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Criminal liability for the use of artificial intelligence in Indonesia

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Keywords

Accountability, Crime, Artificial Intelligence.

Abstract. Artificial intelligence (AI) has become an integral part of various sectors in Indonesia, making a significant contribution to increasing efficiency, productivity and innovation. However, this rapid development has also given rise to various legal challenges, especially regarding criminal liability for the use of AI. This research aims to analyze the legal framework that applies in Indonesia regarding policies and criminal liability for the use of artificial intelligence. This research uses normative legal research methods through a statutory approach. The research results show that the concept of criminal liability that applies to individuals is not fully applicable 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 responsibility 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.

1. INTRODUCTION

The development of the times has brought the role of technology into an increasingly greater dimension of human life. The Industrial Revolution 4.0 is an important milestone in this evolution, where automation and interconnectivity are increasingly widespread (Yani & Damayanti, 2021). One concrete manifestation of this technological development is Artificial Intelligence (AI). AI is a branch of computer science that focuses on creating intelligent machines, capable of doing work like humans do, and in some cases can even surpass human performance (Rajagukguk, 2023).

Two key components that enable the development of AI are big data and algorithms. Big data provides the ability to store and manage massive volumes of data, which then become a source for searching for relevant information . This allows AI systems to automate learning and iterative discovery, improving their capabilities over time (Djafar, 2019). On the other hand, algorithms are used by AI to discover structures and patterns in data, forming the basis for classification and prediction functions. By combining big data and algorithms, AI becomes a force capable of providing intelligent solutions in various life contexts (Sumadi et al, 2022).

AI has dominated various sectors of human life, making major contributions to fields such as medicine, business, finance, education, law and manufacturing. This massive transformation creates an extraordinary impact, changing the way we work, communicate and interact with the world around us (Priowirjanto, 2022). In the medical field, AI is used for disease diagnosis, drug development, and personalization of patient care. Business and finance leverage AI for data analysis, market trend prediction, and risk management. Education integrates AI in adaptive learning processes, while in the legal field, AI is used for document analysis and predicting case outcomes (Wiratraman & Putro, 2019).

The use of AI in everyday life is also becoming more prominent. The Google Assistant application, which is present on most smartphones, provides a human interaction experience with digital devices. Siri, Apple Inc.'s personal assistant, showcases AI's ability to understand human language and can be accessed through the company's products. In fact, Tesla introduced a driverless car that uses AI technology to drive itself and adapt to traffic conditions in real-time. Along with these developments, the role of AI in various fields continues to expand, offering the potential to increase efficiency, innovation and convenience in everyday life (Tanduklangi & Amri, 2019).

The ability of AI to carry out actions like humans provides its own complexity in the legal context, especially in Indonesia which does not yet have specific legal regulations regarding AI (Ravizki & Yudhantaka, 2022). Problems arise when AI commits criminal acts that have the potential to harm other parties, such as making unethical decisions or violating legal norms. In this case, the

development of AI regulations in Indonesia is still limited, leaving legal gaps that need to be addressed immediately (Kurniawwijaya et al, 2021).

In its development, several efforts have been made to fill the legal gaps related to AI. Several organizations and legal experts in Indonesia have advocated for the need for clearer and stricter regulations on the use of AI. The emergence of these initiatives reflects awareness of the potential risks and impacts that AI technology can produce without adequate legal regulations (Amboro, 2021).

From a criminal law perspective, accountability for the use of AI is the focus of attention. The absence of specific regulations creates challenges in determining legal responsibility related to criminal acts committed by AI (Kurniawan, 2023). Therefore, it is necessary to formulate legal regulations that lead to accountability of those who manage and use AI to prevent potential risks and protect the rights of affected parties. Developing comprehensive and adaptive regulations for the development of AI technology is a crucial step in ensuring security, fairness and sustainability of AI use in Indonesia (Fatmawati & Raihana, 2023).

The question of the legal status of AI becomes essential in the context of unclear regulations in Indonesia. So far, the basic question that has arisen is whether AI can be categorized as a legal subject if it has the ability to make decisions or carry out its own actions. In some views, considering AI as a legal subject could open the door to clearer legal accountability for the actions it produces. However, other views argue that AI should be considered a non-legal tool or entity. If AI commits a criminal act, further questions arise regarding criminal liability. Here, the key issue is whether AI can be held criminally liable or whether such responsibility should be placed on the party who designed, managed, or used the AI. Several jurisdictions around the world have begun to examine the concept of legal liability regarding AI, with some countries moving towards liability for human parties involved in the development and use of AI.

2. METHOD

This research adopts a normative juridical method, which focuses on the study of library materials involving legal norms and principles contained in statutory regulations as well as literature outside the law (Marzuki, 2013). In order to develop a legal framework related to the use of artificial intelligence in Indonesia, this research uses a statutory approach. This approach allows researchers to investigate and analyze all statutory regulations relevant to the legal issues being discussed. Apart from that, this research also applies a conceptual approach which involves various views and doctrines in legal science. This approach provides insight into legal thinking and theories that can be the basis for building legal arguments in solving problems related to AI. By integrating various conceptual perspectives, this research aims to provide a comprehensive and in-depth picture of the legal regulation of AI in Indonesia.

3. RESULTS AND DISCUSSION

Artificial Intelligence, or what is usually called artificial intelligence, is a technological concept that combines the elements "artificial" which means not real, and "intelligence" which refers to intelligence. Linguistically, this term includes the development of computing systems that have the ability to think and respond in a similar way to human intelligence. In the context of the definition, AI includes devices and tools designed to assist in various jobs, with thinking and reasoning abilities that can imitate the level of human intelligence (Sihombing & Syahputra, 2020).

