The Prospect of AI Law in Indonesian Legal System: Present and Future Challenges

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Abstract

The development of AI and its ease of use in cyberspace raises various legal problems. This situation is because AI can take actions that could potentially lead to illegal activities. Therefore, to overcome the problems that arise from the use of AI, legislation is needed to regulate it. This research aims to analyze the legal provisions for the use of AI in Indonesian Law. This research is qualitative research with a normative legal approach, and the data analysis method used is qualitative juridical. The results showed that the use of AI in the legal field has been widely carried out, including it can be used to predict case outcomes and make strategic recommendations. AI can also estimate the cost needed to solve cases. In addition, AI

facilitates the development of rules and regulations and the creation of contracts. However, with the use of AI, the legal provisions governing it are considered insufficient. In addition to Statute Number 19 of 2016 Regarding Amendments to Statute Number 11 of 2008 Regarding Electronic Information and Transactions and Regulation of Government Number 71 of 2019 Regarding the Execution of Electronic Systems and Transactions, there must be new and specific regulations governing the use of artificial intelligence.

I. Introduction

Artificial intelligence, or AI for short, is a rapidly expanding technology that has surprised the world. To learn more, let's look at what this AI is. AI refers to computer-based intelligence that can learn, reason, and act in ways that mimic those of humans.[1] It is widely held that AI technology will one day solve all of humanity's labor challenges, from the simplest to the most complex. Virtual assistants have many applications and can perform research, scheduling, reminders, data collection, and content creation. The community's social media platforms also employ AI to learn about its users' preferences so they can provide relevant information. Artificial intelligence (AI) components of search engines streamline the discovery of relevant results, saving users, time and effort.

In addition, music and movie streaming application services combine categories according to interests. Another example is AI

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[1]   Muhammad Pasha Nur Fauzan et al., "Wandering With Artificial Intelligence and Its Obscure Legal Liability," *Indonesia Law Review* 11, no. 2 (2021): 169–89, https://doi.org/10.15742/ilrev.v11n2.4.

services in mobile banking where transactions can be done safely and easily without having to go to an ATM machine. There are many more examples of the use of this AI, for example, online transportation applications and online shopping applications.[2] Taking advantage, the art in technology by concentrating on artificial intelligence (hereafter referred to as "AI"), where AI has substantially aided human labor in general. It is seen in the country economic, industrial, defense and security sectors. Additionally, we have discovered its application in the realm of bureaucracy, specifically in health and education, and even the usage of AI has infiltrated the legal profession.

One of the uses of artificial intelligence in law, especially in contract planning, is developing. Contracts can be executed through electronic contracts. It is clear evidence that the use of artificial intelligence has evolved along with the human need to achieve efficiency and reduce workload.[3] In addition, the role of AI in forming laws and regulations to minimize errors in the construction of legal regulations, whether AI can replace the authority of the institution forming laws and regulations as a whole, needs to be examined more deeply.[4] In addition, the use of AI to replace legal professions such as lawyers and judges is a contentious issue.

The nature of AI with its intelligence and responsibilities, which may involve legal action as in the preceding example, presents significant concerns regarding this technology's governing

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[2] Viony Kresna Sumantri, "Legal Responsibility on Errors of the Artificial Intelligence-Based Robots," *Lentera Hukum* 6, no. 2 (2019): 331, https://doi.org/10.19184/ejlh.v6i2.10154.

[3] Aditya Kurniawijaya, Alya Yudityastri, and Ayuta Puspa Citra Zuama, "Pendayagunaan Artificial Intelligence Dalam Perancangan Kontrak Serta Dampaknya Bagi Sektor Hukum Di Indonesia," *Khatulistiwa Law Review* 2, no. 1 (2021): 260–79, https://doi.org/10.24260/klr.v2i1.108.

