



# Application of Vicarious Liability Principles to Losses from the Use of Artificial Intelligence (AI) from a Civil Law Perspective

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**Abstrat:** The existence of *Artificial Intelligence* (AI) as an artificial intelligence system not only provides many benefits but can also cause losses in its use if the AI produces an error that causes harm to others. The occurrence of losses due to the use of AI is certainly related to who is responsible and what form of liability is incurred for the losses caused. The purpose of this study is to determine the form of liability for the use of AI that causes harm based on the principle of *vicarious liability* or substitute liability. The research method used in this study is normative legal research with a *statute approach* and a *conceptual approach*. The results of the study show that, from a civil law perspective, AI cannot be categorized as a legal subject, whereby actions performed by AI are not legal actions that can be held liable. Therefore, the form of liability that can be applied to losses arising from the use of AI is the application of the principle of *vicarious liability*. In civil law, liability can generally take the form of unlawful acts (Article 1356 of the Civil Code) and vicarious liability (Article 1367 of the Civil Code). The principle of *vicarious liability* is contained in the provisions of Article 1367 of the Civil Code, which is a form of vicarious liability to another party who is responsible for the actions of another party under their responsibility. Thus, the principle of *vicarious liability* can be applied in fulfilling the need for a form of liability for losses arising from the use of AI before there are regulations that specifically regulate AI.

**Keywords:** Artificial Intelligence (AI); Civil Law; Loss; Vicarious Liability

## 1. Introduction

The changes in human civilization that are integrated with technological advances in the current 4.0 revolution era have brought fundamental changes in various aspects of human life (Camelia et al., 2026). Fundamental changes have occurred in this era in the way humans work and live in various aspects of life by seeking and discovering new inventions. One of the important new discoveries in this era is the discovery of artificial intelligence technology, commonly referred to as *Artificial Intelligence* (AI) (Nada et al., n.d.). *Artificial Intelligence* consists of two words, namely *Artificial*, which means man-made or built by humans, and *Intelligence*, which means intelligence or intellectual ability (Sofian, 2025). AI is a form of transformation of computer systems in imitating human cognitive abilities that can understand, think, and act like humans (Ravizki, Eka Nanda & Yudhantaka, 2022). AI plays a role in changing current lifestyles and human patterns. The development of AI has expanded into many areas, including robots, expert systems, speech, vision, machine learning, and natural language use (Juanita, 2024). The use and application of AI today is an inevitability that cannot be avoided, as AI can enhance human performance quickly and efficiently through its ability to analyze data across a broad scope and make predictions. The use of AI in professional fields includes features such as "*smart contracts*" that can draft and analyze contracts, "*docuSign*" features that can create and analyze deeds normally performed by notaries, AI systems in the health sector such as medical consultations via chatbots, patient medication schedule reminders using algorithms (Rayyan et al., 2025) and smart cameras that detect traffic density, namely "*deep learning neural networks*" to support the *smart city* program in districts or cities, as well as the use of AI to replace judges. Behind the benefits generated by its use, the use of AI also poses new legal challenges if this artificial intelligence

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technology causes harm to other parties. In its use, of course, the results of AI thinking and acting are not always correct, as a collection of data systems may result in data inaccuracies or errors. This has become a new legal problem and challenge in the current era where artificial intelligence can imitate, think, and act to perform legal actions like humans. This is because it is certainly related to the capacity of AI as artificial intelligence, whether AI is categorized as a legal subject that can perform legal actions where those actions can have legal consequences or not.

