

The Implementation of Artificial Intelligence by Judges in Law Enforcement Reviewed From Legal Convergence Theory

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ABSTRACT

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Laws often do not regulate phenomena in society, especially those related to technology, especially in Indonesia. One thing related to technology that is not yet regulated in Indonesia is artificial intelligence (AI). This of course has the juridical consequence of creating dualism in the legality of the use of AI, including by the Panel of Judges in law enforcement. Regarding this problem, the problem formulation in this article is first, the characteristics of the use of artificial intelligence in law enforcement and second, the urgency of using artificial intelligence by the panel of judges in law enforcement. This research is legal research with statutory, conceptual and comparative approaches. The data in this article is secondary data in the form of primary and secondary legal materials. The results of this article are first, the characteristics of the use of artificial intelligence in law enforcement vary according to the qualifications of the law enforcer. There are law enforcers in the world who are already using AI in law enforcement, Police, Prosecutors, Judges and Advocates. Second, the urgency of using artificial intelligence by the panel of judges in law enforcement is that AI can be used as a tool to make it easier for judges to make decisions. With judges being able to make decisions faster, it will increasingly bring about fast, simple and low-cost justice, as mandated in Article 4 paragraph (1) Law Number 48 of 2009 concerning Judicial Power.

Keywords: Artificial Intelligence, Panel of Judges, Law Enforcement, Convergence Legal Theory

INTRODUCTION

In recent decades, legal thought has undergone significant changes as a result of major societal transformations, pressures caused by population growth, and advancements in technology.¹ Among various countries around the world, legal thought and its role in society depend on how conservative or progressive the ruling group is. Autocratic states which governed by exclusive groups, tend to resist change and consequently adopt conservative legal views.² In contrast, developed nations view the law as a tool of social engineering, and are inclined to implement legal reforms when societal changes necessitate new regulations.³ In this context, Danrivanto Budhijanto elaborates: ⁴

“The law must always be proactive, anticipating the fundamental changes that rapidly occur in society so that emerging societal issues can be promptly addressed and resolved as early as possible. Referring to the

¹ Danrivanto Budhijanto, *Hukum Ekonomi Digital Di Indonesia*, Bandung: Logoz Publishing, 2019.

² Nur Azizah and Risahlan Rafsanjani, “Hukum Aborsi Karena Penyakit Dan Korban Pemerkosaan Dalam Tinjauan Hukum Islam, Common Law System, Civil Law System,” *SPECTRUM: Journal of Gender and Children Studies* 2, no. 2 (December 29, 2022). p. 75–84.

³ Yuki Fitia Maatisya and Aris Prio Agus Santoso, “Rekonstruksi Kesejahteraan Sosial Bagi Tenaga Kesehatan Di Rumah Sakit,” *JISIP (Jurnal Ilmu Sosial dan Pendidikan)* 6, no. 3 (July 12, 2022), accessed July 5, 2024, <https://ejournal.mandalanursa.org/index.php/JISIP/article/view/3395>. p. 70.

⁴ Danrivanto Budhijanto, *Teori Hukum Dan Revolusi Industri 4.0*, Bandung: Logoz Publishing, 2018. p. 230.

opinion of a legal pragmatist from the United States, Roscoe Pound, it is said that the law should serve as a tool of social engineering.”

One of the elements arising in society, yet often lacking corresponding legal regulations, is technology.⁵ The rapid technological advancements have resulted in various social changes, but these have not been accompanied by corresponding legal developments, leaving the law lagging behind the dynamic nature of society. Moreover, the evolution of the law in the face of technological progress is significantly delayed, often rendering existing laws irrelevant. In line with the classic legal adage: “*neque leges neque senatus consulta ita scribe possunt ut omnes casus qui quandoque inciderint comprehendantur; sed sufficit ea quae plerumque accident contineri*” (could translated as: “Neither laws nor decrees can be written to account for every possible case; it is customary for the law to develop over the time”), thus, the law should evolve in accordance with technological advancements in society.⁶

One area of technological advancement where many countries still lack specific regulations or where legal gaps are (*leemten in het recht*) exist is in relation to artificial intelligence (hereinafter referred to as AI).⁷ According to the Cambridge Dictionary, AI is defined as: “the use or study of computer systems or machines that have some of the qualities that the human brain has, such as the ability to interpret and produce language in a way that seems human, recognize or create images, solve problems, and learn from data supplied to them”. From this definition, it can be understood that AI is a technology capable of performing human-like activities. Some concrete examples of AI applications include:

1. Search Engines for Informations:

AI can be utilized as a tool for rapidly retrieving specific information. Below is a screenshot of AI usage on Google’s Gemini platform, which is used to search for information:

