan biaya ringan") is a core value in Indonesia's legal system. However, achieving this principle has been difficult due to systemic issues like high caseloads and the complexity of legal processes. (Lo, 2021) AI, with its capability to analyze vast amounts of data and assist with legal analysis, offers a promising solution to these challenges. (Mohsin et al., 2023) While AI can support judges in areas such as case management, precedent identification, and legal analysis, it cannot replace the essential human element required for the interpretation and application of law. (Putra et al., 2023) As Indonesia continues to modernize its judicial system, it is crucial that the adaptation of AI be carefully managed to ensure the preservation of legal principles, the protection of judicial independence, and the maintenance of judges' psychological well-being. (Taniady and Siahaan, 2023)

Research conducted by Ekinia Karolin Sebayang(Sebayang, Mulyadi and Ekaputra, 2024), titled "Potensi Pemanfaatan Teknologi Artificial Intelligence Sebagai Produk Lembaga Peradilan Pidana di Indonesia," delves into the integration of AI within Indonesia's criminal justice system. The study highlights the absence of a comprehensive legal framework governing AI usage. Currently, AI is classified under the The Law of the Republic of Indonesia Number 1 of 2024 Concerning the Second Amendment to Law Number 11 of 2008 Concerning Electronic Information and Transaction (UU ITE) as part of the Electronic System and is acknowledged as an Electronic Agent. However, existing regulations do not fully address the wide range of AI applications. The study raises important questions regarding AI accountability, particularly whether AI can be held responsible for its actions or whether liability falls on the developer or end-user. While AI shows promise in assisting judges, particularly in minor cases such as traffic violations, the study concludes that AI is unlikely to fully replace judges in more complex cases requiring human judgment and ethical considerations. Further regulatory development is necessary to address standards, ethical issues, governance, and legal accountability. The study suggests that AI's role in the judiciary will likely remain limited to simpler cases.

Finally, this research emphasizes the broader role of AI in modernizing legal systems and improving judicial efficiency. It explores the potential for developing secure AI-based applications tailored to the judicial environment, while acknowledging that AI should serve as a tool to assist judges rather than replace them. The research also underscores first, comparing legal-tech adaption and innovation, second, the role of AI in judicial and legal enforcement, third, psychological well-being and integrity of the judiciary, and last, the quality and consistency of judgments.

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Method

This study explores the challenges posed by AI within Indonesia's legal transformation, employing a normative legal research methodology, commonly referred to as library-based research. The analysis draws upon a comprehensive review of secondary sources, including primary, secondary, and tertiary legal materials. To address the core issues and provide solutions, a statutory approach was utilized to assess legal dimensions of AI's integration into the judiciary. A comparative approach facilitated an examination of AI's judicial applications in other jurisdictions, while a conceptual approach was employed to develop relevant theoretical frameworks. Additionally, a futuristic approach was adopted to evaluate the prospective implications of AI's expansion within Indonesia's legal framework. This research is both descriptive, outlining AI's current role in the judiciary, and prescriptive, offering recommendations for future development. The researchers conducted a thorough literature review, analyzing statutes, academic texts, government documents, and scholarly articles on AI in the judiciary, with content analysis used to interpret the data and draw informed conclusions.

Analysis And Discussion

In the rapidly evolving landscape of the 21st century, the intersection of law and technology demands continual adaptation.(Benedicta Ehimuan et al., 2024) As advancements in artificial intelligence (AI) and digital infrastructure reshape industries and societies, legal systems must also modernize to maintain relevance and effectiveness. This modernization emphasizes not only technological adoption but also the preservation of judicial integrity, efficiency, and fairness in a digital age. The author proceeds to elaborate on several key topics as outlined below :

Comparing Legal-tech Adaptation and Innovation

The modernization of the legal-tech is crucial for ensuring that judicial practices remain relevant and effective in a rapidly changing world.(Hill, 2023) This modernization involves adapting legal frameworks to technological advancements, particularly in the context of using AI in the judicial processes.(Said, 2023) By examining the practices in developed countries like the United States, China, United Kingdom, and European Union(Laptev and Feyzrakhmanova, 2024), Indonesia can gain insights into how AI can be integrated into its legal system. The following represent several advancements in the application of AI within the judiciary across various countries, including:

First in United States of America, Judges in various U.S. states, including New York, Pennsylvania, Wisconsin, California, and Florida, are provided with predictions of defendants' risk of recidivism, produced by the COMPAS algorithm.(Engel, Linhardt and Schubert, 2024) The COMPAS algorithm (Correctional Offender Management Profiling for Alternative Sanctions) is an AI-based system designed to predict the risk of recidivism, or the likelihood that a defendant will commit another crime after being released. It was developed to assist judges and authorities in making decisions related to detention, parole, and sentencing. COMPAS analyses various factors, such as criminal history, social background, and demographic data, to generate predictions about future risk. However, the algorithm has been

criticized for allegedly exhibiting racial and age biases. For instance, a statistical examination of the COMPAS algorithm, an AI tool utilized by the U.S. justice system to predict the likelihood of a defendant reoffending and their risk level, revealed that Black individuals were assigned scores 45% higher than their white counterparts.(Xu, 2022)

Second in China, The integration of AI into the Chinese judicial system has evolved through three significant phases since the 1990s. The first phase, initiated after the 1996 National Conference on Judicial Communication and Computers, culminated in 2003 when all Chinese courts digitized their files and websites. The second phase (2004-2013) saw the advent of online court hearings, exemplified by a local court in Guangdong communicating with overseas defendants via email in divorce cases and conducting the first full videoconference hearing in Shanghai in 2007. The Beijing Supreme People's Court further promoted transparency by broadcasting court proceedings live online, allowing the public to monitor cases in real-time . The third phase, starting in 2014, introduced the "smart courts" initiative, which emphasized comprehensive online services through platforms such as China Judicial Process Information Online and specialized Internet Courts. These courts address disputes related to online transactions and content liability, allowing complete online legal proceedings, from case filing to adjudication. Innovative technologies, including facial recognition and blockchain for evidence preservation, enhance judicial efficiency. Furthermore, since March 2019, Chinese citizens can resolve disputes through the WeChat platform, with AI facilitating identity verification and decision-making during video consultations. Ultimately, while AI supports judges in analyzing cases and making decisions, it does not replace human oversight .

Third in United Kingdom, November 2022, the House of Lords issued a report on the potential risks of unregulated AI use in the UK criminal justice system, warning that it could lead to miscarriages of justice.(Brader, 2022) One notable tool discussed is the Harm Assessment Risk Tool (HART), created by Durham Police and the University of Cambridge, which analyzes 34 factors to assess the risk of reoffending without including race as a variable. Unlike the COMPAS system in the U.S., HART is used to guide rehabilitation program selection rather than influence parole decisions. Furthermore, the PredPol system employed by Kent Police forecasts crime hotspots by analyzing historical data, but officials express concerns about relying on automated systems for crucial decisions, emphasizing the need for human judgment. The report called for stricter regulations, including mandatory training and the establishment of a national oversight body for AI technologies . Additionally, the UK has implemented the Digital Case System (DCS) since 2020, which enables digital management of cases in the Royal Court, allowing for real-time updates and remote participation in hearings. This system also streamlines the submission of evidence, thus reducing paperwork in court proceedings. The UK Bar Council's Ethics Committee provides guidance to assist legal practitioners in effectively utilizing this online platform, indicating a push towards modernization in the justice system while highlighting the need for careful oversight of AI technologies .

Forth in European Union, The legal regulation of AI technology in justice is grounded in several key documents, including the Ethical Charter on the Use of Artificial Intelligence in Judicial Systems, established by the CEPEJ in

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December 2018. This charter outlines five essential principles: respect for fundamental rights, non-discrimination, quality and safety of data, transparency and reliability, and ensuring user control, emphasizing that AI should assist judges rather than make decisions independently. Additionally, the Ethics Guidelines for Trustworthy AI, approved by the European Commission in 2019, stress the importance of legality, ethical adherence, and robustness throughout the AI lifecycle. Furthermore, the Digital Europe Strategy Programme aims to bolster digital transformation in the EU, while the Artificial Intelligence Act, proposed in 2021, seeks to create a legal framework for AI systems, categorizing them by risk levels to ensure safety and compliance. In contrast, AI's application in justice varies across countries. For example, France leads in judicial AI with tools like Case Law Analytics and Predictive, which assist in legal risk assessment but cannot autonomously make decisions. Meanwhile, Russia's Online Justice initiative aims to automate administrative tasks within the judicial system without replacing human judges, ensuring that AI only assists in drafting documents. As AI technology is still largely experimental in justice, there are ongoing discussions about its use in legal proceedings, including potential multilingual support through AI-driven translation and emotional analysis of testimonies, which could enhance the efficiency and accessibility of justice while also presenting challenges related to control and accountability.