The position of AI as a legal subject needs to be further examined, as this relates to the capacity of AI to perform legal acts. If the capacity of AI cannot be categorized as a legal subject, then this becomes a new legal challenge if, in its use, the results provided by AI are inaccurate or contain errors that can cause harm to other parties. The losses incurred by a person caused by AI are certainly related to the form of liability, namely who will be held responsible. What distinguishes this article from previous studies is that it discusses a new perspective on the form of liability for losses caused by AI. In general, in the civil law system, the form of liability exists in unlawful acts as referred to in Article 1356 of the Civil Code and substitute liability as referred to in Article 1367 of the Civil Code. The capacity of AI as an artificial intelligence system that can perform actions like humans is a current legal challenge and issue. Does AI act independently as a legal entity that has legal responsibility if there is harm to another party, or not? What if AI, in performing an act or actions, does not have legal capacity as a legal subject, in relation to its form of liability? This is a problem, and can even be said to be quite urgent amid the widespread use of AI as a form of modern technological advancement today. Therefore, this study was conducted to determine the form of civil liability for AI losses based on existing relevant regulations to address the rampant problems of losses caused by the use of AI amid the absence of specific laws regulating AI. Based on the background of the issues described above, there are several questions, namely what is the legal position of AI systems in the Indonesian legal system and what is the form of liability for the use of AI that causes losses from a civil law perspective.

## 2. Materials and Methods

The research method used in this study is a normative legal research method with a statute approach, which is to examine several laws and regulations related to the position of AI in the positive legal system and the form of AI accountability in the Civil Code and laws related to Artificial Intelligence (AI). A conceptual approach derived from perspectives and doctrines in legal science served as a reference for researchers to develop arguments in solving legal problems encountered. AI in the context of digital technology, namely as electronic systems and electronic agents, is used to connect forms of substitute accountability based on AI characteristics. Legal materials consisted of primary legal materials, namely legal norms, and secondary legal materials, namely journals, legal dictionaries, and law books (Peter Mahmud Marzuki, 2021).

## 3. Results and Discussion

### 3.1 Regulation of the Legal Position of AI in the Indonesian Legal System

Legal subjects are one of the central basic concepts of law because, according to Logemen, law is a relationship between individuals and an element within the scope of the law (E. Fernando M. Manullang, 2022). The term legal subject comes from the Dutch word *rechtssubject* or, in English, *law of subject* (Gilang Rizki Aji Putra, 2022). Legal subjects are anything that has rights and obligations, consisting of humans (*natuurlijke persoon*) and legal entities (*rechtspersoon*) (Kansil, 1993). According to Sudikno Mertokusumo, legal subjects are anything that obtains rights and obligations from the law (Aji Putra, 2022). According to Van Apeldoorn, legal subjects are anything that has legal authority (*persoonlijkheid*) (LJ. Van Apeldoorn, 1983). Both types of legal subjects have specific characteristics that allow them to be categorized as legal subjects. The position of humans and legal entities as legal subjects is closely related to their authority

when performing legal actions (Doli Witro, Mhd.Rasidin, 2021) . Legal subjects can perform legal actions, where every action performed by a legal subject intentionally gives rise to rights and obligations. Every legal action taken by a legal subject carries legal responsibility (Ghazmi, 2021). The determination of legal subjects and their responsibilities is regulated in law through several applicable regulations, including: the 1945 Constitution of the Republic of Indonesia, the Civil Code, and the Criminal Code.

To perform a legal act, the legal status as a legal subject must be clear because only legal subjects can perform legal acts (M & Masnun, 2024) . *Artificial Intelligence* (AI) is a highly intelligent system that has the ability to think and act so that it can perform tasks and make decisions that normally require human intelligence (Ghazmi, 2021). AI can make decisions by analyzing and using data that already exists in a system. The process of decision-making by AI includes *learning, reasoning, and self-correction*. The AI process of decision-making is similar to that of humans before making a decision. . In several countries, one of which is China, AI has been used as a judge since 2017 in handling disputes in the field of online disputes and copyright (Amelia Azis et al., 2023) , the use of AI *smart contract* features that can design and analyze contracts, *DocuSign* features that can create and analyze deeds that are usually done by notaries, *GeNose*, an AI tool for detecting COVID-19, smart cameras for detecting traffic density, namely *Deep Learning Neural Network* to support the *smart city* program in regencies or cities, and AI that has replaced judges in court proceedings. From these several uses of AI, it can be stated that AI functions to simplify human work so that AI is able to think and act like humans, even more intelligently than humans (Amelia et al., 2024) . The use of AI in society can take the form of virtual assistants, smart technology-based household appliances, automation services, and personal recommendation systems (Raji dan Akhirudin, 2024) Although AI can perform actions like humans, in civil law systems, AI is not recognized as having legal capacity. In the Civil Code, legal subjects are only individuals and legal entities, so AI does not fall into this category (Anovanko et al., 2025) . Therefore, it becomes a legal problem if the subject causing the loss is not a human or a legal entity, but AI that has the ability to act independently and autonomously like a human (Akbar et al., 2024) .

