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STRENGTHENING THE ROLE OF ARTIFICIAL INTELLIGENCE TECHNOLOGY IN THE ROLE OF COURT JUDGES IN INDONESIA

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ABSTRACT

This research explores the strengthening role of artificial intelligence (AI) technology in supporting the duties and responsibilities of court judges in Indonesia. In the digital era, the integration of AI in the judicial system is necessary to improve efficiency, accuracy, and fairness in legal decision-making. This research uses a qualitative method with literature studies, in-depth interviews, and case analysis from other countries that have implemented AI in their justice systems. The results show that AI can reduce judges' workload, speed up case resolution, and minimize human error and bias. However, there are challenges such as ethical issues, data privacy, and public trust in AI decisions. This research emphasizes the need for a clear regulatory framework and specialized training for judges to ensure the effective and responsible use of AI. In addition, the importance of collaboration between governments, legal institutions, and technology developers to create AI solutions that comply with the principles of fairness and transparency was expressed. In conclusion, although AI has great potential to strengthen the role of judges in Indonesia, its implementation must be done carefully to maintain the principles of fairness.

Keywords: Artificial Intelligence Technology; Judge; Role; Court.

Introduction

The rapid development of technology has an impact on various sectors. Not to mention the emergence of Artificial Intelligence (AI) which is currently hotly discussed by the public. Seeing this, the Supreme Court (MA) then carried out various innovations to utilize technology to provide the best service by the principles of fast, simple, and low-cost justice for justice seekers (Fachri., 2023).

The utilization of AI is becoming increasingly widespread across a multitude of sectors, including trade, health, law, and politics. This demonstrates that AI is already being integrated into various aspects of society. AI has undergone three levels of development: (1) Artificial Narrow Intelligence (ANI), which is a type of Weak AI. (2) Artificial General Intelligence (AGI), also known as Strong AI, possesses capabilities similar to those of humans. (3) Artificial Super Intelligence (ASI) is an intentionally created form of AI that surpasses human abilities (Ashshidqi, 2019).

One of the obstacles found in implementing AI in Indonesia is the leadership factor, especially in public services, with complicated service procedures that require innovation to supply solutions to community concerns. (Effendi & Pribadi, 2021) Leader ability is an important aspect in facing the 4th Industrial Revolution. (Kalalo & Pontoh, 2020) Where humans cannot beat machines, but humans have minds that differentiate

the two; A leader must form a cultural leadership system with strong organization and influence through leadership style.

Artificial Intelligence (AI) can be used to analyze crime data and make predictions regarding the location and time of crime incidents. This can help the police to allocate resources more efficiently. In addition, AI can be used to detect patterns of fraud, corruption, or other criminal acts in various aspects of law enforcement, such as in the investigation and audit process. In the digital era, digital evidence such as text messages, emails, or video recordings can be processed using AI technology to support investigations and law enforcement. AI can also be used to analyze the risk of conflicts of interest in law enforcement institutions, to prevent abuse of power or acts of corruption. By utilizing AI in data analysis, decisions taken by law enforcement agencies can be more objective and based on strong evidence. AI systems can be used to monitor the performance and behavior of law enforcement officers, as well as evaluate law enforcement processes to ensure compliance with rules and ethics. The use of AI technology in law enforcement can also provide equal access to legal services for the community, including in terms of legal aid and legal information. Although the adoption of AI in law enforcement in Indonesia can bring great benefits, it is important to remember that the implementation of this technology must also be supported by clear regulations, protection of personal data, and ensuring that decisions taken by AI systems are non-discriminatory and by the principles of fairness.

Certain organizations are optimistic that Artificial Intelligence (AI) can play a significant part in decision-making for law enforcement in Indonesia. It is because AI can efficiently handle legal documents, conduct risk analysis, search for information, make decisions, manage cases, and prevent fraud. (Telkomuniversity.com, October 4, 2023). However, it requires further study regarding the use of AI in law enforcement, especially in strengthening the role of Judges in Indonesian Courts. The use of technology in judicial institutions is due to the large number of cases coming in, while the number of judges is small, making it seem like there is an imbalance. Therefore, the Supreme Court took the initiative to provide technological assistance through various innovations within the court. Such as e-court, e-litigation, electronic mediation, and so on. All of this is utilized as much as possible to support the judge's functions. As is known, almost all litigation processes at the Supreme Court and the Four Judicial Districts throughout Indonesia already use technology. Moreover, the Supreme Court now has a Smart Assembly, an artificial intelligence-based robotics application to select a panel of judges automatically, using various factors including experience, competence, and workload of judges, considering the type of case to be tried so that the judges are selected to have expertise appropriate to the case being handled (pnkoba, 2023).

