



Original Article

Ai, Ethics, and Law: Who is Responsible?

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Abstract:

In Indonesian law, only humans and legal entities are recognized as legal subjects. The development of AI capable of independent thought and action raises new issues when its actions cause harm, because AI is not yet recognized as a legal subject. As a result, civil liability for AI actions remains unclear and creates a legal vacuum. This study aims to analyze the relationship between AI, ethics, and law in the context of liability for actions generated by artificial intelligence systems. The research method is normative with a comparative approach, comparing legal policies in several countries that have begun to formulate a legal framework for AI, such as the European Union, the United States, Japan, and South Korea. The results of the study show that Indonesia needs to immediately establish specific regulations governing the legal status and responsibility of AI in the realm of civil law. This law is expected to provide legal certainty, protect the rights of the people, and create a balance between technological progress and the principles of legal justice.

Keywords: Civil Law, Artificial Intelligence, Onrechtmatige daad

Introduction

Artificial intelligence (AI) now plays an increasingly important role in people's lives. AI is a branch of science and technology that focuses on developing computer systems capable of mimicking human intellectual abilities (Anton, 2024). This technology is designed so that machines not only execute commands mechanically, but can also think like humans through their ability to learn from experience (machine learning), understand complex patterns and data, and adjust their responses based on the information obtained (Rizka, 2024). Applications such as ChatGPT and Dall-E, which are capable of independently generating text and images, are increasingly in demand. However, this progress also raises issues of ethics, values, and responsibility, as AI creations have the potential to spread misinformation and undermine democratic principles, while it is difficult to hold humans accountable (Hadiyanto, 2025). On the other hand, AI technology can help shape a more efficient and rational society, although it has both positive and negative impacts.



In this context, technology is often associated with issues of social values, ethics, and responsibility. Various social measures, such as regulations on AI and its application in various sectors of society, are currently being discussed ([Sebayang et al., 2024](#)). The relationship between AI and ethics can be understood through two main perspectives. First, AI plays a role in automating various human processes and activities. Second, AI's ability to generate disinformation and fake news presents ethical challenges that have the potential to affect social life and the structure of society at large ([Winkel, 2025](#)).

In addition, the legal framework governing AI also highlights the ethical aspects of this technology and seeks to determine who should be responsible for the ethical and social risks that may arise from its development. In this context, the relationship between ethics and responsibility is important because both relate to social actions that can have a positive or negative impact on others. Ethics reflects general norms regarding good and bad behavior in society, while responsibility refers to more specific relationships between individuals, including the obligation to protect the welfare of others ([Raharjo, 2023](#)). In the context of AI, these two concepts are being questioned again because this new technology increasingly blurs the boundaries between humans, their actions, and the consequences of those actions on the lives of others.

On the other hand, the transparency and accountability of AI are also important issues because many AI systems operate as black box systems, making it difficult to trace the logic or basis for decision-making behind the algorithms used. These challenges require the integration of ethics and law in regulating and overseeing the development of AI so that it does not only focus on technological innovation, but also guarantees the protection of human rights, social justice, and legal certainty ([Maulana, 2023](#)). In addition, the autonomous nature of AI raises fundamental questions in the legal sphere, particularly with regard to criminal liability. When an AI system acts independently and causes a crime to be committed, the question arises as to who should bear responsibility: the developer, the user, or the AI system itself. This issue shows that the law needs to transform adaptively to anticipate new challenges posed by intelligent technology.

Within the framework of conventional criminal law, criminal liability is generally based on the existence of human fault or malicious intent. In the context of AI, proving this intent becomes problematic, especially when the system operates based on complex algorithms that are not fully understood by either the developer or the user ([Wahyudi, 2025](#)). Another challenge arises from the limited ability of law enforcement officials to understand and master artificial intelligence (AI) technology. Crimes involving AI generally use highly complex technology, requiring in-depth knowledge for the identification, analysis, and proof of legal violations.