All in all, AI is increasingly integrated into judicial systems worldwide, with each region adopting unique approaches and facing distinct challenges. First, In the U.S., the COMPAS algorithm assesses recidivism risk but has been criticized for racial bias, assigning higher scores to Black defendants than to white ones. Second, China has developed "smart courts" that utilize AI for case management while ensuring human oversight remains central. Third, The U.K. has expressed concerns over unregulated AI use, emphasizing human judgment alongside tools like the Harm Assessment Risk Tool (HART) and the Digital Case System (DCS) for efficient case management. Forth, In the E.U., initiatives like the Ethical Charter and the proposed Artificial Intelligence Act seek to ensure AI supports judicial processes ethically and transparently, without making independent decisions. Overall, while AI holds promise for enhancing justice efficiency, it raises significant ethical and accountability concerns requiring careful regulation

Concurrently in Indonesia has significant development in this regard is the E-Court application, which was inaugurated by the Supreme Court of Indonesia in 2018. Additionally, on August 18, 2023, coinciding with the 78th anniversary of the Supreme Court, five AI-based applications were launched, namely Smart Majelis, Court Live Streaming, Satu Jari, Lentera 2.0, and e-IPLANS. Chief Justice Syarifuddin remarked that these initiatives signify a steadfast commitment to establishing a prestigious and modern judicial system in Indonesia, as delineated in the judicial reform blueprint spanning 2010 to 2035.(Sebayang, Mulyadi and Ekaputra, 2024)

Table 1. The Supreme Court of The Republic of Indonesia Innovation

Current Innovation	Function
Smart Majelis	AI-based Robotics Application for Automatic Judge Selection: This application uses various factors such as experience, competence, and judge workload to automatically select a panel of judges. It also takes into account the type of case to be adjudicated, ensuring that the selected judges have the appropriate expertise for the case at hand.
Diktum	This application connected to the Decision Directory. To search for legal formulations, users input keywords in the search bar. DIKTUM will then display information relevant to the search keywords.
Court Live Streaming	This application allows the public to watch the reading of verdicts in cassation and judicial review cases live. The Court Live Streaming application can be accessed by the general public via a website or smartphone, enabling them to view the reading of these verdicts in real-time.
Satu Jari	This application is designed to monitor court performance in an integrated and real-time manner. It can also be used to analyze the performance of courts throughout Indonesia.
Lentera 2.0	This application manages the promotion and transfer process of judges and technical staff within the general court system. It is developed to enhance transparency and accountability in the promotion and transfer processes at the Directorate General of General Courts.
e-IPLANS	This application is used for budget planning, grant management, and organizational management in a hierarchical manner from the first-instance court level, appellate level, eselon I level, and institutional level within the Supreme Court environment.

Source : Mahkamah Agung Republic Indonesia Websites(Azizah, 2023)

Based on the table above, we can see that there are two key differences between AI-based and non-AI-based applications, where an AI application is software that uses Artificial Intelligence to perform tasks requiring human-like intelligence, such as learning, decision-making, and problem-solving. It can analyse data, recognize patterns, and make autonomous decisions, often improving over time through techniques like machine learning. In contrast, a non-AI application operates based on predefined rules and instructions set by programmers. It follows fixed processes and cannot learn or adapt on its own, only performing tasks it has been explicitly programmed for. While AI applications are dynamic and adaptive, non-AI applications are static and rule-based.

The AI-based application are the Smart Majelis and Diktum, which uses artificial intelligence to select judges based on factors like experience, competence, workload, and case type. The remaining applications are non-AI-based: the Court Live Streaming app allows the public to watch verdict readings in real-time, while the Satu Jari app tracks and analyzes court performance across Indonesia. Additionally, there is a Lentera 2.0 app that ensures transparency in judge and staff transfers, and a e-IPLANS app for managing budgets, grants, and organizational processes within the judiciary.

The potential for developing an AI-based application integrated with a secure database specifically for the judicial environment is highly promising in Indonesia. Such an application could automate various legal processes, including case management, judge assignment, legal research, and decision-making assistance. By leveraging AI, the system could analyze vast amounts of legal data, past rulings, and case specifics to provide recommendations or insights to judges and legal staff. It could ensure that judges with the appropriate expertise are assigned to specific cases and help predict case outcomes based on historical data.