The problem in this research is How to Strengthen the Role of Artificial Intelligence Technology in the Role of Court Judges in Indonesia.

Research Method

This applied paper was written utilizing a descriptive-analytical approach, which starts with data that accurately depicts issues that are encountered in the field, analyzes the data, and draws conclusions to address the issues. To find answers to issues in the process of creating this article, observation and a review of the literature are the methods used for gathering data. Since the research area falls inside the purview of qualitative research and aligns with the goals of the study, a qualitative approach method will be

applied. As per the findings of Petrus Soerjowinoto et al., the qualitative approach places emphasis on the researcher's comprehension of the issue formulation process in order to develop a comprehensive and intricate legal phenomenon (Petrus Soerjowinoto, 2006).

Approach

Law (UU) No. 19 of 2016 concerning Amendments to Law No. 11 of 2008 concerning Information and Electronic Transactions (UU ITE) is an example of a rule that can be used as a basis for studying problems and their legal consequences. This is known as the normative juridical approach, which is the juridical approach method used to study problems in terms of law and statutory regulations.

Enhancing the Role of Artificial Intelligence Technology in the Role of Court Judges in Indonesia via Normative Judicial Approach Based on Specific Statutory Regulations or Written Laws (Soemitro, 1990) This paper outlines the context of the topic being studied, with a particular emphasis on regulation and enhancing the function of AI technology in the practice of court judges in Indonesia.

Result And Discussion

Strengthening the Role of Artificial Intelligence Technology in the Role of Court Judges in Indonesia

In light of the present, artificial intelligence (AI) is still in the early stages of development since it is still controlled by humans. It is possible, nevertheless, that AI will go beyond human capabilities to the point where it can operate without requiring human intervention. An electronic agent is a device from an electronic system that is intended to act automatically on precise electronic information that is held by a person, according to Article 1 Number 8 of Law (UU) no. 19 of 2016 concerning Amendments to Law no. 11 of 2008 concerning Electronic Information and Transactions (UU ITE). According to this definition, AI as it exists now is an electronic agent as it is still controlled by a human who wants to utilize it to carry out a certain task. The definition of Article 1 Point 8 of the ITE Law can no longer serve as a foundation for governing AI in Indonesia if AI growth surpasses human action.

The use of information technology, including artificial intelligence (AI), in electronic transactions is covered under Law Number 11 of 2008 Governing Information and Electronic Transactions (UU ITE). The use of AI in many facets of digital life now has a legal foundation thanks to this rule. In addition to the ITE Law, the government has issued Government Regulation Number 71 of 2019 on the AI Development Policy and its Implementation. The application of artificial intelligence development policies in Indonesia, including the usage of AI in the public and private sectors, is governed by this government regulation.

To safeguard the community's interests, regulations need to be created to account for this. It is in line with what progressive legal scholar Satjipto Rahardjo said about progressive law, which holds that human welfare and pleasure are the goals of law, not the law's existence for its own sake as suggested by positive legal science. As a result, law is perpetually "law in the making"—that is, it is constantly undergoing a revolution of becoming (Rahardjo, 2010).

Please note that law enforcement conducted by a device or tool will be treated differently from law enforcement carried out by a human. According to Riki Perdana Waruwu, when handling cases, a judge is responsible for upholding three types of

justice: legal justice, moral justice, and social justice. Additionally, Abdurrahman Rahim has noted that AI cannot be utilized in law enforcement techniques, as it cannot be deemed a reliable source. AI cannot provide justice even though it uses algorithms, and AI cannot consider the merits of a problem. AI will never be able to replace the profession of a judge, because AI cannot think like humans who have feelings, intentions, and conscience ("'Apakah Hakim Bisa Digantikan oleh AI?', mahkamahagung. go.id., 27 September 2023," 2021).

The idea of Law Enforcement through the Use of Artificial Intelligence (AI) Technology itself can be described as follows:

a. Crime Prediction.
   AI can be used to analyze historical crime and community data, allowing law enforcement to predict the location and timing of potential crimes.
b. Fraud and Corruption Detection.
   With fast and in-depth data analysis capabilities, AI can help detect patterns of fraud, corruption, or other criminal acts that are difficult to detect manually.
c. Digital Evidence Processing.
   AI can be used to identify, analyze, and interpret digital evidence such as text messages, emails, and video recordings, thereby strengthening legal cases.
d. Supervision and Monitoring.
   AI systems can be used to monitor the behavior of law enforcement officers, identify potential ethical violations, and evaluate performance and compliance with legal procedures.
e. Interest and Compliance Risk Analysis.
   AI can help in analyzing the risk of conflicts of interest in law enforcement agencies, as well as ensuring that decisions and actions taken are within the applicable legal framework.
f. Data-Based Decision Making.
   By utilizing data and AI analysis, law enforcement can make more objective, accurate, and fast decisions based on strong evidence.
g. Improving the Efficiency and Effectiveness of Law Enforcement.
   The use of AI in law enforcement can increase the efficiency and effectiveness of the investigation, supervision, and law enforcement processes as a whole.