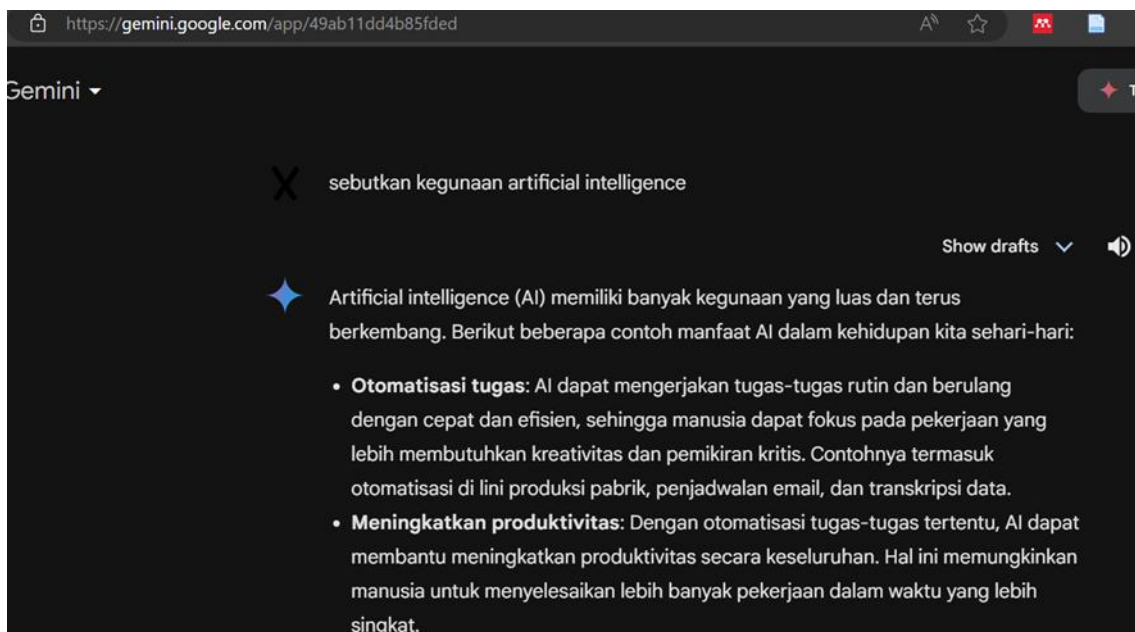


Figure 1 Screenshot of Using AI to Search for Information

Source: gemini.google.com

2. Document Summarization

⁵ Fatma Yunita, “Aspek Hukum Penggunaan Media Sosial Berbasis Internet,” *Jurnal Notarius* 2, no. 1 (July 23, 2023). p.125.

⁶ Anatoliy Kostruba et al., “Legal Gaps: Concept, Content, Problems of the Role of Legal Doctrine in Overcoming Them,” *Statute Law Review* 44, no. 2 (2023). p.16.

⁷ Hugo C. Hoeschl and Vânia Barcellos, “Artificial Intelligence and Law: An Overview,” *IFIP Advances in Information and Communication Technology* 35, no. 4 (2019). p.394.

AI can be employed to quickly summarize information from existing documents. Below is an example of a document summarized using AI via the Smallpdf.com website.

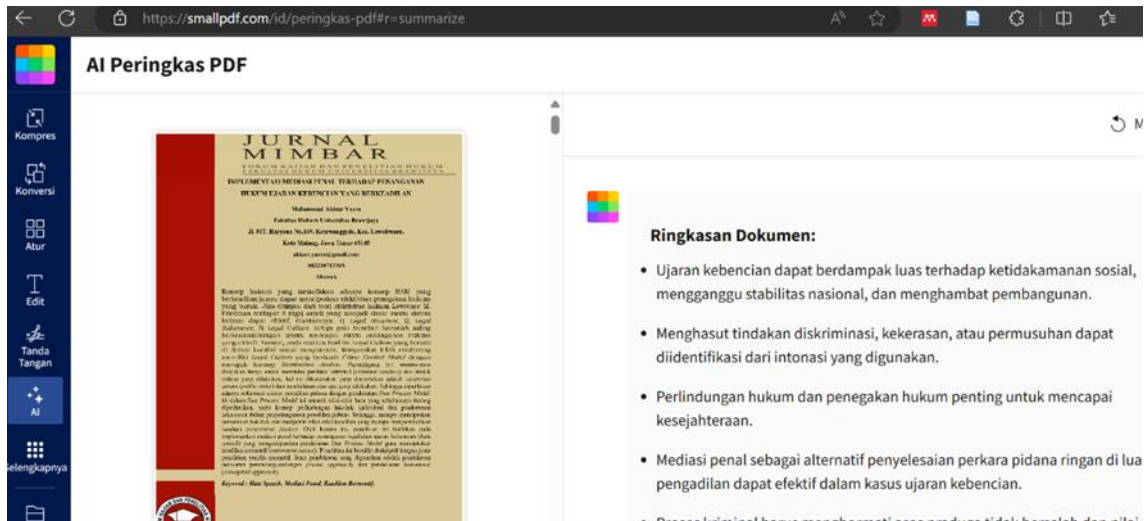


Figure 2 Screenshot of Using AI to Summarize Documents

Source: Smallpdf.com

3. Answering Questions

AI can be used to quickly answer various questions. Below is an example of a question answered using AI mechanisms on the ChatGPT platform.