In many countries, including Indonesia, limited human resources, infrastructure, and technological support remain major obstacles to law enforcement. Law enforcement agencies often lack access to adequate digital forensic tools to investigate AI-based crimes, especially when dealing with large-scale cyber attacks. In the context of Indonesian law, the issue of AI liability is not explicitly regulated in legislation ([Atiyah et al., 2025](#)). Positive law still focuses on humans as legal subjects with consciousness and will. Meanwhile, AI, as an entity that is different from humans, cannot yet be qualified as a legal subject with independent legal responsibility.

Thus, this study aims to analyze the relationship between AI, ethics, and law in the context of responsibility for actions generated by artificial intelligence systems. The approach in this legal research adopts a normative juridical approach with data collection techniques

through a review process of national legislation, articles, and news from reliable sources that discuss AI and its relationship with law in the Republic of Indonesia. In addition, this study also adopts a comparative approach, which is done by comparing laws and regulations with other countries.

Research Method

This research was conducted by adopting a normative legal study with a comparative approach, which means examining articles, news, and national legislation applicable in Indonesia and then comparing them with regulations in other countries related to AI. Through a comparative approach, this study also examined regulations and legal policies related to AI in several other countries that have developed more advanced legal frameworks, such as the European Union, the United States, Japan, and South Korea. The purpose of this approach is to identify differences and similarities in legal regulations regarding responsibility for AI actions and to draw lessons that can be applied in the context of the Indonesian legal system.

The data used in this study is secondary data, which includes primary, secondary, and tertiary legal materials. Primary legal materials consist of national legislation, such as Law Number 11 of 2008 concerning Electronic Information and Transactions (ITE Law) and other related regulations, as well as international legal instruments such as the Budapest Convention on Cybercrime. Secondary legal materials include academic literature, scientific articles, news, and publications discussing the relationship between AI, ethics, and criminal law. Meanwhile, tertiary legal materials are used as support to strengthen the understanding of terminology and conceptual context (Soekanto & Mamudji, 2018).

Data analysis was conducted qualitatively by interpreting and examining existing legal substance to find the compatibility between legal theory, ethical principles, and the reality of AI technology implementation. The results of the analysis were then used to formulate legal arguments regarding the most appropriate form of criminal liability in dealing with legal issues arising from AI systems.

Result and Discussion

Digital transformation has become a hot topic for many people, especially in relation to the working environment. Rapid technological developments are encouraging companies in various sectors to continuously adapt by utilizing these developments in order to remain competitive. Digital transformation is not only related to the adoption of new technologies, but also includes changes in work culture and organizational operational patterns (Headrick, 1970). Digital transformation is the process of applying digital technology to all aspects of a business, fundamentally changing the way companies operate and providing added value to customers. This process involves the use of technologies such as AI, big data, the Internet of Things (IoT), and cloud computing to improve efficiency, develop innovative products and services, and enhance the customer experience (Rizka, 2024). According to research conducted by McKinsey, the long-term potential of AI is estimated to reach \$4.4 trillion in the form of productivity gains from various applications in the corporate sector. In the next three years, 92 percent of companies plan to increase investment in AI (Tesaloni, 2023). Thus, although digital transformation and the application of AI bring great opportunities for business efficiency and innovation, these developments also pose new challenges in social aspects, especially regarding the risk of dehumanization in working relationships.

Corporate investment in AI has a major impact on social aspects, such as dehumanization in working relationships. AI in company operations threatens the position of humans as workers,

widening the gap between groups of people who have access to technology and those who have less access to technology. AI used in recruitment risks introducing algorithm-based discrimination and has the potential to make people feel that they are losing their role in society that has been attached to their work (Atiyah et al., 2025). The development of AI in the workplace has significant implications for industrial relations and the protection of workers' rights (Amboro & Komarhana, 2021). In this context, there is a need to update the labor law framework to be more adaptive to the realities of digital work, including the application of “algorithmic management,” which is a system of monitoring and decision-making carried out automatically by algorithms. This practice has the potential to reduce worker autonomy and create inequality in labor relations because decisions regarding recruitment, performance appraisal, and termination of employment can be made without human intervention. Therefore, it is important to regulate the rights of digital workers, such as algorithm transparency, the right to explanation, and the right not to be excessively monitored by AI systems. These regulations not only aim to protect the dignity and privacy of workers, but also ensure that technology is used to support productivity in an ethical and fair manner. Thus, labor regulations in Indonesia need to be expanded to include technology monitoring mechanisms and adequate legal protection for workers in the digital age.