[4] Eka NAM Sihombing and Muhammad Yusrizal Adi Syaputra, "Implementasi Penggunaan Kecerdasan Buatan Dalam Pembentukan Peraturan Daerah," *Jurnal Ilmiah Kebijakan Hukum* 14, no. 3 (2020): 419, https://doi.org/10.30641/kebijakan.2020.v14.419-434.

responsibilities, safeguards, and regulations. Legally speaking, the growth of artificial intelligence poses the question of what exactly artificial intelligence is. The above statement cannot confirm artificial intelligence's status as a legal subject. Due to the circumstances and threats associated with artificial intelligence, it is essential to understand AI's legal status, particularly under Indonesian civil law. Throughout history, legal entities have been portrayed as human persons. Legal entities are theoretically personified as if they were people to exercise their rights and responsibilities and be held accountable for their conduct. Artificial intelligence is another possibility to attain effective and efficient performance.[5] The diversity of services and ease of usage of these services in cyberspace poses numerous legal issues. It is deemed significant because AI can do acts that result in legal action and possibly illegal activity. Data protection is the primary legal question in this regard. Because of these opportunities and threats, the role and regulation of artificial intelligence must be specified so there is no ambiguity in interpreting the rule of law.

This research involves an academic dialogue with several previous studies exploring similar themes, thereby assessing their distinct contribution and originality. Fadiah Ghazmi (2021), in his research on "The Importance of Artificial Intelligence Regulations in the World of Digital Commerce in Indonesia". He stated that responsibility for AI's actions could be the responsibility of the person or legal entity above him based on the doctrine of vicarious liability. The formation of specific regulations governing AI is also needed as a preventive measure.[6] Disemadi (2021) discusses the use of AI as a data protection mechanism in cyberspace, underscoring

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[5] FL Yudhi Priyo Amboro and Komarhana Khusuf, "Prospek Kecerdasan Buatan Sebagai Subjek Hukum Perdata Di Indonesia," *Law Review Volume* XX, no. 2 (2021): 145–72.

[6] Shabrina Fadiah Ghazmi, "Urgensi Pengaturan Artificial Intelligencepada Sektor Bisnis Daring Di Indonesia," *Jurnal Hukum Lex Generalis* 2, no. 8 (2021): 782–303.

the need for a better legal framework to support consumers. protection in the Indonesian technology services sector.[7] Purnomo (2023) analyzes the legal framework in force in Indonesia regarding policy and criminal liability for the use of artificial intelligence. He stated that the concept of criminal responsibility that applies to individuals cannot yet be fully applied to artificial intelligence (AI). As an electronic system, AI does not have the ability to understand the consequences of its actions, recognize violations of societal norms, or determine its will independently. In the Indonesian legal framework, criminal liability is placed more heavily on humans who create and control AI, indicating the need for clearer legal regulations to address ethical and legal issues that arise as AI technology develops.[8] Based on several previous studies, the novelty in this research is discussing Artificial Intelligence integrated into the Indonesian legal framework, as well as analyzing existing laws regulating the application of Artificial Intelligence in Indonesian law. Then the author summarizes the theme of AI Legal Prospects in the Indonesian Legal System: Current and Future Challenges.

II. Method

This research is qualitative research with a normative legal approach. This approach is used because this research examines the legal rules contained in laws and regulations regarding what regulations regulate AI. Apart from that, normative juridical research is an approach carried out based on main legal materials by examining theories, concepts, legal principles and statutory

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[7] Hari Sutra Disemadi, "Urgensi Regulasi Khusus Dan Pemanfaatan Artificial Intelligence Dalam Mewujudkan Perlindungan Data Pribadi Di Indonesia," *Jurnal Wawasan Yuridika* 5, no. 2 (2021): 177, https://doi.org/10.25072/jwy.v5i2.460.