In Indonesia, judges are obligated to render decisions pursuant to Article 183 of the Criminal Procedure Code (KUHAP), which mandates that rulings be supported by at least two pieces of evidence, along with a conviction based on that evidence, reflecting the judge's discretion (negative legal system). The concept of “Negative Wetterlijk Theory” is not something that AI can emulate, presenting substantial challenges, especially as the system must formulate algorithms capable of accommodating the diverse complexities and variations inherent in legal cases.(Sebayang, Mulyadi and Ekaputra, 2024) Thus, the author focuses exclusively on civil cases that apply the “Possitive Wetterlijk Theory” Article 164 of the HIR / Article

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284 of the RBg, as these cases are relatively straightforward in their resolution.

The author suggests the following AI models that could be developed in the future by the Supreme Court of the Republic of Indonesia :

Table 2. AI-based Models for Indonesia Judiciary

Future AI Innovation	Function	Classification
SCC Intelligent	The AI for Small Claim Courts in Indonesia is designed to facilitate the process of filing and managing small claims in accordance with Indonesian civil procedural law (Hukum Acara Perdata). This innovative system aims to simplify the legal process for individuals involved in minor disputes, improving accessibility, efficiency, and understanding of the judicial system while ensuring compliance with local regulations	Possitive Wetterlijk Theory'
Voluntary Intelligent	The AI for Voluntary Applications in Indonesian courts is designed to streamline the filing and management of unilateral civil petitions (gugatan voluntair) in accordance with Indonesian civil procedural law (Hukum Acara Perdata). This user-friendly platform guides individuals through the application process, automating document generation and ensuring compliance with legal requirements. It features real-time case tracking and automated notifications for deadlines, along with an AI legal assistant that provides access to relevant statutes and precedents. By improving accessibility, efficiency, and transparency, this AI solution empowers individuals to navigate the judicial system more effectively and assert their legal rights confidently without the need for legal representation.	Possitive Wetterlijk Theory

To sum up the author proposes two AI models for potential development by the Supreme Court of Indonesia to enhance judicial processes under the Positive Wettelijk Theory framework. The SCC Intelligent model focuses on supporting Small Claim Courts by streamlining the filing and management of small claims, aligning with Indonesian civil procedural law (Hukum Acara Perdata). This model aims to simplify dispute resolution for minor cases, increasing accessibility, efficiency, and compliance with local regulations. The Voluntary Intelligent model assists with managing unilateral civil petitions (gugatan voluntair), guiding users through the application process with automated document generation, real-time case tracking, and deadline notifications. It also includes an AI legal assistant, offering access to relevant legal statutes and precedents. Together, these models are designed to enhance accessibility, efficiency, and transparency within the Indonesian judiciary, empowering individuals to navigate the legal system more confidently, often without legal representation.

The Role of AI in Judicial and Legal Enforcement

The rapid advancement of AI has generated significant debate among legal practitioners regarding its potential role in the judicial system, particularly the question of whether AI could replace judges. Currently, many experts concur that AI is not yet equipped to fulfill the complex responsibilities inherent in judicial roles, especially within criminal justice proceedings. While AI can assist with administrative tasks—such as organizing case files and managing procedural documentation—it has not reached a level capable of navigating the intricate dynamics of courtroom proceedings. While AI can assist with administrative tasks, such as organizing case files and managing procedural documentation, it has not yet reached a level where it can effectively handle the intricacies of courtroom proceedings.

In accordance Riki Perdana Waruwu asserts that judges embody three distinct forms of justice: legal, moral, and social :

Figure 1. Three Distinct Forms of Justice

Legal justice pertains to the strict application of laws and legal precedents, ensuring consistency and predictability in rulings; however, it may overlook unique circumstances of individual cases. Moral justice extends beyond mere legal compliance, urging judges to incorporate ethical considerations and societal norms into their decisions, particularly in human rights cases where fairness and compassion are crucial. Lastly, social justice underscores the need for judges to recognize the broader societal context, addressing inequalities and advocating for marginalized groups, thus ensuring that legal decisions contribute to social equity.(Kartika, 2016)

The interplay of these three forms of justice underscores the complexity of a judge's role. Judges must navigate the delicate balance between legal correctness and their moral and social responsibilities, ensuring that justice is not only legally sound but also ethically and socially responsible.(Canadian Judicial Councel, 2023) This multidimensional approach is particularly essential in an era where AI increasingly influences legal processes.(Hu and Lu, 2019) Judges must rely on unique human qualities—such as intuition, empathy, and ethical reasoning—that AI lacks, thereby reinforcing that justice remains fundamentally a human endeavour.(Menon, 2004)

When considering the role of AI in criminal evidence and the judicial process, this multidimensional approach becomes even more critical. According to the negative wetterlijk theory, the use of AI in criminal cases conflicts with the fundamental principles of proving guilt or innocence, as criminal law necessitates a profound understanding of human behavior and moral considerations—attributes that AI cannot replicate. Conversely, in civil matters, the integration of AI may be more feasible, aligning with positive wetterlijk theory, where proof requirements can be structured and amenable to algorithmic analysis thus the author propose for "SCC and Voluntary Intelligent" as model of AI with positive wetterlijk theory that more suitable with AI. This distinction emphasizes the limitations of AI's role in the judicial process, particularly within criminal cases, while acknowledging its potential utility in civil matters.