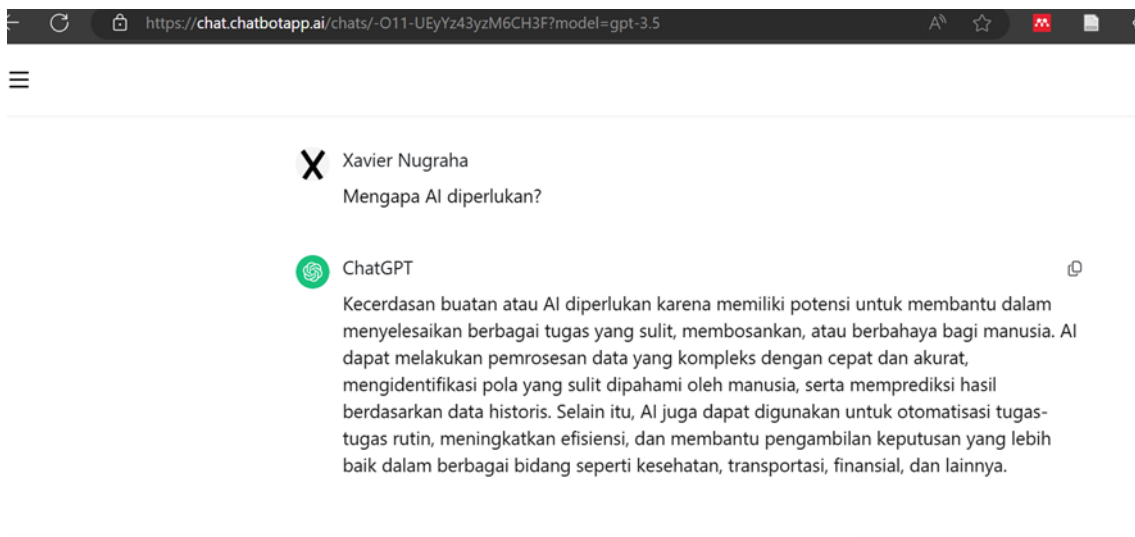


Figure 3 Screenshot of Using AI to Answer Questions

Source: <https://chat.chatbotapp.ai/>

Based on the examples of AI applications above, it is perceptible that AI provides many functions that can simplify the daily life. However, as previously discussed, there is no specific regulation governing the use of AI, which is also what happened in Indonesia.⁸ Indonesia does have Law No. 11 of 2008 on Electronic Information and Transactions (*Informasi dan Transaksi Elektronik*), as amended by Law No. 19 of 2016, and Law No. 1 of 2024 of the Republic of Indonesia (hereinafter referred to as the Law of ITE), but these laws only generally

⁸ Abdul Hadi and Bima Guntara, "Pembaharuan Hukum Nasional Dalam Upaya Perlindungan Data Pribadi Di Era Distrupsi Kecerdasan Buatan (Artificial Intelligence)," *Jurnal Hukum Mimbar Justitia* 8, no. 1 (June 30, 2022). p.233–253.

regulate electronic information and transactions. Therefore, there is no specific regulation regarding the use of AI.

The legal vacuum in Indonesia concerning AI usage has led to a duality regarding the legitimacy of AI use, particularly by the judges. In principle, judges generally base their rulings on evidences (*bewjis*) and the law. However, in seeking substantive truth, judges sometimes conduct comprehensive analyses of facts, law, and the validity of the presented evidence. Judges do not solely accept the facts, law, and evidence provided as absolute truth.⁹ In such instances, judges may utilize available tools, such as books, legislations, scientific journals, the internet, and including AI. In the current *ius constitutum* (existing legal order), there are no prohibitions or regulations regarding the use of AI by the judges.

This legal gap concerning AI use by the judges raises at least three issues: *First*, The Legitimacy of AI Use by the Judges under Law Enforcement. The absence of specific rules regarding AI use by judges does not automatically grant judges the right to use AI, especially considering that the truth and credibility of data provided by AI are not ensured. *Second*, The Extent to Which Judges Can Use AI. The lack of regulations on AI use by the judges raises questions about the extent to which judges may rely on AI. Should its use be limited to finding legislation, or can it be used as a basis for judicial reasoning (*ratio decedendi*). *Third*, Qualification of AI for Judicial Use. Not all AI systems are guaranteed to produce reliable information, and judges may not always be aware of whether the AI they use qualifies as a credible source. Therefore, there must be defined conditions for AI systems that are approved for judicial use.

Other countries' is experiencing provide examples of challenges that have arisen as a result of law enforcement using AI. For instance, the Case of GAUGHRAN v. THE UNITED KINGDOM in 2020 and a case in Canada involving the use of AI that produced a "fabricated" case. These cases highlight weaknesses in the use of AI with legal consequences, notably for law enforcement officers. They also highlight the potential for AI errors, which could occur when judges use AI in legal proceedings. Therefore, it is necessary to conduct further analysis on the urgency and legitimacy of AI usage by the judges.

Based on the background above, the issues raised in this article are, first, the characteristics of AI usage in law enforcement, and second, the urgency of AI usage by judges in the judicial process. The objectives of this article are, first, to analyze the characteristics of AI usage in law enforcement, and second, to analyze the urgency of AI usage by judges in the judicial process.

The author has analyzed several articles from legal academic journals and has found no article identical to this one. However, to ensure novelty, several similar articles will be reviewed, and the differences will be outlined. *First*, First, the article by Muhammad Dafi Akbar et al., titled "*Pemanfaatan dan Permasalahan Artificial Intelligence Dalam Kehidupan Manusia Serta Pengaturannya Secara Hukum*" (The Use and Issues of Artificial Intelligence in Human Life and Its Regulation in Law), which published in *Jurnal Media Hukum Indonesia*, Vol. 2, No. 2, 2024. This article focuses on examples of AI usage in daily life as well as the relevant legal regulations in Indonesia, including the ITE Law.¹⁰ The difference between that article and this one is that it does not address the use of AI by law enforcement, much less the legitimacy of AI usage by judges. *Second*, the article by Ito Kurniawan titled "*Analisis terhadap Artificial Intelligence sebagai Subjek Hukum Pidana*" (Analysis of Artificial Intelligence as a Subject of Criminal Law), which published in *Jurnal Ilmiah Multidisiplin Indonesia*, Vol. 1, No. 1, 2023. This article discussing on the legal responsibility for crimes committed by AI as a legal subject.¹¹ To distinguish the article mentioned with the present article is that it does not discuss the use of AI by law enforcement, nor does it address the legitimacy of AI use by judges.

⁹ Zahratul'ain Taufik and Muhammad Rosikhu, "Kedudukan Bukti Tidak Langsung Sebagai Alat Bukti Dalam Perkara Pidana | Innovative: Journal Of Social Science Research," *Innovative: Journal Of Social Science Research* 4, no. 3 (2024), accessed July 5, 2024, <https://j-innovative.org/index.php/Innovative/article/view/12718>. p. 113.