[8] Hadi Purnomo, "Criminal Liability for the Use of Artificial Intelligence in Indonesia" 13, no. 03 (2023): 1109–14.

regulations related to this research.[9] The source of data were secondary data, along with literature research using primary legal materials, namely Statute Number 19 of 2016 regarding Amendments to Statute Number 11 of 2008 regarding Electronic Information and Transactions and Regulation of Government Number 71 of 2019 regarding the Execution of Electronic Systems and Transactions and secondary legal materials sourced from previous research and online articles that are in direct contact with this study. The data were analyzed with qualitative juridical, based on applicable legal regulations, and then connected to the problems studied.[10]

III. Result & Discussion

Legal Application of Artificial Intelligence in Indonesia

Artificial Intelligence emerges as a branch of computer science, promising numerous benefits in addressing the needs of humans in the future. 'Intelligence' derives from the word '*intelligo*', meaning 'I understand'. Therefore, AI signifies the capability to comprehend and execute actions. In conclusion, AI epitomizes a field of computer science that accentuates the production of intelligent machines. With the advancement of futuristic and robust technology, AI no longer just assists in human roles; it has been utilized to supplant human roles in specific job sectors.[11]

Fundamentally, AI is a technology that mimics human knowledge, using data from multiple sources or systems to make judgements and study impact. The four underlying concepts of AI include systems that can act humanly, think humanly, think

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[9] Muhammad Syahrun, *Pengantar Metodologi Penelitian Hukum:Kajian Penelitian Normatif, Empiris, Penulisan Proposal, Laporan Skripsi Dan Tesis* (Jakarta: CV.DOTPLUS Publisher, 2022).

[10] Jonaedi Efendi and Prasetijo Rijadi, *Metode Penelitian Hukum Normatif Dan Empiris* (Jakarta: Prenada Media, 2022).

[11] Rio Christiawan, *Aspek Hukum Startup* (Jakarta: Bumi Aksara, 2021).

rationally, and act rationally. Technology has affected many professions, including law. Although AI can operate similarly to human intelligence, this does not qualify AI for legal subject status. Due to the inability of computers to comprehend knowledge and subjective intent, demonstrating intent will necessitate a focus on the human individual who developed or spread AI for harmful or malicious goals.[12]

Artificial Intelligence has become an integral part of various legal fields, as evidenced by its contributions in recent years. Among these is document processing, where AI can automatically process legal documents, including categorizing them, highlighting important issues, and filtering related information from those documents. By adopting artificial intelligence, document processing can be completed swiftly and efficiently, saving both costs and time. For instance, artificial intelligence assists lawyers in risk analysis and case outcome prediction. It also distributes information about potential legal risks their clients may face. Such is the assistance of AI in accelerating decision-making processes for lawyers.[13]

The rapid development of artificial intelligence and its ability to accomplish jobs that humans are also capable of, and often better, extends to writing contracts. For efficiency's sake, artificial intelligence for generating contracts should be applied in Indonesia, similar to attorneys' use of artificial intelligence. Even with the internet at their disposal, attorneys frequently require substantial time to do their obligations. In the meantime, AI can conduct legal research in different languages and organize

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[12] Enni Soerjati Priowirjanto, "Urgensi Pengaturan Mengenai Artificial Intelligence Pada Sektor Bisnis Daring Dalam Masa Pandemi Covid-19 Di Indonesia," *Jurnal Bina Mulia Hukum* 6, no. 2 (2022): 254–72, https://doi.org/10.23920/jbmh.v6i2.355.

[13] Denindah Olivia, "Legal Aspects of Artificial Intelligence on Automated Decision-Making in Indonesia," *Lentera Hukum* 7, no. 3 (2020): 301, https://doi.org/10.19184/ejlh.v7i3.18380.

legislation, legal cases, and their resolutions. In addition, AI enables the supply of judicial predictions drawn logically from existing data.