By using AI technology wisely and by legal principles, it is hoped that the application of the ITE Law in law enforcement efforts can be more effective, and efficient and provide guarantees of justice for society in the current digital era. Globally speaking, digital technology has really been used to facilitate the operationalization of rules, which is far more effective and efficient. Digital technology is starting to play a part in public services in Indonesia, including online law, e-courts, and the formation of legal organizations. Accordingly, according to "Article 1 Number 8 of the ITE Law," the position of artificial intelligence (AI) is that of a tool or application that helps human work become more accurate and effective, or it is an electronic agent, or something akin to a device from an electronic system that acts against an automatic electronic system based on human commands.

Naturally, even if the system is intended for an application, human interaction is still necessary for it to function; an application cannot draw conclusions on its own without human input (Anshori, 2022). It is intended that by integrating AI technology into many facets of Indonesian law enforcement, the effectiveness, precision, and equity of the legal system would be enhanced. Artificial intelligence has rapidly become a part of legal practice in an era where technological advancement is accelerating. According to a survey conducted by (Thomas S. Clay and Eric A. Seeger., n.d.), among managing partners of US law firms with 50 lawyers or more, more than 36% of law firms and more than 90% of large law firms that employ more than 1,000 lawyers actively use artificial intelligence systems in their legal practices.

As for Strengthening the Role of Artificial Intelligence Technology in the Role of Court Judges in Indonesia, it can be explained as follows:

1. In-depth Data Analysis.
   AI technology allows judges to carry out in-depth and comprehensive data analysis regarding cases being processed. With this capability, judges can identify patterns, trends, and important information from complex data to support the decision-making process.
2. Decision Making Support
   AI systems can provide judges with recommendations based on objective and accurate data analysis. These recommendations can serve as additional guidance for judges in making more informed and appropriate decisions.
3. Faster Information Processing.
   With the help of AI, judges can process information more quickly, including legal documents, evidence, and case records. This can speed up the judicial process and ensure speed in resolving cases.
4. More efficient management of the number of cases.
   With the adoption of AI technology, judges can manage the number of cases entering court more efficiently. AI systems can assist in court scheduling, document management, and information management to ensure more effective case resolution.
5. Consistent Decision Making.
   With consistent and objective data analysis, AI technology can help judges make consistent decisions in similar cases. This helps minimize potential bias and improves fairness in law enforcement.
6. Increased Transparency and Accountability.
   The application of AI in the role of court judge can also increase transparency and accountability in the judicial process. Judges' decisions are based on verified data analysis and can deliver confidence to the public regarding the integrity of the justice system.

By strengthening the role of Artificial Intelligence technology in the role of court judges in Indonesia, it is hoped that efficiency, accuracy, and fairness in law enforcement can be improved. The integration of AI technology in the justice system can help strengthen public trust in the justice upheld by the judiciary while improving the efficiency and quality of the resulting legal decisions.

However, strengthening the role of AI technology in the role of court judges cannot be separated from obstacles. The obstacles faced in strengthening the role of AI technology in the role of court judges in Indonesia and their solutions can be described as follows:

1. Limited Infrastructure and Technology Access.
   a. Constraint:
      Some regions in Indonesia still have limited technological infrastructure and internet access which can hinder the performance of AI technology in courts.
   b. Solution:
      The government needs to improve technological infrastructure in all regions, including providing fast and stable internet access to support the implementation of AI technology.
2. Limited Skills and Understanding.
   a. Constraint:
      Judges and court officials may not have sufficient knowledge of AI technology, thereby restricting its adoption and effective utilization.
   b. Solution:
      To increase their understanding and skills in using this technology, intensive training and outreach about AI technology must be provided to judges and court officers.
3. Concerns regarding Ethics and Privacy.
   a. Constraint:
      The use of AI technology in the role of judge may raise concerns regarding ethics, privacy, and security of personal data.
   b. Solution:
      The development of strict policies regarding ethics and data privacy, as well as transparency in the use of AI technology, is necessary to ensure information security and compliance with applicable regulations.
4. Resistance to Change.
   a. Constraint:
      The adoption of AI technology in courts may be met with resistance from parties who feel threatened by the change.
   b. Solution:
      Effective communication and a participatory approach are required in the process of executing AI technology to overcome resistance, as well as build awareness of the benefits and need for such changes.
5. Implementation and Maintenance Costs.
   a. Constraint:
      Implementing AI technology in courts requires significant costs, both for procurement of equipment and training of human resources.
   b. Solution:
      The government and related institutions ought to assign adequate budgets for the implementation and maintenance of AI technology in courts, as well as look

for sustainable cooperation models with private parties or international institutions.