¹⁰ Muhammad Dafi Akbar et al., "Pemanfaatan Dan Permasalahan Artificial Intelligence Dalam Kehidupan Manusia Serta Pengaturannya Secara Hukum," *Media Hukum Indonesia (MHI)* 2, no. 2 (June 20, 2024), accessed July 5, 2024, <https://ojs.daarulhuda.or.id/index.php/MHI/article/view/521>. p. 538-542

¹¹ Itok Kurniawan, "Analisis Terhadap Artificial Intelligence Sebagai Subjek Hukum Pidana," *Mutiara: Jurnal Ilmiah Multidisiplin Indonesia* 1, no. 1 (July 18, 2023). p. 35-44.

B. ANALYSIS

I. CHARACTERISTICS OF UTILISING ARTIFICIAL INTELLIGENCE IN THE LAW ENFORCEMENT

A. The Role of Artificial Intelligence under the Law Dicipline

Artificial Intelligence (AI) is a technological implementation that combines information systems and machine learning methods to efficiently and interactively analyse and solve a wide range of problems.¹² This technology mechanises operations that require human intelligence, such as language translation, mathematical problem-solving, and comprehension of brief narratives, which entail complex cognitive processes.¹³ During problem-solving, artificial intelligence employs proses learning, reasoning, and self-correction.¹⁴ Thus, AI can be defined as "the science of making machines do things that would require intelligence if done by man" as stated by Marvin Minsky, an inventor in the field of AI.¹⁵

Historically, AI emerged as a practical field after World War II, stemming from philosophy, logic, mathematics, reasoning theory, cognitive psychology, and linguistics.¹⁶ The Dartmouth Project in 1956 marked the beginning of AI research, with remarkable achievements in developing tools capable of human-like performance in areas such as geometry proof, algebra, and simple games.¹⁷ This period marked the beginning of the Golden Age of AI research (1956-1974), when the prototype systems challenged the prevailing notion that machines were incapable of doing certain jobs. AI now aims to comprehend human intelligence and develop intelligent computer systems that progressively enhance their complexity..

AI technology consists of two primary categories: machine learning and logical and knowledge representation. Machine learning refers to a set of artificial intelligence methods that identify particular patterns in huge amounts of data for future application in specified tasks. The concept of "learning" implies the process of acquiring knowledge by the analysis of more data and the identification of further patterns. This enhances its performance and facilitates the generation of more accurate automated decisions.¹⁸ Meanwhile, the second primary category for AI, known as logical and knowledge representation, seeks to represent actual situations or processes in a format that computers can understand for the purpose of automation. Programmers or authors of commands for AI will provide rules that contain the basic logic and knowledge of a task. Therefore, enabling the computer to engage in processing and deductive reasoning related to that task.¹⁹

Under the legal framework, two primary objectives emerge as essential aspects of the *ratio legis* and demonstrate their utility as valuable instruments for legal practitioners, education, and research.²⁰ AI may assist in legal reasoning by assisting lawyers in drafting briefs. These tools have the capability to collect jurisprudence, organise it, and "separate" relevant legal precedents. Analytical models are essential for constructing efficient systems, as they reveal important findings that result in concrete improvements. However, previous research has not provided enough detail for AI models, leaving many questions unanswered. AI approaches require analytical and specific thinking, using ideas and methods from computer science to develop conceptual and computational frameworks.

The use of AI as a designed computer program can assist general legal practitioners in solving legal problems. These systems, which often depend on the knowledge of legal professionals, are specifically structured to provide

¹² Gio Arjuna Putra, Vicko Taniady, and I Made Halmadiningra, "Tantangan Hukum: Keakuratan Informasi Layanan Ai Chatbot Dan Pelindungan Hukum Terhadap Penggunanya," *Jurnal Rechts Vinding* 12, no. 2 (2023). p. 282.

¹³ Hoeschl and Barcellos, "Artificial Intelligence and Law: An Overview." p. 1307.

¹⁴ Tegar Raffi et al., "Menilik Pro Dan Kontra Pemanfaatan Dan Penetapan Status Hukum Artificial Intelligence Dalam Hukum Positif Indonesia," *Journal of Analytical Research, Statistics and Computation* 3, no. 1 (2024). p. 52.

¹⁵ Edwina L. Rissland, "Artificial Intelligence and Law: Stepping Stones to a Model of Legal Reasoning," *Scientific Models of Legal Reasoning: Economics, Artificial Intelligence, and the Physical Sciences* 99, no. 8 (1990). p. 1958.

¹⁶ Stephan De Spiegeleire, Matthijs Maas, and Tim Sweijis, "What Is Artificial Intelligence?," *JSTOR* (2017). p. 31.

¹⁷ Stuart J. Russell and Peter Norvig, *Artificial Intelligence: A Modern Approach, 2010 The 2nd International Conference on Computer and Automation Engineering, ICCAE 2010*, Third Edit., vol. 4 (New Jersey: Pearson Education, Inc., 2010). p. 17.

¹⁸ Hoeschl and Barcellos, "Artificial Intelligence and Law: An Overview." p. 1311-1312.

¹⁹ Russell and Norvig, *Artificial Intelligence: A Modern Approach*, vol. 4, p. . p. 1316-1317.

²⁰ Rissland, "Artificial Intelligence and Law: Stepping Stones to a Model of Legal Reasoning." p. 1960.

intelligent support and can also function as educational tools.²¹ Their role is to pose questions to direct the system, assisting users in navigating the problem-solving process, and provide trustworthy data for statements and conclusions.²² Nevertheless, there are undoubtedly limitations inherent in the application of AI in law enforcement.