By analogy, there are multiple grounds to believe that AI can provide the legal industry with considerable benefits comparable to the advent of smartphones. The contemporary legal field continues to rely substantially on paralegal and researcher contributions in terms of conducting data searches, indexing, locating, and analyzing data. Law firms must boost their recruiting of resource workers, which unquestionably increases their costs. AI can be used to assist lawyers in performing legal research, but only if more time and money are saved so that work can be accomplished without taking a long time, reducing the workload and allowing the judicial process to proceed more quickly. AI can be used as an assistant lawyer in conducting legal research, so that work can be completed without taking a long time, lightening the workload, so that the judicial process can take place faster. The projection of AI taking over several professions in the legal sector doesn't negate the potential emergence of new professions untouched by AI capabilities and can only be executed by humans. Human has been endowed with superior intelligence to that of machines. Empathy is a characteristic of humans that AI has not yet acquired. The capacity for empathy is the fundamental asset of policy creation and decision-making.[14]

Currently, Indonesia does not have sufficient regulations to regulate AI and its use in its territory. Therefore, based on the Social Engineering Theory by Roscoe Pound, there is a need for special AI regulations as social control to handle personal data through AI. This is because the law exists to protect state interests, social interests and personal interests; all three are influenced by AI in

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[14] Kurniawijaya, Yudityastri, and Zuama, "Pendayagunaan Artificial Intelligence Dalam Perancangan Kontrak Serta Dampaknya Bagi Sektor Hukum Di Indonesia."

various aspects. However, the formation of this law needs to be studied within the framework of achieving maximum limits in meeting the needs of today's society. So, in forming a legal product, it needs to be created by establishing another basic framework that pays more attention to broader recognition of social needs, demands and interests. Based on Roscoe Pound's interest theory, the law on AI is to anticipate and guarantee the state's interests in safeguarding interests (state interests as guardians of social interests), social interests (public interests), and private community interests (individual interests); These three interests need to be protected in a balanced manner in a compromise with written law in order to create legal certainty.[15]

In Indonesia, the implementation of laws related to artificial intelligence (AI) is still in the development stage. However, several efforts have been made to start integrating AI into the Indonesian legal system. Several academic institutions and government agencies have conducted research and discussions to understand the legal implications of using AI. This includes discussions about fairness, privacy, and legal responsibility in the context of AI. The Indonesian government has planned to develop a national policy regarding artificial intelligence. This will cover aspects such as technical regulations, ethics, privacy and security related to the use of AI. Indonesia is involved in international discussions and cooperation to study and share best practices in implementing laws related to AI. This can help Indonesia develop approaches that suit local conditions and needs. Training for legal professionals on the legal implications of AI use is being developed. Awareness of the need to understand and overcome the legal challenges that arise with the development of AI is also increasing. Although there are

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[15] Imelda Martinelli et al., "Urgensi Pengaturan Dan Perlindungan Rights of Privacy Terhadap Artificial Intelligence Dalam Pandangan Hukum Sebagai Social Engineering Imelda," *Jurnal Tana Mana* 4, no. 2 (2023): 158–66, https://rechtenstudent.iain-jember.ac.id/index.php/rch/article/view/101.

many challenges and processes that must be overcome, these steps show that the Indonesian government realizes the importance of overcoming the legal challenges that arise along with the development of AI technology. Thus, the implementation of laws related to artificial intelligence in Indonesia is part of an agenda that is currently developing and continues to be updated.[16]

The Legal Provisions of Artificial Intelligence in Indonesian Law

Industrial Revolution 5.0 has offered not only positive sides but also negative aspects. Indonesia will be consumed by a technologically-supported revolution involving the internet, artificial intelligence, and others. Therefore, individuals are expected to be able to prepare, plan, and devise strategies to deal with it. However, a significant number of Indonesians still do not comprehend what the industrial revolution is or why the Indonesian government is launching industrial revolution 5.0. To prevent or mitigate the issues mentioned earlier, Indonesia's rules must keep pace with the rapid growth of technology, particularly artificial intelligence.[17]

A law-based state, Indonesia will undoubtedly implement laws to govern its citizens' daily lives properly. The current law should be the basis for solving all existing problems. Recent developments show that technology has played an essential role in human life. It must be recognized that technology determines human survival, especially in Indonesia, which is currently facing the Industrial Revolution 5.0. The presence of technology in the legal field can be a golden door to a more advanced field of law. The Industrial Revolution 5.0 can improve production chain efficiency