The primary responsibility of a judge lies in determining guilt or innocence, a task that requires a high level of conviction and ethical judgment that AI cannot mimic. Judges base their decisions on a combination of legal reasoning, personal experience, and moral considerations—elements that AI lacks. The concept of "keyakinan hakim" and the ability to empathize with human experiences are essential qualities that inform a judge's decision-making process.(Gulo, 2024) While AI can process large volumes of data and recognize patterns, it lacks the human-like qualities necessary for navigating the nuances of justice.(Stankovich, Behrens and Burchell, 2023)

Despite these limitations, some scholars posit that AI may evolve to become more sophisticated, potentially acquiring the ability to analyze human behavior and emotional contexts over time. They suggest that future iterations of AI could offer valuable insights and recommendations regarding sentencing by leveraging established legal codes and existing jurisprudence. For instance, an AI system could analyze historical data from similar cases to suggest appropriate sentencing ranges based on trends in prior rulings.(Bell et al., 2023) This capability

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could streamline certain aspects of the judicial process and assist judges in making more informed decisions.(Greenstein, 2022).

However, the transition to AI-driven recommendations in judicial sentencing raises significant ethical concerns. Reliance on AI could lead to challenges surrounding accountability, fairness, and the risk of algorithmic bias.(Zhai, Wibowo and Li, 2024) The legal system fundamentally requires a human touch, particularly in matters of justice involving individual lives and freedoms. Therefore, while AI may serve as a supportive tool in legal processes, the consensus remains that it cannot and should not replace the essential role of human judges, who embody the principles of justice that AI inherently lacks.(Tamošiūnienė, Terebeiza and Doržinkevič, 2024).

In terms of practical applications, AI can significantly enhance the identification of relevant rulings or jurisprudence, thus transforming the legal landscape.(Yaroslav Mudryi, 2023) AI can efficiently analyze extensive databases of legal texts to extract pertinent case law and legal precedents, employing precise keywords for effective classification of cases.(Javed and Li, 2024) This capability enhances legal research by enabling judges, lawyers, and legal scholars to access relevant information quickly, saving time and resources. For example, when faced with a specific case, legal professionals can input keywords related to the issues at hand, and AI algorithms can swiftly search multiple databases to surface applicable decisions and interpretative frameworks.

Utilizing AI in this manner not only increases efficiency but also ensures that legal decisions are informed by the most current and relevant legal precedents.(Balynska et al., 2023) By leveraging AI to sift through extensive legal documents, practitioners can gain insights that may have otherwise been overlooked, potentially improving the quality of legal arguments and decisions. However, it is crucial to approach this technology with caution; reliance on AI-generated results must be balanced with critical human analysis to mitigate the risks of misinterpretation or over-dependence on algorithmic outputs. Thus, while AI can serve as a powerful tool for identifying relevant legal rulings, it should complement rather than replace the nuanced judgment of legal professionals.

Psychological Well-Being and Integrity of the Judiciary

The psychological well-being of judges is an essential component of a fair and functional judiciary.(Ramadhan, 2023) Studies indicate that frequent, direct interaction with litigants especially in high-stakes or emotionally charged cases can contribute to heightened stress levels and potential burnout among judges.(Miller et al., 2018) This stress can interfere with a judge's ability to maintain the necessary levels of detachment and objectivity, thereby impacting the quality of judicial decisions and overall judicial performance. To mitigate these challenges, reducing face-to-face confrontations with litigants has emerged as a key strategy :

Table 3. Key Strategy of Mitigate Judicial Stress

Component	Goal	Strategy	Examples
Psychological well-being	Support judges' mental health	Reduce face-to-face interactions	Use virtual hearings such as e-court (active method), mediation or model SCC and Voluntary Intelligent in future (AI Based system)
		Provide emotional support resources	Counselling services and stress management training
Judicial Integrity	Maintain neutrality and fairness	Limit direct communication with litigants	Set guidelines for interactions
		Standardize communication methods	Use official channels for case updates (Meja Informasi PTSP)
Integration in Practice	Enhance efficiency in daily operations	Enable digital court systems	Implement video conferencing for hearings
		Use automated tools for managing inquiries	Automated responses for common questions

