Topic: Human Right Issues of Artificial Intelligence (AI) Gaps and Challenges, and Affected Future Legal Development in Various Countries

# Analysis of the Role of Artificial Intelligence as a New Entity (Legal Subject) in Criminal Liability in Indonesia

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**Abstract.** *The development of human life in the era of the 4.0 industrial revolution is rapidly advancing, placing social relations in people's lives to be instant, fast, and easy. However, the interactions that take place are then perceived to be so complex in reality. The concept of "Cyber Physical Systems" in the Industrial Revolution 4.0 places humans and technology side by side. This development has enabled the emergence of various technological breakthroughs in fields such as Artificial Intelligence (AI). Based on the ability to perform actions to assist or replace human labor, artificial intelligence (AI) is worthy of being categorized as a legal subject. Moreover, if artificial intelligence performs legal acts, of course, it can be held legally liable (criminally). This paper aims to understand Artificial Intelligence as a New Entity (Legal Subject) in Criminal Law and how the Criminal Responsibility of Artificial Intelligence (AI) in Indonesia.*

*Keywords: Artificial; Criminal; Intelligence; Legal; Responsibility.*

## 1. Introduction

The rapid development of human life in the era of the 4.0 industrial revolution increasingly places social relations in a fast-paced and easy environment. However, the interactions that take place are perceived as complex in their reality. This is evidenced by the interaction carried out through the utilization of the pace of information technology as if the world were limitless, with the consequence that clashes of interest, violations of legal rules, or crime will also increase.

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The massive use of electronic devices (computers) and the internet has implications for the increased use of digital communication networks (information and electronic transactions). The concept of "Cyber Physical Systems" in the 4.0 Industrial Revolution places humans and technology side by side to facilitate everyday activities, especially in terms of speed, scope, and impact of systems. This development has enabled the birth of various technological breakthroughs that have emerged in fields such as artificial intelligence (artificial intelligence = hereinafter referred to as AI).

Artificial intelligence is a technological system that is programmed to solve problems or perform tasks in a way that resembles human thinking and behavior. Ed Burns, et.al in their writing titled "What is Artificial Intelligence?" states that Artificial Intelligence (AI) is the simulation of human intelligence processes by machines, specifically computer systems. Specific applications of artificial intelligence include expert systems, natural language processing, speech recognition, and machine vision. The rapid development of technology has shifted the working principles of artificial intelligence. Initially, artificial intelligence was created to assist human work. Now, artificial intelligence has been able to not only assist human work but also replace human work. Artificial intelligence as a technology in the form of a machine that can imitate human behavior, has the ability to think and has knowledge like humans, can carry out human thinking process. In the aspect of law enforcement, a device like AI can play a role in assisting the law enforcement process in carrying out technical administrative litigation, such as making decisions neatly, smoothly, and readably. AI can shape the law enforcement process by selecting the appropriate judge for the case at hand and adjusting it to the workload of a judge. Similarly, other law enforcement activities that can be carried out by AI include assisting law enforcement officers in finding perpetrators by tracking the whereabouts of criminal offenders. Based on its ability to perform actions that assist or replace human work, artificial intelligence deserves to be categorized as a legal subject. Moreover, if artificial intelligence commits acts that fall within the scope of legal acts, it is certainly subject to legal liability. The position of artificial intelligence should be equated with humans and legal entities (corporations) as bearers of rights and obligations.

If we look at several countries that have used AI technology in various fields, some of these countries have already positioned AI as a legal subject with rights and obligations. However, this is not yet the case in Indonesia because AI is not a legal subject under positive law in Indonesia. Therefore, in this case, it is necessary to explain in this study the responsibility for actions and legal acts carried out by AI, especially from the perspective of criminal law.

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Based on the problem description as in the introductory section, which contains the pros and cons of placing artificial intelligence as a legal subject and how the criminal liability of artificial intelligence is intended above, by conducting research "Analysis of the Role of Artificial Intelligence as a New Entity (Legal Subject) in Criminal Liability in Indonesia".