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[16] Martinelli et al.
[17] Yusuf Arif Utomo, "Legal Protection for Problem Debtor Related to the Use of the Artificial Intelligence System in Peer to Peer Lending," *Yuridika* 35, no. 3 (2020): 657, https://doi.org/10.20473/ydk.v35i3.19007.

and product quality through connectivity and digitalization. On the other hand, this can also threaten conventional law because the Industrial Revolution 5.0 will eliminate hundreds of millions of jobs worldwide by 2030, as robots will take over. So, it is undeniable that Indonesia, as a country with a relatively high labor force and unemployment, will have a significant impact.[18]

Artificial Intelligence (AI) is a technology that has impacts not only on the economy, but also on the legal domain. More and more AI systems are integrated into various sectors of society and citizens' personal lives, addressing issues such as copyright infringement and hate speech prevention. Can we hold AI systems accountable for their actions by developing AI personification as legal entities? Supervision of such AI systems must be considered, and solutions for AI actions should be established. Regulation of Government Number 71 of 2019, regarding the Execution of Electronic Systems and Transactions, actively defines an electronic agent as a device within an electronic system. An individual administratively creates this agent to perform specific actions automatically on designated electronic information. Therefore, AI acts automatically and operates through the mediation of users or system owners. If AI is perceived as a mere intermediary that transmits or receives contract statements, potential conflicts, as mentioned earlier, might not arise, as AI does not create contracts at its discretion, enabling contracts to be completed within the designated time frames.[19]

Illegal acts that violate others' rights are punishable in civil law. Article 1365 of the Civil Code makes it quite plain that if a

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[18] Romanti, "Artificial Intelligence (AI): Bahaya Atau Dukungan Untuk Pekerjaan Manusia?," Inspektorat Jenderal KEMENDIKBUDRISTEK, 2023.

[19] Stefan Koos, "Artifical Intelligence as Disruption Factor in the Civil Law: Impact of the Use of Artifical Intelligence in Liability, Contracting, Competition Law and Consumer Protection with Particular Reference to the German and Indonesian Legal Situation," *Yuridika* 36, no. 1 (2021): 235, https://doi.org/10.20473/ydk.v36i1.24033.

person does an act that breaks the law and causes harm to other people, then that person is obligated to provide restitution for the damages that he or she caused as a result of their negligence. He can be held accountable if the culprit is responsible for his conduct. Generally, legal accountability demands that the individual understand the implications of his actions or inactions.[20]

The individual demonstrates intent to perpetrate the crime. However, the connection to certain concepts may dissipate if artificial intelligence, in its autonomous nature distinct from mere tools, conducts the illicit activities. Knives, for instance, need a swing by the offender in order to inflict harm on a victim. Consequently, it is possible to conclude that there is a direct causal link between the perpetrator's acts and the victim's injuries. AI-operated tools, on the other hand, may behave autonomously, as demonstrated previously. Under some circumstances, the elements of guilt and causation between the criminal's conduct and the illicit outcomes are not satisfied. When the tool is engaged, the AI is able to make independent judgments based on a predefined set of action possibilities. AI refers to random-selection algorithms that can identify the most effective decision. The method often employs artificial neural networks that simulate actual brain tissue. This network analyzes the large quantity of data collected by its sensors to create the most accurate data possible. This resembles how the human brain operates.[21]

Manufacturer responsibility will cause disproportionality since legal liability will inspire fear and slow technical innovation. If the usage and development of this technology are hindered, the problem of human mistakes that artificial intelligence seeks to solve will worsen. It can be seen in Article 36 paragraph (4) part d of

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[20] Hanif Abdul Salim, "Kedudukan Hukum Artificial Intelligence: Tantangan Dan Perdebatannya," KlikLegal.com, 2023.