Additionally, The use of AI for legal purposes also contributes to the development of analytical and computational AI models. This happened because the law entails different characteristics that present challenges for artificial intelligence, distinguishing it apart from other disciplines in science. For instance, the comprehensive legal reasoning of the circumstances and conclusions involved in making a decision, the formal criteria for reasoning in court decisions (*ratio decidendi*), and the reliance on legal sources such as laws, legal precedents, legal pleadings, and expert legal principles. Hence, the ongoing advancement of AI demonstrates the possibility for mutual advantages in its application to the legal discipline. While AI is being established, the reasoning methods and cognitive processes used by AI differ significantly than those of legal professionals.²³

B. Utilization of Artificial Intelligence for Law Enforcement

Although regulations regarding AI have not yet been established in Indonesia, the impact of AI usage is already significant. With AI's ability to manage data, it can assist in analyzing the information required by law enforcement officers. The following table outlines AI applications for law enforcement:

Table 2 AI Applications for Law Enforcement

No.	Legal Enforcements	Duties and Authorities	The Use of AI
1.	Police	<p>Article 13 of Law No. 2 of 2002, that translated in English as: "The main duties of the Indonesian National Police are:</p> <ol style="list-style-type: none"> maintaining public order and security; enforcing the law; and providing protection, guidance, and services to the community." <p>Article 15 paragraph (1) of Law No. 2 of 2002, that translated in English as: "In order to carry out the duties as referred to in Articles 13 and 14, the Indonesian National Police has the general authority to:</p> <ol style="list-style-type: none"> receive reports and/or complaints; assist in resolving public disputes that may disturb the public order; prevent and combat the spread of social problems; monitor movements that may cause divisions or threaten the national unity; 	<p>The possible applications of AI in police duties and authority consist of:²⁴</p> <ul style="list-style-type: none"> - Data gathering, criminal detection, cybercrime prevention, and other related duties; - AI's data mining ability can be used to identify, anticipate, and mitigate criminal conduct; - Crime data mining include the identification of entities from police narrative reports, the detection of criminal identity fraud using algorithmic methods, the analysis of authorship in cybercrime, and the examination of criminal networks; - The use of chatbots can be utilised to comprehend daily conversation patterns;

²¹ Richard E. Susskind, "Expert Systems in Law: A Jurisprudential Approach to Artificial Intelligence and Legal Reasoning," *The Modern Law Review* 49, no. 2 (1986). p. 175.

²² Ibid. p. 176.

²³ Rissland, "Artificial Intelligence and Law: Stepping Stones to a Model of Legal Reasoning," p. 1961.

²⁴ Muhamad arif Budiman, "Penggunaan Agen Berbasis Intelijen Untuk Menangani Kejahatan Siber," *Journal of Innovation Research And Knowledge* 1, no. 8 (2022). p. 457-459.

		<ul style="list-style-type: none"> e. issue police regulations within the scope of administrative police authority; f. conduct a special inspections as part of police actions for prevention purposes; g. take initial actions at crime scenes; h. collect fingerprints and other identification details, as well as photograph individuals; i. seek information and evidence; j. operate the National Criminal Information Center; k. issue licenses and/or certificates required for public services; l. provide security assistance in court sessions and the execution of court decisions, other agency activities, as well as public events; m. temporarily accept and store found objects." 	<ul style="list-style-type: none"> - AI can be used for adaptive traffic signals, in which sensors operate based on the provided instructions; - AI-enhanced closed-circuit television (CCTV) surveillance and security systems provide the capability to identify faces, track motions, as well as other detection features; - AI can oversee the consumption of water and power to anticipate and manage problems such as water leakage in the city infrastructures; - Enhancing public safety can be achieved by using predictive AI frameworks, which can identify license plates to identify stolen vehicles, speeding vehicles, or expired registrations.
2.	Prosecutor	<p>Article 30 of Law No. 16 of 2004, that translated in English as:</p> <p>"(1) Under Criminal Law, the prosecutor's office has the duties and authority to:</p> <ul style="list-style-type: none"> a. Conduct a litigations; b. enforce court decisions and judgements that acquire permanent legal force; c. oversee the execution of conditional criminal sentences, imprisoned criminal sentences, and conditional discharges; d. Conduct investigations into specific criminal offences in accordance with statutory laws; and e. Complete particular case files and, in order to do so, execute 	<ul style="list-style-type: none"> - AI in some states are used to assist tasks such as generating responses to citizen petitions. For instance, in Russia, AI is used in the context of law and criminal prosecution.²⁵ An AI system has created a virtual prosecutor's assistant that utilises deep learning principles to identify violations in criminal cases and inspection materials. The system also conducts analytical comparisons of extensive datasets, including operational and statistical data, as

²⁵ Eduard B. Khatov, "Digital Prosecutor's Assistant or Digital Prosecutor?," *Russian Journal of Legal Studies (Moscow)* 10, no. 1 (2023). p. 89.