## 2. Research Methods

To obtain concrete data as a material for this research, the approach method used in this research is a juridical-normative (doctrinal) library research, which is carried out through library research or can also be called documentary research. In this research, the main source used by the author is Data, where the data used are Secondary Data (library materials). Within this Secondary Data, there are legal materials used by the Author, namely; Primary Legal Materials, Secondary Legal Materials, and Tertiary Legal Materials. In Primary Legal Materials, the Author will examine and obtain sources and basic foundations for research on "Analysis of the Role of Artificial Intelligence as a New Entity (Legal Subject) in Criminal Liability in Indonesia", through the applicable Laws and Regulations at that time. Such as the 1945 Constitution of the Republic of Indonesia, the Criminal Code (KUHP)/Law Number 1 of 1946, Law Number 1 of 2023 concerning the Criminal Code, Law Number 11 of 2008 jo. Law Number 19 of 2016 concerning Electronic Information and Transactions, and other Laws and Regulations. In secondary legal materials, which provide explanations regarding the above primary legal materials and are the supporting materials for this research, the Author uses literature (books) related to the research being studied, namely Academic Manuscripts of Draft Regulations, especially Drafts and Academic Manuscripts of the Criminal Code (KUHP), Books, Scientific Journals, Unpublished Research Results (Thesis, Dissertations). Other legal materials are tertiary legal materials, which are materials that provide guidance and explanations for primary and secondary legal materials, such as dictionaries, encyclopedia and other materials relevant to this research. Furthermore, the supporting or complementary data sources are Primary Data, which the author obtains through field research activities in the form of interviews with informants and related parties. The nature of the research description used in writing this research is descriptive, which is to explain how the law is made or designed and implemented, including the law enforcement process. The techniques used by the writer in this research are as follows: First: Document Study, which involves studying documents related to the research problem by reading and examining written literature documents as well as other relevant documents within the research framework. Document study is the initial step in every research, whether normative or sociological. Second: Interview, which is a question and answer process, face-to-face with the interviewee, aimed at obtaining more in-depth data related to the researched problem. Interviews are used in research to understand perceptions, beliefs, motivations, general and personal information. Regarding Data Processing

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and Analysis Techniques, data processing is done through editing, which is the process of re-examining the notes, files, and information collected by data seekers.[9] The data analysis used is qualitative analysis because the type of data used by the writer is in the form of criminal law formulation policies (penal policy) and several case examples. The data is presented in the form of sentences or words by the writer. [10]

## 3. Results And Discussion

### 3.1. Artificial Intelligence as a New Entity (Legal Subject) In Criminal Law in Indonesia in Indonesian Criminal Law

there are at least two known legal subjects: humans (persons) and legal entities. The first element of a criminal act in Indonesian criminal law is an act of a human being, in this case a natural person. Criminal law clearly states that natural persons (people or humans) are the first legal subject; humans are the bearers of rights and obligations.

Natural persons can be found in the formulation of the Criminal Code (KUHP) "Anyone..." both in the main crimes and in the additional crimes. In addition, one of the proofs in the examination of a criminal case is the existence or absence of fault on the part of the defendant. Proving fault means proving the mental state of a human being.

The element of "anyone" is the subject of criminal law, namely a person who bears rights and obligations, where the perpetrator does not have any grounds for extinguishing the criminal act so that he can be held accountable for his actions.

To become a legal subject, a person must meet certain qualities that are often determined by law or regulations. According to L.J. Van Apeldoorn, as quoted by Chidir Ali, a person in the juridical sense is anyone who has legal authority. Legal authority is the capacity to be a legal subject. Furthermore, it is stated that law is only binding on humans, because only humans can have subjective rights, meaning authority and obligations.

As another legal subject known as a corporation, it also has the responsibility to be punished like other legal subjects, namely individuals. Corporations often commit criminal acts, even though they are included in passive legal subjects, the criminal acts that occur will have wide and massive consequences.[12] For legal entities (Recht Persoon), criminal liability can be imposed because a legal entity is vested with rights and obligations that, if violated, can be held criminally liable.

A legal entity cannot commit a criminal act according to the Criminal Code, but the pengurus (management) of a legal entity can commit a criminal act using the name of the legal entity. As

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regulated in Article 59 of the Criminal Code "In cases where criminal sanctions are determined against pengurus, members of the management board or commissioners due to a violation, then pengurus, members of the management board or commissioners who are found not to have participated in the violation shall not be punished."

According to L.J. van Apeldoorn, "To be able to perform legal acts, certain conditions are required, namely legal subjects who have the capacity to hold rights, the capacity to hold the relevant rights must be distinguished from their capacity in legal acts as for minors and persons under guardianship are called legal subjects because they have rights. However, from a legal point of view, such persons are declared incapable of performing legal acts. In this case, it is the law that determines whether or not a legal subject is eligible.