In Indonesia, there are no specific regulations related to AI, but there are several regulations that can be examined in determining the status of AI. AI as a form of artificial intelligence can be examined in terms of digital technology, so the relevant law is contained in Law Number 1 of 2024 , the second amendment to Law Number 11 of 2008 concerning Electronic Information and Transactions, hereinafter referred to as the ITE Law. The ITE Law does not explicitly describe the meaning of AI, but it can be qualified that AI falls into the category of an electronic system based on Article 1 Number 5. This is because the AI system works in such a way that a person gives commands on the application site, and then the AI responds by collecting, managing, and analyzing the relevant data, and then displaying the results. In addition to being an electronic system, AI is also an electronic agent as defined in Article 1 Number 8 of the ITE Law. This is because the electronic system feature still requires action from a person to carry out an action. AI as an electronic system manages electronic data based on a person's construction or command. This means that the person who issues commands and acts using or operating this electronic feature acts as an agent and bears the legal responsibility attached to the AI feature facilitator (Amelia Azis et al., 2023) .

### **3.2 AI Responsibility in the Perspective of Civil Law**

In general, liability is imposed on individuals or legal entities when they commit legal acts or violations that cause harm. As explained earlier, in the classical civil law perspective, legal subjects consist only of humans and legal entities, so AI cannot be classified as a legal subject. Therefore, AI cannot be held liable if its use causes harm. In the civil law system, the principle of liability is generally regulated in the provisions of Article 1356 of the Civil Code, namely unlawful acts, and Article 1367 of the Civil Code, namely a form of substitute liability. In the event that the use of AI causes harm to

others, such acts cannot be categorized as unlawful acts under Article 1356 of the Civil Code because AI is not a legal subject that can perform legal acts. Therefore, if AI causes harm to others, the form of liability becomes an issue as to whom the person who feels harmed by the acts or results provided by the AI will be held liable.

An individual can be considered a responsible legal subject if they have the awareness and ability to choose. Responsibility requires intent (*mens rea*) or awareness of one's actions. AI performs its functions based on programming commands within a system. Jean-Paul states that humans are free beings who are fully responsible for themselves. AI, as a human artificial intelligence technology that works based on existing programs and algorithms, can be said to not yet have self-awareness and the freedom to perform actions based on itself as humans do. Therefore, when linked to the elements of existential consciousness and free will, it does not meet the requirements as a legal subject. Without consciousness and freedom to act, it is difficult to position AI as an entity that can be held legally responsible. Therefore, even though AI intelligence is becoming as sophisticated as humans, it still cannot touch on the essence of humanity, namely consciousness, free will, and responsibility. Therefore, if the use of AI causes harm, the responsibility for AI is transferred to another entity.

AI users can be held liable if, in its use, AI performs actions or deeds that cause harm to others. A legal act (*rechtshandeling*) is any human act that is done intentionally and willingly, resulting in rights and obligations that are regulated by law (Gilang Rizki Aji Putra, 2022). Responsibility for the use of AI when it causes harm cannot be transferred to AI, but remains with the human being who ordered the action to be taken. For example, the use of AI in the notary field, where notaries can use AI as a tool for restructuring, due diligence, and deed creation, where in its use, notaries will output data, thus raising concerns if there are errors or mistakes in the data produced that cause losses to other legal subjects (Caroline Cynthia, 2023). Users who, in their professional capacity, use AI to perform actions that harm others can be held accountable. From a civil law perspective, the principle of vicarious liability can be implemented, as users who utilize AI systems control the AI and benefit from its use (Layanan, 2025).