		<p>further investigations prior to submitting it to the court, along with the investigators.</p> <p>(2) Di bidang perdata dan tata usaha negara, Kejaksaan dengan kuasa khusus dapat bertindak baik di dalam maupun di luar pengadilan untuk dan atas nama negara atau pemerintah.</p> <p>(3) Under the public order and peace, the prosecutor's office also conduct:</p> <ol style="list-style-type: none"> enhancing public knowledge of the law; ensuring the implementation of law enforcement policies; monitoring the distribution of printed materials; supervising religious community that could pose a threat to society and the state; preventing the abuse and/or disrespect of religious beliefs; conducting legal research and development, as well as criminal statistics." 	<p>well as administrative requirements. The legalisation of documents in this case may only be executed based on decisions made by the appropriate authorities.²⁶</p> <ul style="list-style-type: none"> - The Chinese authorities have implemented the concept of a digital prosecutor, in which a system based on AI assists in formulating of indictments for criminal proceedings. - The implementation of AI by prosecutors in many States is designed to eliminate common duties, improve the efficiency of monitoring, and maximise the overall effectiveness of law enforcement institutions.
3.	Judge	<p>Article 24 paragraph (1) of Constitutional Law of Indonesia of 1945:</p> <p>Judicial power is an autonomous authority that is responsible for the functioning of justice in order to maintaining law and justice.</p> <p>In accordance with Law No. 48 of 2009:</p> <ol style="list-style-type: none"> Judges and constitutional judges are required to entirely examine, adhere to, and comprehend the legal principles and norms of fairness that exist in society; Judge are responsible for examining, adjudicationg, and making decisions on cases. 	<p>There are several benefits of AI that can support the work of judges include:</p> <ul style="list-style-type: none"> - Since 2017, China has been using AI by establishing it as a judge to handle digital cases;²⁷ - AI technology may assist judges in determining the suitable punishment to be imposed on a defendant;²⁸ - AI can be used to search for existing laws and agreements; - AI can rapidly and precisely analyse legal literature and references.²⁹

²⁶ Ibid. p. 91.

²⁷ Raffi et al., "Menilik Pro Dan Kontra Pemanfaatan Dan Penetapan Status Hukum Artificial Intelligence Dalam Hukum Positif Indonesia." p. 62.

²⁸ Ibid. p. 66.

²⁹ Ekinia Karolin Sebayang, Mahmud Mulyadi, and Mohammad Ekaputra, "Potensi Pemanfaatan Teknologi Artificial Intelligence Sebagai Produk Lembaga Peradilan Pidana Di Indonesia," *Locus Journal of Academic Literature Review* 3, no. 4 (2024). p. 325.

		c. Judges also have the authorities granted by judicial institutions such as the Supreme Court and the Constitutional Court.	
4.	Advocate/Lawyer	<p>Under Section IV of Law No. 18 of 2003 governs, that translated in English as:</p> <ul style="list-style-type: none"> a. Advocates are free to express opinions or make statements in defense of a case while adhering to the professional code of ethics and applicable laws and regulations; b. Advocates are free in carrying out their professional duties to defend cases for which they are responsible, while still adhering to the professional code of ethics and applicable laws and regulations; c. Advocates cannot be sued either in civil or criminal courts for performing their profession in good faith to defend their clients in the court; d. In performing their profession, advocates have the right to obtain information, data, and other documents related to the interests of their clients, as required for their defense, in accordance with the law; e. Advocates are prohibited from discriminating against clients based on gender, religion, politics, descent, race, or social and cultural background; f. Advocacy professionals are required to maintain the confidentiality of all information they obtain from their clients as part of their professional relationship; g. The right of advocates to maintain the confidentiality of their relationship with clients includes protecting their files and documents from seizure or inspection, as well as 	<p>There are several AI's functions that can be used by the Lawyer, such as:³⁰</p> <ul style="list-style-type: none"> - Assisting in quickly and efficiently identifying patterns, trends, and relevant information in case law; - Automating routine tasks such as drafting legal documents, searching case law, and contract analysis; - Helping in translating foreign languages for contract drafting; - Assisting with filing and archiving; - Enhancing the efficiency of document analysis process.

³⁰ Raffi et al., "Menilik Pro Dan Kontra Pemanfaatan Dan Penetapan Status Hukum Artificial Intelligence Dalam Hukum Positif Indonesia." p. 63.

		<p>protection against interception of electronic communication.</p> <p>Under Article 22 paragraph (1) of Law No. 18 of 2003 stipulated as translated below: Advocates have a fundamental duty to provide free legal aid to individuals who are unable to afford it and are seeking justice.</p>	
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Source: Based on authors' analysis

Based on the explanation in the table above, it can be concluded that the use of AI to assist law enforcement officers is currently limited to technical procedures. Most applications involve using AI to search for information related to legal regulations, cases, and document preparation. The primary implementation of AI in daily tasks can be seen in police work, shown by the use of facial recognition on closed-circuit television (CCTV) and license plate recognition. By using AI, law enforcement officers only need to provide narrative commands, and the AI system processes the required information to execute the tasks. Thus, the existence of AI significantly impacts the development of the legal discipline, itself.

II. THE URGENCY OF USING ARTIFICIAL INTELLIGENCE BY THE JUDGES IN LAW ENFORCEMENT

A. Challenges of Using Artificial Intelligence in Law Enforcement

Currently, there is no specific legal framework that regulates AI technology. However, in a broader sense, the use of AI might be considered the implementation of the Information and Electronic Transactions Law (UU ITE) to electronic systems. The application of AI in law includes predictive coding, predictive analysis, and machine learning. This technology has influenced how legal materials are presented to judges and how decisions are made, especially in the United States.³¹

Some States already have comprehensive regulations governing AI, one of which is the European Union. The European Commission proposed the drafting of AI regulations in 2021 to establish a legal framework for AI. The aim is ensuring that artificial intelligence systems used within the European Union are safe, identifiable, traceable, objective, and environmentally sustainable. Artificial intelligence systems require supervision from humans to avoid negative consequences, therefore they do not operate completely autonomously.³²

The EU's AI regulation is called the AI Act, which is expected to be enacted in this year, 2024.³³ The AI Act will govern according to determined levels of risk. Each tier of risk, ranging from excessive risk to high risk, will be governed by specific provisions of the AI Act. Artificial intelligence systems considered excessive risks are those that are considered a danger to humans and will consequently be prohibited, such as biometric systems and facial recognition. Systems considered high-risk are those that have a negative impact on safety or fundamental rights, such as assistance in legal interpretation and law enforcement.³⁴