Based on the explanation, it can be understood that something can be declared as a legal subject or not determined by the current applicable law. Just like artificial intelligence, artificial intelligence, like other legal subjects, have rights and obligations, and its actions must be regulated by legal norms. Artificial intelligence cannot be equated with humans as a whole because artificial intelligence does not possess human characteristics, but artificial intelligence is equated with the same legal status as a legal subject.

Artificial Intelligence that can perform legal actions must be given a clear legal status. The legal position of Artificial Intelligence can be applied in specific laws on Artificial Intelligence as legal subjects, similar to legal entities specifically regulated in "Law No. 40 of 2007 concerning Limited Liability Companies", "Law No. 16 of 2001 concerning Foundations", "Law No. 17 of 2012 concerning Cooperatives", the Criminal Code, and others. In progressive law, the development of Artificial Intelligence as Artificial Intelligence is one of the new breakthrough examples that have shifted from illogical to logical, from impossible to possible.

Artificial Intelligence that can act without the inherent human consciousness has proven its ability to surpass humans in performing an action. This also allows Artificial Intelligence to be placed as a legal subject in the development of positive law in Indonesia. Similar to legal entities, Artificial Intelligence also has responsibilities, namely the Creator of Artificial Intelligence and the User of Artificial Intelligence who have their respective rights and obligations. For a clearer legal certainty regarding accountability for legal actions carried out by Artificial Intelligence, the User of Artificial Intelligence and the Creator of Artificial Intelligence can create authentic deeds as the identity of Artificial Intelligence. In addition, government agencies can also establish a special Artificial Intelligence department to handle Artificial Intelligence disputes that arise.

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In the context of Artificial Intelligence as a New Entity (Legal Subject) in Criminal Law in Indonesia, it is not clearly regulated whether AI is a legal entity or legal subject. AI is a system created to provide convenience for humans to work, engage in activities, and interact, and AI can even be created to exceed the capabilities of the average human.

However, AI is not the same in terms of criminal responsibility as individuals or legal entities, which are groups of people who collectively determine their goals. AI, on the other hand, is a computer system or artificial intelligence designed for the benefit of humans under the command of the operator. The criminal responsibility of AI is not the same as that of humans or legal entities (corporations), so it is important to establish AI as a new entity as a separate Legal Subject regulated by its own specific laws.

## 3.2. Criminal Liability of Artificial Intelligence (AI) in Indonesia

Criminal liability refers to the punishment of perpetrators who have committed a criminal act and fulfill the elements specified in the law. According to Romli Atmasasmita, criminal liability is defined as a legal obligation in criminal law to provide retribution to the perpetrator who caused harm to others.[19]

Criminal responsibility means that in the event of a prohibited act punishable by law, it is necessary to determine who should be held accountable for the act, in order to receive or impose the prescribed penalty. Accountability is about how we should be responsible in criminal law or how to demand accountability from individuals or entities in criminal law. The ability to be accountable reflects the fault of the perpetrator in the form of intent or negligence.

Accountability is a legal obligation for every specific legal subject, which includes individuals and legal entities. Therefore, accountability can be demanded from individuals or legal entities if they commit a criminal act, and the consequences must be borne by the individual or entity responsible for it (right to execute something). From the perspective of accountability capability, only someone who is 'capable of being responsible' can be held accountable for criminal acts. The ability to be responsible is based on the condition and capacity of the 'soul'.

A person is considered capable of being responsible when, generally, firstly, their mental condition is not disturbed by continuous or temporary illnesses, they are not physically impaired in growth, not influenced by hypnosis, subconscious influence, etc. In other words, the person must be conscious. Secondly, their mental capacity: They can understand the nature of their actions, determine their will regarding the action, whether it will be carried out or not, and understand the wrongfulness of the action.

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A person is considered to lack the ability to be responsible when their mental or soul condition is sick, their mental or soul condition is too young so their psyche is not yet mature, and their mental function is impaired due to a disturbance that prevents them from functioning properly. The ability to be responsible must be able to distinguish between right and wrong, what is in accordance with the law and what is against it (Intellectual Factor), and must be able to determine their will based on consciousness of the rightness or wrongness of the action (emotional or volitional factor).