One solution is the integration of virtual hearings, which can be especially beneficial for maintaining judges' mental health without compromising the integrity of the legal process. Virtual hearings have proven effective in fostering a sense of professional distance, allowing judges to maintain their mental resilience and focus on judicial tasks without the immediate emotional toll that in-person encounters can entail. Additionally, alternative dispute resolution (ADR) mechanisms, such as mediation and arbitration, offer structured alternatives to conventional court settings. By diverting some cases to ADR, courts can ease the psychological burden on judges, allowing them to concentrate on complex or high-priority cases that may require in-person deliberation while protecting their well-being in less contentious matters.

Judicial integrity relies on the appearance and reality of impartiality, free from bias, prejudice, or undue influence. By limiting direct interactions between judges and litigants, courts reduce opportunities for potential conflicts of interest or perceptions of favoritism. Such measures are essential for upholding the judiciary's credibility and public confidence in its decisions. Moreover, when interactions are strictly regulated, judges can better focus on legal reasoning based solely on the evidentiary and legal merits of each case, minimizing extraneous influences.

The judiciary can further safeguard its integrity by implementing strict protocols governing judge-litigant interactions.(Putra, 2023) For example, courts may adopt digital communication platforms and case management software that standardize communications, thereby reducing the possibility of undue influence or inappropriate contact. These technologies enable case updates, filings, and other procedural interactions to occur with minimal direct contact, while still allowing transparency and accessibility for all parties involved. Additionally, using AI-driven data analysis to support case preparation and legal research helps streamline the process while maintaining neutrality.

Through these advancements, judges are insulated from the biases or pressures that may arise through repeated or close contact with litigants, allowing them to maintain an unwavering commitment to impartiality. Together, these approaches underscore a proactive commitment to preserving the mental health of judges and upholding the judiciary's ethical foundations—ensuring a fair, reliable, and transparent legal system for all parties involved.

Quality and Consistency of Judgments

The integration of AI into the judicial process presents a transformative opportunity to improve the quality and consistency of legal judgments.(Leheza, 2024) As courts increasingly grapple with the complexities of legal decision-making, AI emerges as a powerful tool for enhancing judicial effectiveness.

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AI can significantly enhance the quality of judgments by providing in-depth analyses and recommendations based on data-driven insights. By evaluating vast amounts of case law and legal precedents, AI can offer judges comprehensive overviews of relevant legal frameworks. This analytical capability allows judges to make more informed decisions, strengthening the reasoning behind their judgments. As a result, the incorporation of AI promotes a more consistent application of the law, ensuring that similar cases receive similar outcomes.(Chan, 2024)

In addition to improving judgment quality, AI plays a critical role in reducing cognitive biases that judges may inadvertently introduce into their decision-making processes. By processing large datasets and relying on objective data rather than subjective impressions, AI helps ensure that legal norms are applied consistently across similar cases. This technological support fosters a more equitable judicial environment, enhancing public confidence in the fairness and reliability of judicial outcomes.

In conclusion, the integration of AI in the judicial system not only improves the quality of judgments but also contributes to a more consistent application of the law. By leveraging data-driven insights and minimizing cognitive biases, AI enhances the overall integrity of the legal process, paving the way for a more just and equitable society.

Conclusion

In summary, the integration of artificial intelligence into the judicial system represents a pivotal advancement that enhances both the quality and consistency of legal judgments while also addressing critical issues of judicial integrity and psychological well-being. By adopting AI technologies, such as the proposes SCC Intelligent model for managing small claims and the Voluntary Intelligent model for unilateral civil petitions, the legal framework can better adapt to the demands of a rapidly evolving society. It is important to emphasize that AI does not fully replace judges; instead, it enhances the efficiency of their work. These innovations aim to streamline processes, improve accessibility, and enhance understanding of the judicial system for users, all while ensuring compliance with positives law. AI's ability to analyse vast datasets mitigates cognitive biases, fosters equitable application of legal norms, and allows judges to focus on more complex cases without the stress of direct interactions with litigants. Ultimately, this modernization not only preserves the integrity and fairness of the judicial process but also ensures that justice remains accessible and effective in the digital age.

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