Nevertheless, the initiative to establish regulations regarding AI is driven by an urgency for a comprehensive legal framework. Since 2008, the European Court of Human Rights (ECHR) has ruled over five cases concerning the use of AI, including the *Case of GAUGHRAN v. THE UNITED KINGDOM* in 2020.³⁵ The main concern of this case was the retention of biometric data, including DNA profiles, fingerprints, and photographs, belonging to convicted persons in the United Kingdom.³⁶ The European Court of Human Rights (ECHR) emphasised the need of using proportionate and specific measures for the protection of biometric data. The decision emphasised the need of

³¹ Tania Sourdin, "Judge v Robot? Artificial Intelligence And Judicial Decision-Making," *UNSW Law Journal* 41, no. 4 (2018), p. 2.

³² European Parliament, "EU AI Act: First Regulation on Artificial Intelligence," last modified 2023, accessed June 30, 2024, <https://www.europarl.europa.eu/topics/en/article/20230601STO93804/eu-ai-act-first-regulation-on-artificial-intelligence>. (diakses 30 Juni 2024).

³³ European Parliament, *Artificial Intelligence Act*, n.d.

³⁴ European Parliament, "EU AI Act: First Regulation on Artificial Intelligence."

³⁵ *Gaughran v. the United Kingdom*, Judgement, ECHR, App. No. 45245/15, [2020].

³⁶ *Gaughran v. the United Kingdom*, [2].

maintaining a balance between the public interests in criminal detection and the privacy rights. Hence, the Court determined that the continued retention without any form of review infringed against the privacy rights protected by Article 8 of the Convention for the Protection of Human Rights and Fundamental Freedoms (hereinafter referred to as "the Convention").

Based on the brief explanation of the *Case of GAUGHRAN v. THE UNITED KINGDOM*, the ECHR still refers to the Convention as the applicant also referred to it. Article 8 of the Convention is a general rule on human rights that everyone has a right to privacy. Currently, if we look at the draft AI Act, the preamble states that:

*"To the extent that this Regulation contains specific rules on the protection of individuals with regard to the processing of personal data concerning restrictions of the use of AI systems for remote biometric identification for the purpose of law enforcement, of the use of AI systems for risk assessments of natural persons for the purpose of law enforcement and of the use of AI systems of biometric categorisation for the purpose of law enforcement,..."*³⁷

Another case occurred in Canada regarding the use of AI, which resulted in a "fictitious" case. The misuse of AI happened in one of the Canadian courts. Advocates from British Columbia, Lorne and Fraser MacLean, discovered a fake legal case submitted to the court by the opposing lawyer in a civil case. The opposing lawyer, Chong Ke, was suspected of using ChatGPT to create a fake legal case. The incident highlighted the potential misuse of AI in legal proceedings. AI systems, such as ChatGPT, can be trained to think and act like humans, but they also have limitations, such as producing answers that sound plausible but are actually incorrect. In response to Chong Ke's misconduct, the Law Society of British Columbia issued warnings along with suggestions to lawyers on the use of AI in late 2023. Subsequently, an investigation was initiated and disciplinary action were taken.³⁸

The examples mentioned above demonstrate that while AI is an advanced technology in the present day, it has faced significant criticism for its use of compiled data to provide convincing legal summaries without proper citation. This poses a highly critical problem, since it has the potential to result in the presentation or submission of misleading evidence in a court of law. Hence, law enforcement officers using AI should verify the data or information obtained from AI systems.

In Indonesia, AI integration currently refers to the Information and Electronic Transactions Law (Law of ITE) as statutory law, which legally classifies AI as an Electronic Agent.³⁹ The lack of regulations regarding the use and implementation of AI can result in legal uncertainty, as each matter will be addressed case-by-case. Hence, the lawmakers are anticipated to immediately formulate regulations regarding artificial intelligence.

This necessity emerges from the development of knowledge, technology, and the process of globalisation. The borderless and global nature of technology requires its continual adaptation and cannot be avoided. The descriptive, explanatory, normative, and analytical nature of legal theory requires its adaptation to legal phenomena globally in accordance with its current development. Consequently, legal principles regarding legal convergence arise, indicating the endeavour to harmonise legal systems, conceptions, principles, or standards.⁴⁰ The process of convergence can lead to the harmonisation and unification of laws.

B. Artificial Intelligence as a Tool for Judges in Law Enforcement

As described in the previous section, artificial intelligence might assist judges in performing their daily duties. It is plausible that in the future, AI systems will have a more prominent position in every aspect of legal proceedings, utilising advanced tools to assist in formulating judgements and providing resolutions to disputes. AI collects and examines data in order to derive conclusions and potentially make judgements. This raises a question: whether artificial intelligence might replace judges? The result seems impossible, at least in the present, due to multiple factors impacting on court decisions, including a judge's conviction and the assessment of social consequences.⁴¹

³⁷ Parliament, *Artificial Intelligence Act*. Whereas (3).

³⁸ Charles E. Gluckstein, "Artificial Intelligence Hallucinates Case Law Introduced In a Canadian Court," *Gluckstein Lawyers*, last modified 2024, accessed July 3, 2024, <https://www.gluckstein.com/news-item/artificial-intelligence-hallucinates-case-law-introduced-in-a-canadian-court>. (diakses Juli 3, 2024).

³⁹ Sebayang, Mulyadi, and Ekaputra, "Potensi Pemanfaatan Teknologi Artificial Intelligence Sebagai Produk Lembaga Peradilan Pidana Di Indonesia." p. 322.