In the context of Artificial Intelligence (AI), some legal issues that may arise from the existence of intelligent AI-based agents include: who should be held accountable in court if a robot (fully autonomous, operating without human control) commits an act that causes serious injury or death? Furthermore, can intelligent machines be subject to criminal law? [20]

Regarding the concept of criminal liability towards AI according to Gabriel Hallevy, there are 3 models:
1. The Perpetration by Another Liability Model AI is considered as a tool or a system that has no liability at all, so when a violation occurs, the responsibility lies with the programmer or user.
2. The Natural Probable Consequence Liability Model Criminal liability can be imposed on the programmer or user if AI is considered a guilty agent, and it can also be imposed on the AI system itself.
3. The Direct Liability Model Liability can be attributed to the AI itself and its enforcement is no different from human accountability.

Based on the three accountability models above, it appears that there are AI systems that are used as tools and are not legal subjects that can be held criminally responsible. However, on the other hand, there are AI systems that are treated as legal subjects and can be held criminally accountable for their actions.

Regulating AI in the national legal system becomes important to provide legal space, therefore the concept of regulating AI regarding Criminal Liability in Indonesia is based on at least 3 aspects. The legal status of AI in Indonesia itself is not specifically regulated in the current applicable laws. However, AI can be treated as a legal entity and have legal responsibilities in certain cases.

Firstly, AI can be considered as a legal subject. This means that AI can have legal rights and obligations, like a company or individual. As a legal subject, AI can enter into contracts and be held legally liable for the actions it takes. Secondly, AI can be regulated by laws governing technology. Thirdly, AI can have legal responsibility. If AI takes actions that harm others, such as violating copyrights or privacy, then AI can be sued in court. In this case, it is clear that the law

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must be able to look far ahead (futuristic) so that the law does not lag behind society itself. So that the law that should be a tool to create a welfare state will not be achieved. Therefore, the law as a means of social renewal must be able to regulate new developments, new technologies, and changes due to the above by viewing Artificial Intelligence as a New Entity (Legal Subject) in Criminal Law in Indonesia, we can comprehensively examine the need to include provisions for AI itself in laws and regulations explicitly and clearly. AI needs to be regulated specifically, both as a legal subject and for its potential criminal liability. The similarities between AI entities and humans and legal entities as legal subjects have legal consequences that will affect legal interests in Indonesia. Considering the rapid development of information technology that can be carried out by AI, then the legal consequences must also be anticipated.

## 4. Conclusion

In the context of Artificial Intelligence as a New Entity (Legal Subject) in Criminal Law in Indonesia, it is not clearly regulated whether AI is an entity or legal subject or not. AI is a system created to provide convenience for humans to work, do activities, or interact, even AI can be created beyond the capabilities of humans in general. However, AI is not the same in criminal liability, as well as a legal entity which is a group of people who together determine their goals. Meanwhile, AI is a computer system or artificial intelligence that is intended for the benefit of humans at the command of the person who operates it. The (criminal) responsibility of AI is not the same as humans (people) or legal entities (corporations), therefore it is important to establish AI as a new entity as a separate Legal Subject regulated by a separate (specific) Law. It appears that AI can function as a tool so it is not a legal subject that can be held criminally liable. However, on the other hand, there is also AI that is placed as a legal subject so that AI can be held criminally liable for the actions it takes. By looking at Artificial Intelligence as a New Entity (Legal Subject) in Criminal Law in Indonesia, then it can also be comprehensively considered the need to include AI provisions themselves in regulations clearly and explicitly. AI needs to be regulated specifically, both as a legal subject and its potential criminal liability. The similarities between AI entities and humans and legal entities as legal subjects have legal consequences that will affect legal interests in Indonesia. Considering the rapid development of information technology that can be carried out by AI, then the legal consequences must also be anticipated. The government can revise a number of Laws and Regulations (Laws and Government Regulations) such as the Criminal Code (KUHP)/Law Number 1 of 1946 jo. Law Number 1 of 2023 concerning the Criminal Code, Law Number 11 of 2008 jo. Law Number 19 of 2016 concerning Electronic Information and Transactions, and other Laws and Regulations, by including material provisions that clarify and strengthen the role of Artificial Intelligence as a New Entity (Legal Subject) and the Criminal Liability that can be imposed on it.

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