Article 1367 paragraph (1) of the Civil Code states that "A person is not only responsible for losses caused by his own actions, but also for losses caused by the actions of persons under his care or caused by items under his supervision." Thus, based on the provisions of this article, a person can be held responsible for something he did not do himself, but for something under his supervision. In the case of losses arising from the use of AI, such losses occur because the use of AI experiences errors caused by several factors, including bias in training data, errors in programming, and failure to translate or understand text. In the use of AI, the commands to obtain results or decisions are still carried out by humans, so that the application of vicarious liability under Article 137 paragraph (1) of the Civil Code can be carried out.

In the context of civil law, the provisions in Article 1367 paragraph (1) of the Civil Code are known as the principle of vicarious liability. The principle of vicarious liability is a substitute liability to another party who is responsible for the actions of another party under their responsibility. In essence, the perpetrator himself should be the party liable for an unlawful act, but with the principle of vicarious liability, it is possible for other parties who did not commit the unlawful act to also be held liable for one reason or another. The principle of vicarious liability can be applied in the use of AI when its use causes harm to other parties. The question then becomes who will replace AI in taking responsibility for the consequences of its actions that cause harm to other parties. When looking at its use, there are three parties involved in the use of AI, namely the developer, the user, and the AI service provider (cloud-based)(Lubis, n.d.).

AI developers play a role in designing and developing AI features or systems. Developers are legally responsible for all matters related to AI features. If we examine the provisions of Article 1 point 8, which states that "An Electronic Agent is a device

from an Electronic System that is made to perform an action on certain Electronic Information automatically, which is organized by a Person." Therefore, it can be said that an AI feature developer under the ITE Law is a legally accountable subject. AI service providers, namely technology companies that provide AI systems or features to users, can also be held legally accountable. This is because AI service providers are responsible for ensuring that the systems or features they operate comply with applicable security and ethical standards. In addition to developers, service providers may also have legal liability because they function to provide AI systems to users. Therefore, service providers must be able to ensure that the systems they have operate in accordance with applicable security and ethical standards.

AI as artificial intelligence that causes losses is sued for unlawful acts, but users of AI features are liable for losses incurred based on the principle of vicarious liability because AI is only a feature that carries out tasks as instructed by users or humans. The principle of vicarious liability is a manifestation of the role of users who have a direct or indirect special relationship. Thus, vicarious liability can be used to address actions from the use of AI that violate or cause losses before there is positive law that specifically regulates AI (Saputra et al., 2024).

In the civil law system, a person is not only liable for unlawful acts that they commit themselves, as stipulated in Article 1365 of the Civil Code: "Every act that violates the law and causes harm to another person obliges the person who caused the harm due to their fault to compensate for the harm." However, the civil law system also recognizes the term vicarious liability. Vicarious liability is a theory to determine who should be liable or receive a claim for compensation for their own legal actions, but it also regulates a person's liability for unlawful acts committed by people under their responsibility. Basically, a person is liable if they commit a legal act that causes harm to another person. With the doctrine of vicarious liability, it is possible for other parties who did not commit the legal act to also be held liable for the harm caused (Mihardja et al., 2020). The contribution of this article's findings to the development of legal liability theory is that liability for losses caused by AI falls under the category of vicarious liability as stipulated in Article 1367 of the Civil Code, because AI, based on its status, cannot be categorized as a legal entity.