⁴⁰ Danrivanto Budhijanto, "Pembentukan Hukum Yang Antisipatif Terhadap Perkembangan Zaman Dalam Dimensi Konvergensi Teknologi Informasi Dan Komunikasi," *Jurnal Ilmu Hukum* 14, no. 2 (2011). p. 228.

⁴¹ Sourdin, "Judge v Robot? Artificial Intelligence And Judicial Decision-Making." p. 1123-1124.

The fact that judges cannot be replaced by AI does not mean that they cannot use it. Currently, AI provides advantages mainly in terms of technical purposes. Some examples of AI usage by judges include but not limited to:

- a. Rapidly examining the most recent regulation developments;
- b. Summarizing international agreements, international documents, and comparing foreign-language rulings from other States more easily;
- c. Translating documents or evidence submitted by the Respondent in foreign languages;
- d. Simplifying the process of summarizing submitted evidence.

Artificial Intelligence is seen as a tool that can enhance the decision-making process of judges. Furthermore, the use of AI is expected to speed up the work of judges, therefore allowing the quick resolution of increasing numbers of legal disputes and cases. An enhanced decision-making process by judges would improve the achievement of an immediate, simple, and affordable judicial process, as stipulated by Article 4, paragraph (1) of Law Number 48 of 2009 on Judicial Power.

However, the use of AI by judges still comes with certain limitations. For instance, AI is not authorised with the legal power to make decisions. While AI can provide information and predict outcomes when instructed to solve problems, this raises the question of who is responsible for decisions made by AI. This issue relates to the competence of legal subjects in decision-making and their ability to take responsibility. AI is merely a technology that uses algorithms and data to respond to commands, meaning it is not a legal subject and lacks legal competence.⁴²

In regards of the limitations of AI usage, it must be understood that AI is merely a tool. After a judge uses AI for technical purposes that simplify their work, the judge is still required to verify the accuracy of the information. This in accordance with Article 183 of the Criminal Procedure Code (KUHP), a verdict must be established upon two admissible pieces of evidence and the judge's own conviction.⁴³ The establishment of a judge's conviction is completely a result of human logic, not artificial intelligence. A judge's conviction results from attentively observing the evidentiary process throughout a trial and carefully evaluating moral, justice, and humanitarian factors prior to reaching a legal conclusion.

Moreover, up to now, there is no artificial intelligence explicitly designed for legal purposes. This has led legal experts to question the necessity of converting laws into coding for computers. In order to provide precise outcomes, programmers, who typically lack legal knowledge, must initially convert laws and legal circumstances into operational commands.⁴⁴ This is because AI works by "learning" the data it is provided with, which is then processed through deep learning to recognize all future inputs. Upon inquiry, artificial intelligence will examine the data, compare it with the models developed by deep learning, interpret complete words, and deliver outcomes based on the matched data. For example, when programmers "teach" AI about all data regarding theft, AI will retrieve the learned data when someone commands it to solve a theft case.

The limitations of AI are evident when dealing with specific cases. For instance, in the case of a mother who steals a loaf of bread to feed her child who hasn't eaten for three days, AI programmed strictly according to legal rules would deliver a result based solely on the law, without considering factors like morality, justice, and humanity. Nevertheless, if examined further, the positive impacts of AI use by judges outweigh its limitations. These limitations are natural, as a system created by humans cannot surpass human capabilities.

In the context of developing *ius constituendum* regarding the use of AI by judges in law enforcement, it is necessary to establish a Supreme Court Circular (SEMA) related to guidelines on the use of AI by judges. The content of this SEMA should include guidelines on AI usage by judges. Some key points that should be included in the SEMA on AI usage guidelines by judges are as follows: *First*, qualifications for the legitimate use of AI by the judges. It is important to regulate the qualifications for the legitimate use of AI by judges, such as in searching for or confirming the accuracy of laws, legal precedents, legal facts, foreign languages, etc. *Second*, the category of AI can be used by the judges. It is important to regulate the types of AI that judges can use. The selected AI must be reliable and credible. By accommodating the regulation of AI usage by judges in law enforcement, implies that the law adheres to the concept of legal convergence, which aims to harmonise technological developments with the current legal framework.

⁴² Sebayang, Mulyadi, and Ekaputra, "Potensi Pemanfaatan Teknologi Artificial Intelligence Sebagai Produk Lembaga Peradilan Pidana Di Indonesia." p. 32.

⁴³ Ibid. p. 324.

⁴⁴ Sourdin, "Judge v Robot? Artificial Intelligence And Judicial Decision-Making." p. 1127.

C. Conclusion

The characteristics of using artificial intelligence (AI) in law enforcement vary depending on the qualifications of the law enforcers. Law enforcers around the world who have already implemented AI in law enforcement include the police, prosecutors, judges, and lawyers. The urgency of using AI by judges in law enforcement lies in its potential as a tool to assist judges in making decisions. Artificial Intelligence can be used in the subsequent way:

- e. Rapidly examining the most recent regulation developments;
- f. Summarizing international agreements, international documents, and comparing foreign-language rulings from other States more easily;
- g. Translating documents or evidence submitted by the Respondent in foreign languages;
- h. Simplifying the process of summarizing submitted evidence.

Improving judicial decision-making time would help with the fulfilment of a more efficient, organised, and affordable judiciary, as required by Article 4, paragraph (1) of Law Number 48 of 2009 on Judicial Power. Implementing laws that permit the use of artificial intelligence (AI) by judges in law enforcement implies that the law complies to the concept of legal convergence, which aims to harmonise technological advancements with present legal frameworks.

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