In the social sphere, the misuse of artificial intelligence is also often found in the form of the spread of false information (hoaxes), data and media manipulation (deepfakes), and a decline in social interaction due to dependence (Mardayanti et al., 2024). Through the application of robotic process automation and machine learning, various job positions, such as cashiers, operators, data analysts, and customer service representatives, can be replaced by an algorithm-based system. Not only that, workers in the legal field may also be threatened with replacement by AI. Workers in the fields of paralegal, legal research, and contract drafting are predicted to be replaced by AI. Professions such as paralegals, which involve document analysis and legal research, are examples of jobs that have the potential to be disrupted by automation, given the sophistication of AI in efficiently processing and analyzing large amounts of documents. This is reinforced by a study conducted by Stanford in 2025, which found that AI tools such as Harvey and Co Counsel can analyze data with 90% accuracy (Marsha & Pertiwi, 2025). This development does not merely reflect technological progress that we must accept openly and view only from a positive perspective. Rather, we must also be critical of the fact that technological development creates profound structural disruptions, requiring countries to have legal regulations that can comprehensively adapt to such technological advances.

This is reinforced by the fact that AI does not only have an impact on social aspects, but also has a significant impact on economic aspects. According to the World Economic Forum (WEF) report in 2023, around 83 million jobs are expected to be lost globally by 2027 due to increased automation and the use of AI-based technology, although at the same time it is estimated that 69 million new types of jobs requiring advanced digital skills will be created (Rizka, 2024). This data shows a major transformation in the labor market structure that has the potential to widen the gap between highly skilled and low-skilled workers. In addition, the International Labor Organization (ILO) highlights the significant economic inequality in the digital economy, where micro, small, and medium-sized enterprises (MSMEs) face difficulties in adopting AI technology due to limited capital, infrastructure, and competent human resources (Anton, 2024). This situation has led to the dominance of large companies in the use of AI becoming even stronger, while small businesses are lagging behind in digital transformation. Thus, the development of AI not only raises legal and ethical challenges, but also demands inclusive economic policies so that the benefits of technology can be felt equally across all levels of society.

With the replacement of human labor by AI, accompanied by the growing potential that

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humans can actually be replaced by AI, legal issues arise: (1) Can AI be considered a legal entity? (2) Who is responsible if AI commits an unlawful act in the course of its work? In the realm of civil law, unlawful acts (*onrechtmatige daad*) can be defined as acts that violate written laws, customs, morality, and propriety ([Haris & Tantimin, 2022](#)). This unlawful act is regulated in Article 1365 of the Civil Code, which states: “Every act that violates the law and causes harm to another person obligates the person who caused the harm to compensate for it.” Through this article, it can be concluded that there are at least four main elements of PMH, namely: (1) the existence of an act (*daad*); (2) the act is unlawful (*onrechtmatige daad*); (3) the existence of fault (*schuld*); and (4) the existence of damage (*schade*).

Humans are legal subjects and can therefore be held accountable if they commit a crime or violation under Article 1365 of the Civil Code. However, what about AI, which is not recognized as a legal subject in civil or national law? According to the Civil Code, legal subjects are only humans and legal entities. Article 1 paragraph 2 of Law Number 13 of 2003 concerning Manpower states that “Manpower is every person who is able to perform work to produce goods and/or services to meet their own needs or those of the community.” This does not adequately accommodate the current situation where production processes and other work are no longer carried out solely by humans, but can also be performed by AI. This situation requires the state to immediately revise the Manpower Law, followed by the formulation and ratification of specific regulations regarding AI and its application in the world of work. These regulations must include provisions on the recognition of algorithmic systems as part of the employment relationship, the obligation of transparency in algorithm-based decision-making mechanisms, the protection of workers' personal data, the guarantee of workers' fundamental rights in the digital era, the position of AI in Indonesian law, and the accountability of AI ([Awangga, 2020](#)). As a country governed by the rule of law as stipulated in Article 1 paragraph (3) of the 1945 Constitution of the Republic of Indonesia, Indonesia is obliged to ensure that every citizen receives protection of their rights. This is emphasized in Article 28 paragraph (2) of the 1945 Constitution of the Republic of Indonesia, which reads: “Every person has the right to work and to receive fair and proper compensation and treatment in their employment relationship.”