#### **4. Conclusions**

The position of AI in the Indonesian legal system does not include parties that are recognized as having legal capacity, so in civil law, AI cannot be categorized as a legal subject because AI does not have self-awareness and free will as the main requirements for bearing responsibility for legal actions. However, in certain situations and sectors, AI is indirectly given a legal role to perform certain acts. In the classical civil law perspective, legal subjects consist only of individuals and legal entities. To date, regulations related to AI are generally still governed by several existing regulations. Therefore, when AI, which is not a legal subject, performs an action that harms another party, the principle of vicarious liability in Article 1367 of the Civil Code can be applied based on existing regulations. The application of the principle of vicarious liability in damages caused by AI in its use is because in the use of AI systems, users exercise control over the AI system before it produces results that can benefit users. Thus, in every legal consequence arising from the use of AI, legal responsibility still lies with humans. Therefore, the addition of new legal subjects such as AI is necessary as a civil law reform to accommodate the development of AI technology.

In facing the complex development of artificial intelligence (AI) technology, it is hoped that the government will also act quickly to create specific regulations related to AI. This is because, to date, regulations related to AI resolution only use general regulations that cannot accommodate the complexity of AI, which is independent and autonomous in nature. Therefore, with regulations that specifically govern AI, it is

possible to accommodate the development of a legal framework that is fair, adaptive, and responsive to technological developments, thereby creating legal certainty in society. The logical research agenda for further study in this area includes conceptual clarification, normative evaluation, empirical testing, and recommendations for legal reform.