The main goal of AI development is to provide support in carrying out complex tasks in an intelligent way, which previously could only be done by humans. The decision-making process by AI is based on commands given by humans. AI is able to receive data, process it, and then formulate decisions to complete a particular job. Thus, AI becomes an effective tool in helping humans in daily activities and work that require complex data analysis and fast decision making (Jaya & Goh, 2021).

The use of AI covers various fields, from industry, healthcare, finance, to everyday life. Through sophisticated data processing, AI makes a significant contribution to increasing efficiency, productivity and innovation in various sectors. As technology develops, expectations and challenges

regarding the ethics, security and regulations of AI continue to be important discussions in optimizing the benefits of this technology for the progress of society (Yudoprakoso, 2019).

Looking at AI technology that can perform actions like humans, of course this is the basis for legal regulations in a country to have regulations specifically related to AI. In Indonesia, legal regulations relating to technology are Law no. 19 of 2016 in conjunction with Law no. 11 of 2008 concerning ITE, AI is classified as an electronic system and electronic agent.

> *Article 1 number 5 Law no. 19 of 2016 states "Electronic systems are a series of electronic devices and procedures that function to prepare, collect, process and analyze, store, display, announce, transmit and/or disseminate electronic information."*
> *Article 1 number 8 Law no. 18 of 2016 states "An electronic agent is a device from an electronic system that is created to automatically carry out an action on certain electronic information held by a person."*

Looking at the characteristics of AI that are in line with the definition of an electronic system, there are many compatibility that attract attention in the context of legal regulations. AI, as a form of electronic system, has the ability to collect, process, and analyze data with a level of artificial intelligence. These systems can execute complex tasks involving language understanding, decision making, and even self-directed learning. Thus, AI reflects the characteristics of an electronic entity that not only facilitates the storage and transfer of data, but also involves more complex and in-depth interactions.

The way AI works, which involves data collection, processing, analysis and delivery of electronic information, strengthens the argument that legal regulations related to ITE in Indonesia can embrace AI as part of its regulations. As technology continues to develop and the role of AI becomes increasingly important, it is important to ensure that regulations not only reflect current understanding of the technology but can also respond to future changes and innovations. Therefore, involving AI in the existing regulatory framework is a wise step to anticipate the challenges and benefits that arise from the development of this technology. Top of Form

Classifying AI as an electronic agent is in line with the concept of classifying AI as an electronic system. The difference between the two is not very significant, because both reflect aspects of automation in AI actions and actions based on human commands. Within Indonesia's legal regulatory framework, the classification of AI as an electronic agent or system has an impact on the way AI is regulated and treated under the law.

It is important to note that in Indonesian legal settings, AI is not recognized as a legal subject, but is considered a legal object. In this context, AI is seen as technology operated by humans, and the party responsible for the use and actions of AI is referred to as the Electronic System Operator. This means that even though AI has the ability to carry out actions automatically, the responsibility for its use remains with the human who operates it. With an emphasis on the role of Electronic System Administrators, this arrangement highlights the need to maintain human accountability and control over AI. Even though AI is automatic, policies and responsibilities for its use must remain under human control to ensure the use of this technology is in line with applicable ethical values and legal norms.

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 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.

Van Hamel proposed a concept of criminal responsibility that involves three important aspects of a person's normal psychological state and abilities. First, individuals are considered criminally responsible if they are able to understand the true meaning and consequences of their actions. This includes a deep understanding of the implications of actions taken, both related to legal norms and their impact on other parties or society. Second , individuals are also considered responsible if they are able to realize that their actions are contrary to the norms that apply in society. Awareness of the inconsistency between the actions taken and social values is a significant indicator of criminal responsibility. This reflects an individual's ability to assess and recognize violations of applicable legal or ethical norms.

Finally, criminal responsibility also requires the ability to determine the will to act. This includes an individual's ability to consciously and of his own free will decide to do or not to do an action. This concept emphasizes that individuals who have free will and are able to consciously control their actions can be considered criminally responsible. This entire concept builds the basis for assessing criminal responsibility which considers psychological aspects and individual abilities in a legal context.

In the context of the use of Artificial Intelligence (AI), the concept of criminal responsibility put forward by Van Hamel can be considered critically. First, AI does not have the ability to truly "understand" the meaning and consequences of its actions. Although AI can process data and generate actions based on applied programming, such understanding is limited to logic and algorithms that

have been established by humans. AI does not have the awareness or understanding that humans have of the moral or ethical implications of the actions it carries out. Second, AI cannot determine the will to carry out an action. AI decisions and actions are completely dependent on commands and parameters that have been programmed by humans. AI does not have free will or the ability to choose outside a predefined logical framework. This is different from humans who have the freedom to make decisions and are responsible for their actions. Third, AI also has no awareness of carrying out legal actions. In the context of criminal liability, awareness of legal and ethical norms is an important factor. AI does not have the ability to realize these concepts independently; he only carries out actions based on the orders and algorithms that have been implemented, without understanding the meaning or legal implications of his actions.

Therefore, based on the limitations that AI has in meeting the criteria for criminal liability as stated by Van Hamel, it can be concluded that AI does not have the ability to become a legal subject that can be subject to criminal liability. AI has no understanding, consciousness, or free will in the context of the actions it performs. Therefore, assigning direct criminal liability to AI is not in accordance with the basic principles of criminal liability which are usually applied to individuals who have certain psychic abilities and skills. In the use of AI, the criminal law perspective tends to place responsibility on the creators and users of AI. If an AI performs an action or deed that violates the law, the AI creator or the user who provides the commands and parameters is the party responsible. This is in line with the concept that humans who create and control AI technology must bear responsibility for the actions produced by the AI.

4. CONCLUSION

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.

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