[21] Ahmad M R and Amli, "UU Tentang Artificial Intelligence," Kompas.com, 2023.

Statute Number 71 of 2019 regarding the accomplishment of electronic Systems and Transactions, which states that electronic agents, including in other forms, are not explained particularly and that the operator of the electronic agent is responsible for negligence and loss. This choice of law is, therefore, likewise unjustified. Nevertheless, it is conceivable to confer rights and obligations upon AI legally. It is not an attempt to propose answers and solutions to previously disclosed concerns; instead, it is a new conversation based on actual occurrences. Several points must be brought up to continue this discussion. Thus, for AI to be responsible, it must be implemented.[22]

AI-specific legislation may be needed. Responsible AI usage motivates AI legislation reformers. Responsible AI is an ethical framework that promotes AI technology use for the public good. Human supervision allows people to control AI systems at any moment, ensuring the ethical, transparent, and accountable usage of AI technology. To avoid damage, AI needs technological strength and security. Privacy emphasizes data security and legal collecting. Stakeholders should be able to access and document AI system results.[23]

Indonesia may require unique legislation to control AI technology based on these concepts. Indonesia is a legal nation. The state must act legally. Indonesia requires AI legislation that uses AI concepts to create community laws and solve AI issues. In the absence of comprehensive legislation, AI can be leveraged irresponsibly, leading to potential misuse.[24] Endowed with internet

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[22] Pasha Nur Fauzan et al., "Wandering With Artificial Intelligence and Its Obscure Legal Liability."

[23] Disemadi, "Urgensi Regulasi Khusus Dan Pemanfaatan Artificial Intelligence Dalam Mewujudkan Perlindungan Data Pribadi Di Indonesia."

[24] Rofi Aulia Rahman, Valentino Nathanael Prabowo, and Aimee Joy David, "Constructing Responsible Artificial Intelligence Principles as Norms : Efforts to Strengthen Democratic Norms in Indonesia and European Union A . Introduction The Cambridge Analytica Scandal Is One of the Striking Cases That Showcased the Influence of Art" 5 (2022): 231–52.

connectivity and proficiency, humans possess the capacity to instigate direct or indirect criminal activities with far-reaching and potentially catastrophic consequences. [25]

From such an understanding, we must then consider how best to adapt the current construction of the legal state so that it can be effectively applied to the world of technology, bringing the individual and his interaction under legal protection. It does not mean that we ignore our values and aspirations about what we expect from the rule of law. Still, we must consider what new systems and processes will be developed to ensure these expectations can be effectively met in our new technological developments.[26]

Indonesia has a civil law system; thus all legal agreements must be in writing. This legal structure hinders AI growth because legal change cannot keep up with technical advancement.[27] As established in the fourth paragraph of the preamble to the 1945 Constitution of the Republic of Indonesia, this system is also required to fulfill the state's duty to safeguard its inhabitants. The community must be provided with legal clarity and a sense of security.[28]

How can the legal system ensure that victims receive compensation if AI has caused physical or economic harm? In addition, the question arises whether AI can be treated like humans

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[25] Sumantri, "Legal Responsibility on Errors of the Artificial Intelligence-Based Robots."

[26] Hannah Lim, "The Technological Limits of the Rule of Law, and the Perspective of Developing States," *Indonesia Law Review* 11, no. 1 (2021), https://doi.org/10.15742/ilrev.v11n1.694.

[27] Wardah Yuspin et al., "The Law Alteration on Artificial Intelligence in Reducing Islamic Bank's Profit and Loss Sharing Risk," *Legality : Jurnal Ilmiah Hukum* 30, no. 2 (2022): 267–82, https://doi.org/10.22219/ljih.v30i2.23051.

[28] Shabrina Fadiah Ghazmi, "Urgensi Pengaturan Artificial Intelligencepada Sektor Bisnis Daring Di Indonesia," *Jurnal Hukum Lex Generalis* 2, no. 8 (2021): 782–303, https://jhlg.rewangrencang.com/.

regarding legal responsibility. Or to what extent the system owners should be held accountable for AI actions?