## References

- Aji Putra, G. R. (2022). Manusia Sebagai Subyek Hukum. *Adalah: Buletin Hukum Dan Keadilan*, 6(1), 27.
- Akbar, M., Syahril, F., TI, A. D., Murdiono, M., & Asriyani, A. (2024). *Artificial Intelligence dan Hak Asasi Manusia : Kajian Hukum tentang Potensi Bahaya di Indonesia*. 11, 359–364.
- Amelia Azis, R., Susetio, W., Nurhayani, & Hikmawati, E. (2023). Pengaturan Dan Pertanggung Jawaban Pemanfaatan Artificial Intelligence (Ai) Di Indonesia Dalam Perspektif Hukum. *Forum Ilmiah*, 20(4), 243–254. <https://www.bing.com/ck/a?!&#p=8ed41b3ddf88be700ac2eb2e756260f70465ed224ac7bad1ff988f3207c542f1JmldtHM9MTczOTkyMzIwMA&ptn=3&ver=2&hsh=4&fclid=21ac1bf1-8aac-684d-0fca-0a0a8b9469d3&psq=jurnal+hukum+tentang+penciptaan+game+ai&u=a1aHR0cHM6Ly9lanVybmFsLmVzYXVu>
- Amelia, N. F., Marcella, D. M., Semesta, H. J., Budiarti, S., & Usman, S. F. (2024). *Implementasi Artificial Intelligence ( AI ) Dalam Pembentukan Peraturan Perundang-Undangan Di Indonesia*. 2(1), 56–70.
- Anovanko, U. B., Wijaya, A., & Nugraha, S. (2025). *Implikasi Hukum Perdata terhadap Penggunaan Kecerdasan Buatan ( AI ) dalam Kontrak Komersial*. 5, 3637–3653.
- Camelia, N. D., Rifai, A., Heryanti, F., Lutfiadi, L., & Siwi, C. (2026). *The Legal Force of Article 1977 of the Indonesian Civil Code Regarding Ownership of Unregistered Movable Property*. 7(2), 721–736. <https://doi.org/10.46924/jihk.v7i2.332>
- Caroline Cynthia, D. L. S. (2023). Tanggung jawab Perdata dan Prinsip Kehati-hatian Notaris dalam Penggunaan Artificial Intelligence yang Menimbulkan Kerugian. *Ilmiah Indonesia*, 08(12), 2.
- Doli Witro, Mhd.Rasidin, M. I. N. (2021). Subjek Hukum dan Objek Hukum: Sebuah Tinjauan Hukum Islam, Pidana dan Perdata. *Asy Syar'iyah: Jurnal Ilmu Syari'ah Dan Perbankan Islam*, 6(1), 43–64.
- E. Fernando M. Manullang. (2022). Subjek Hukum Menurut Hans Kelsen dan Teori Tradisional :Antara Manipulasi dan Fiksi. *Jurnal Hukum Dan Peradilan*, 6, 27–34.
- Ghazmi, S. F. (2021). ( *THE URGENCY OF REGULATING ARTIFICIAL INTELLIGENCE IN*. 2(8), 782–803.
- Gilang Rizki Aji Putra. (2022). Manusia Sebagai Subyek Hukum. 'Adalah: *Buletin Hukum Dan Keadilan*, 6(1), 31.
- Juanita, G. (2024). Pemanfaatan Kecerdasan Artifisial (Artificial Intelligence/AI) Dalam Kerangka Pancasila. *Jurnal Interpretasi Hukum*, 5(2), 1141–1151. <https://doi.org/10.22225/juinhum.5.2.10622.1141-1151>
- Kansil. (1993). *Pengantar Hukum Indonesia (II)*. Balai Pustaka.
- Layanan, D. P. (2025). Liabilitas Produk Ai Dalam Sistem Hukum Indonesia: Implikasi Bagi Pengembang, Pengguna, Dan Penyedia Layanan. *Iuris Studia: Jurnal Kajian Hukum*, 6(1), 24–34. <https://doi.org/10.55357/is.v6i1.808>
- LJ. Van Apeldoorn. (1983). *Pengantar Ilmu Hukum*. Pradnya Paramita.
- Lubis, M. S. Y. (n.d.). *IMPLEMENTASI ARTIFICIAL INTELLIGENCE PADA*. 1–7.
- M, B. M., & Masnun, M. A. (2024). *Prospek Artificial Intelligence Sebagai Quasi Subjek Hukum : Dinamika Pengaturan Hukum Perdata di Indonesia*. 2, 1–19.
- Mihardja, A., Kurniawan, C., Anthony, K., Hukum, F., Airlangga, U., Pengganti, P., & Rugi, G. (2020). *VICARIOUS LIABILITY : PERSPEKTIF MASA KINI*. 8(1), 73–81.
- Nada, F., Abqori, F. F., Ratu, D., & Fatimah, N. (n.d.). *Gagasan Pengaturan Artificial Intelligence Sebagai Subjek Hukum Di Indonesia*. 149–157.
- Peter Mahmud Marzuki. (2021). *Penelitian Hukum* (cetakan 15). Kencana.
- Raji dan Akhirudin. (2024). Eksistensi Kecerdasan Buatan dalam Sebagai Subjek Hukum: Kajian Holistik berdasarkan Perspektif Filsafat Hukum Eksistensial. *Jurnal Hukum Lex Generalis*, 5(10), 1–16.
- Ravizki, Eka Nanda & Yudhantaka, L. (2022). *Artificial Intelligence Sebagai Subjek Hukum : Tinjauan*. 5(3), 351–376. <https://doi.org/10.20473/ntr.v5i3.39063>
- Rayyan, R., Simarmata, M., Pascasarjana, F., Studi, P., Hukum, M., & Budi, P. P. (2025). *Kepastian Hukum Penggunaan Artificial Intelligence ( AI ) dalam Pelayanan Kesehatan dan Diagnosa Medis di Indonesia*. 2.
- Saputra, H., Angkupi, P., & Metro, U. M. (2024). *Tantangan Hukum dalam Pengembangan Teknologi Kecerdasan Buatan (AI)*. 1(2), 75–89.
- Sofian, A. (2025). *Konsepsi Subjek Hukum dan Pertanggungjawaban Pidana Artificial Intellegence The Concept of Legal Subjects and Criminal Responsibility of Artificial Intelligence*. 9(1), 13–26. <https://doi.org/10.1177/1741659020917434.Doowon>