The Indonesian state also needs to conduct comparative studies with international legal practices or other countries in particular, such as the European Union, the United States, Japan, and South Korea. Comparatively, regulations regarding the legal status of AI show variations in approach across different jurisdictions. The European Union, through the Artificial Intelligence Act of 2024, does not establish AI as a legal subject, but rather places legal responsibility on parties involved in the AI system life cycle, such as providers, operators, and users. This approach emphasizes the principle of human accountability behind technology. In the United States, the legal system places greater emphasis on the concept of liability of manufacturer, whereby legal responsibility is imposed on AI developers or manufacturers in the event of losses resulting from the use of the systems they have created. In contrast to these two regions, Japan and South Korea have begun discussing the idea of electronic personhood, a concept that considers the possibility of granting limited legal status to AI entities, although there has been no formal legal recognition to date ([Respati, 2024](#)). This comparison shows that Indonesia needs to determine a clear regulatory direction, not by making AI a legal subject, but by emphasizing the legal responsibilities of the parties that create, operate, and utilize this technology.

In a global context, the development of AI cannot be separated from the ethical framework that forms the basis for policy and legal regulation. One of the main references is the OECD AI Principles, which were ratified in 2019 and emphasize the importance of the principles of transparency, fairness, accountability, and human-centered values. These principles affirm that

every application of AI must be able to guarantee openness in the decision-making process, not cause discriminatory bias, and continue to prioritize the interests of humans as the main subject (Wahyudi, 2025). In addition, the UNESCO Recommendation on the Ethics of Artificial Intelligence of 2021 broadens the ethical perspective by highlighting the values of human dignity, justice, and sustainability. This recommendation encourages countries to ensure that AI development is in line with human rights and does not cause adverse social impacts. Based on these two frameworks, it can be understood that AI ethics are not only normative in nature, but also form the foundation for the establishment of responsible and fair legal regulations at the national and international levels.

The development of AI in Indonesia is faced with a vacuum of law and the weak position of AI ethics in the national legal system. Existing regulations, such as Law Number 1 of 2024 concerning the Second Amendment to the ITE Law and the Circular Letter of the Minister of Communication and Information Technology Number 9 of 2023 concerning Artificial Intelligence Ethics, have not been able to provide a strong legal basis for regulating the responsibilities, positions, and limitations of AI use (Rasyidah et al., 2024). Based on these conditions, this study recommends the formulation of a specific law on AI that comprehensively regulates the legal, ethical, and responsibility aspects of its application. In addition, it is necessary to revise the Labor Law to accommodate the reality of digital work that is increasingly dependent on algorithmic systems, as well as to strengthen digital literacy for law enforcement officials so that they are able to understand and effectively handle crimes involving AI technology. Reflectively, Indonesian law must be able to adapt to technological developments without losing its identity as a protector of human values. The basic principle that technology must be in favor of humans needs to be the foundation of every legal policy, so that digital progress not only brings efficiency, but also guarantees justice, dignity, and the human rights of every individual in the era of artificial intelligence.

Conclusion

The conclusion of this study is that the development of artificial intelligence (AI) has major implications for social, economic, and legal aspects in Indonesia. Amidst rapid digital transformation, there is still a legal vacuum that has led to uncertainty regarding legal responsibility and the position of AI in the national legal system. AI is not yet recognized as a legal entity, while existing regulations, such as the Electronic Information and Transactions Law and the Minister of Communication and Information Technology Circular Letter No. 9 of 2023, are not yet able to substantively regulate the ethical aspects and accountability of AI. Therefore, there is a need to formulate a specific law on AI, revise the Manpower Law, and improve the digital literacy of law enforcement officials to face legal challenges in the era of autonomous technology. This study emphasizes that Indonesian law must be adaptive to technological advances, while remaining grounded in the values of humanity, justice, and the protection of human rights as the basis for responsible AI regulation.

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