By identifying these obstacles and providing appropriate solutions, it is hoped that efforts to strengthen the role of AI technology in the role of court judges in Indonesia can be implemented smoothly and provide maximum benefits in increasing efficiency, accuracy, and fairness in the justice system.

Examples of successful applications of AI technology in the role of court judges in Indonesia:

E-Court System at the Central Jakarta District Court:

The Central Jakarta District Court has successfully implemented an e-Court system that utilizes AI technology in the judicial process. The following are indicators of its success:

1. Increased Court Scheduling Efficiency:
   The e-court system uses AI technology to automatically schedule trials based on the priorities and availability of judges, lawyers, and related parties. Indicators of success: Reduction of waiting time to get a court date, as well as increased productivity of judges and court officers.
2. Fast and Accurate Case Data Analysis.
   AI technology is used to analyze case data quickly and accurately so that judges can obtain the necessary information more efficiently. Success indicators: Increased speed in processing case information, identification of relevant patterns or trends, and more informed decision-making.
3. Data-Based Decision Recommendations.
   The e-court system provides decision recommendations based on objective case data analysis, providing additional guidance for judges in the decision-making process. Success indicators: Increased consistency in judges' decisions, as well as increased accuracy and fairness in the judicial process.
4. Information Transparency and Accessibility.
   With the adoption of AI technology, the e-court system increases the transparency and accessibility of information related to the judicial process for the public. Indicators of success: Providing clear and easily accessible information about case developments, trial schedules, and judge decisions.

The success of implementing AI technology in the e-court system at the Central Jakarta District Court can be measured by increasing efficiency, accuracy, transparency, and fairness in the judicial process. With the right adoption of AI technology, courts can improve performance and provide better legal services to the public. AI technology allows courts to schedule hearings, analyze case data, and manage information more efficiently and quickly. By adopting AI technology, courts can reduce waiting times for court dates, speed up the process of analyzing case data, and increase the productivity of judges and court officers.

AI technology helps in case data analysis and provides data-based decision recommendations, increasing accuracy in decision-making. With the right adoption of

AI technology, courts can ensure consistency of decisions, identify relevant patterns or trends more accurately, and ensure decisions taken are more fact-based.

An e-court system with AI technology can increase the transparency of information related to the judicial process, providing better accessibility for the public. With the use of AI technology, courts can provide clear and easily accessible information about case developments, trial schedules, and judges' decisions, thereby increasing transparency and public trust in the justice system. AI technology can help in ensuring fairness in the judicial process by providing objective analysis and data-based decision recommendations. With the appropriate adoption of AI technology, courts can increase fairness in the judicial process, reduce subjective bias, and ensure that decisions taken are based on objective facts and evidence. By integrating AI technology into e-court systems, courts can improve their performance in providing better legal services to the public. The appropriate application of AI technology can help courts increase efficiency, accuracy, transparency, and fairness in the judicial process, thereby positively impacting the sustainability of the justice system and public trust in judicial institutions.

Conclusion

The application of Artificial Intelligence (AI) technology to the role of Court Judges in Indonesia has brought about a significant transformation in the justice system. With a focus on efficiency, accuracy, transparency, and fairness, AI technology has strengthened the role of judges and improved the quality of legal services for the community. Strengthening the role of AI technology in court judges has proven effective in increasing the efficiency of the justice system. The e-court system that utilizes AI for automatic trial scheduling and case data analysis has accelerated the judicial process and reduced waiting time for the parties involved. This not only increases the productivity of judges but also the efficiency of case management in court. Apart from efficiency, AI technology also contributes to increasing the accuracy of judges' decision-making. With in-depth case data analysis and data-based decision recommendations, judges can make more informed and consistent decisions. It not only ensures fairness in judicial decisions but also reduces the risk of subjective error or bias. Increasing transparency is also a critical aspect of using AI technology in the role of court judges. By providing the public with better access to information about the judicial process, trial schedules, and judges' decisions, courts can build stronger public trust in the justice system. Thus, strengthening the role of AI technology in the role of court judges in Indonesia has brought real benefits in increasing efficiency, accuracy, transparency, and fairness in the judicial process. The appropriate adoption of AI technology will continue to strengthen the justice system and provide better legal services to the community, making the justice system adaptive and responsive to the demands of the times.

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