At present, we are well aware that many laws and regulations in this country are still not harmonized with one another. In reality, many laws are castrated by its rules and regulations. It is inseparable from the political configuration that existed when the legislation was made. Not to mention the things that happen in society and need to be regulated in law but have not been. [29]

As mentioned above, the law is a tool the government may utilize to construct a national legal system to achieve national and state goals. According to this perspective, the legislation must generate what this nation wants. However, given current events, significant gaps remain in the creation of laws, regulations, and special legal standards for AI usage.

Article 1 number 6a Law no. 19 of 2016 provides a clear definition of Electronic System Operators, which involves every person, state administrators, business entities and the public who provide, manage and/or operate Electronic Systems. In the context of the use of artificial intelligence (AI), Electronic System Operators become figures responsible as legal subjects for the administration of electronic systems, including the implementation and operation of AI. As legal subjects, Electronic System Operators have responsibilities for various aspects, including security, ethics and accountability in the use of AI.

Thus, legal regulations stipulate that parties who provide, manage, or operate AI, whether individuals, government institutions, business entities, or the general public, must ensure that the use of this technology is carried out responsibly and in accordance with applicable regulations. The important role of Electronic System Operators in regulation emphasizes the principle that even though AI may be able to operate automatically, the

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[29] Paulus Siburian, *Arbitrase Online Alternatif Penyelesaian Sengketa Perdagangan Secara Elektronik* (Jakarta: Djambatan, 2004).

sustainability and ethics of its use must still be monitored and controlled by humans. Thus, further discussion regarding the roles and responsibilities of Electronic System Operators in the context of AI is essential in ensuring that the development of this technology takes place in accordance with applicable legal and ethical norms.

In the context of recognition as a legal subject, there are two main criteria that underlie this assessment, namely the ability to carry out legal acts and the ability to assume rights and obligations. Consideration of the first criterion, especially in the context of using AI, becomes increasingly complex as AI capabilities approach the level of human intelligence. For example, an AI working system with the ability to analyze and make decisions similar to humans can raise the question of whether this system can be considered a legal subject with the authority to carry out legal actions. However, in practice, the lack of clarity regarding the legal subject matter for AI remains a challenge. Although AI may be able to produce actions that are virtually indistinguishable from human actions, ethical and legal questions arise regarding whether AI has the quality of full legal subjectivity. An analogy with the legal subject of legal entities (rechtspersoon) can be applied, where legal entities are recognized as legal subjects even though they are artificial constructions made by humans. In this case, the legal subject of AI can be considered the result of human work, recognizing that AI decisions and actions actually originate from its creators. However, a deeper ethical and legal debate is needed to determine the level of autonomy and responsibility that AI as a legal subject has

Based on the provisions of the ITE Law, AI which is recognized as an electronic system and electronic agent is closely related to orders given by the Electronic System Operator. Electronic System Operators, as legal subjects who can be individuals, state administrators, business entities, or the public, play a key role in providing instructions to AI. This means that AI

does not have legal autonomy or the ability to act independently, but instead operates based on orders given by humans. In this context, although AI may have a frame of thinking and reasoning that is close to human capabilities, this does not give AI the status of an independent legal subject. The concept of criminal liability which is related to the independent skills of legal subjects cannot be applied to AI, because the skills possessed by AI are actually the result of automatic conditions created by humans. Independent criminal liability is generally related to the ability of legal subjects to consciously and independently make decisions and be responsible for the actions taken. AI, in this context, does not have these capabilities, because all actions and decisions produced depend on human programming and commands. Therefore, in legal assessments, AI cannot be considered as a legal subject on a par with other legal subjects that have independent capabilities.

Hadi Purnomo in his research results stated that the concept of criminal responsibility, which is generally based on an individual's ability to understand the meaning and consequences of his or her actions, realize violations of societal norms, and determine the will to act, cannot be fully applied to AI. AI does not have the understanding, consciousness, or free will required in a traditional criminal liability framework. In the legal framework in Indonesia, AI is recognized as an electronic system and electronic agent that operates based on human commands. Therefore, in the event of an unlawful act or act, the responsibility for criminal liability is more likely to be placed on the creator and user of the AI who provided the commands and parameters. Even though AI has the ability to carry out complex and intelligent actions, understanding the concept of criminal liability in AI requires a different approach. Criminal responsibility in the context of AI is more appropriately placed on humans who create, manage and control the technology. Therefore, it is necessary to develop clear and up-to-date legal regulations to address the dynamics of the use

of AI in society, by ensuring appropriate and fair accountability for actions carried out by this technology. In addition, the involvement of all stakeholders, including developers, regulators and the general public, is crucial in dealing with the legal and ethical complexities associated with AI developments.[30]

Then the existing laws in Indonesia do not specifically regulate the application of Artificial Intelligence (AI) in law. However, several laws relevant to the use of AI have been regulated, such as Law Number 11 of 2008 concerning Electronic Information and Transactions (UU ITE), Law Number 27 of 2022 concerning Personal Data Protection (UU PDP), Government Regulations Number 71 of 2019 concerning Implementation of Electronic Systems and Transactions (PP PSE)[31], Regulation of the Minister of Communication and Information Number 5 of 2020 concerning Implementation of Private Scope Electronic Systems (Permen PSE), as well as Law Number 28 of 2014 concerning Copyright (Copyright Law). Although it does not specifically regulate AI, this law can be used to monitor and regulate the use of AI-related technology. In the Indonesian legal context, AI has brought several significant benefits, such as time and resource efficiency, as well as improving the quality of decision making. However, the use of AI also raises ethical challenges and questions that need to be addressed, such as issues of privacy and data security to responsibility and accountability.

Even though there are no regulations that specifically regulate AI, the regulations are implicit in several of the rules above. Then the doctrine of responsibility for AI's actions applies in Indonesia as regulated in Article 31 of the Government Regulation on the Implementation of Electronic Systems and Transactions, that responsibility for every action of AI lies with its organizers. This is

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[30] Purnomo, "Criminal Liability for the Use of Artificial Intelligence in Indonesia."
[31] Fadiah Ghazmi, "Urgensi Pengaturan Artificial Intelligencepada Sektor Bisnis Daring Di Indonesia."

in accordance with the statement made by Shabrina in her research results that responsibility for AI′s actions can be the responsibility of the person or legal entity above it based on the doctrine of vicarious liability. However, for legal certainty related to AI, it is necessary to establish specific regulations that regulate AI as a preventive measure.

IV. Conclusion

The use of AI in law in Indonesia has many benefits, namely obtaining an efficient, practical, cost-effective, and time-effective judiciary. But besides that, there are negative impacts with the use of AI, including the increasing number of legal profession vacancies taken over by AI and fear of abuse in its use. AI developers must be transparent, considering that they must be open about the process and reasons for using AI, and people must be able to understand or interpret the system's behavior. Another concept is a divergent and non-discriminatory system. AI systems need to be developed and able to evade unwanted prejudice. AI must be beneficial to and consider all walks of life, including minorities. Therefore, AI developers must create inclusive AI systems for all communities in society, and the last is the principle of accountability. Someone must be responsible for the mistakes made by the AI system. AI systems need humans to take responsibility for their actions to prevent irresponsible actions.

For this reason, special legal provisions are needed for *Artificial Intelligence*. Another important thing is that the law must be dynamic to follow the dynamics of the development of human life, bringing benefits and justice. Therefore, the regulations formed do not hinder the innovation of AI, whose existence in various parts of the world has been recognized and utilized well in various fields. In countries with advanced internet use to facilitate

every aspect of their lives, the development of cyber law has been significantly advanced.

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