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A New Paradigm of Civil Liability for Damages Caused by AI Systems under Article 1365 of the Indonesian Civil Code

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Abstract

The revolution of Artificial Intelligence (AI) has presented fundamental challenges to the classical civil law framework, particularly Article 1365 of the Indonesian Civil Code (KUHPerdata), which is grounded in the concept of "fault" (schuld) . This study analyzes the inadequacy of Article 1365 in addressing damages caused by autonomous and "black box" AI systems. Using a normative legal research method with conceptual and comparative approaches, this article argues that proving the element of "fault" on the part of the developer, operator, or the AI itself is practically impossible .The autonomous nature of AI severs the traditional chain of causality, while its "black box" characteristic obstructs transparency in evidentiary proceedings . Consequently, a potential legal vacuum arises that is detrimental to victims. As a solution, this study proposes a paradigm shift from fault-based liability to strict liability, or at least risk-based liability, for AI operators or developers. This new paradigm is considered more capable of providing legal certainty and protection for victims without the burden of proving elusive faults.

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1. INTRODUCTION

In the last decade, the landscape of human civilization has undergone a fundamental transformation due to the disruption of digital technology. The development of Artificial Intelligence technology, or Artificial *Intelligence* (*AI*), is no longer in the realm of science fiction; it has manifested into an undeniable empirical reality. Progressively, this technology has been massively integrated into various sectors of life, changing the way humans interact, work, and make decisions. This phenomenon is clearly visible from the broad spectrum of implementations.*AI*: starting from autonomous vehicles (*autonomous vehicles*) that revolutionized transportation, medical diagnostic systems that help doctors detect diseases with high precision, to high-frequency trading algorithms in the capital markets that can execute transactions in microseconds. In this context, *AI promises* operational efficiency and exponential progress of civilization, surpassing conventional human cognitive capacity.

However, along with the benefits offered, there are inherent risks that cannot be ignored. The complexity of the system AI, especially those built on deep learning or neural network architectures, has two key characteristics that fundamentally challenge traditional legal

doctrine: autonomy and opacity. Autonomy refers to the system's ability to operate and make decisions without direct human intervention in real time. Meanwhile, opacity, often referred to as the problem, describes the inability of humans, even their creators, to trace or fully understand the algorithmic logic used by AI *in* reaching a certain conclusion or action.

These unique characteristics create serious legal complications. When these autonomous systems malfunction (*malfunction*) or make a wrong decision that causes material or immaterial losses, then a fundamental and crucial question immediately arises: Who should be held responsible? Is it the programmer, the manufacturing company, the end user, or even...*This* complexity places victims in a vulnerable position due to the difficulty of identifying a legal entity that can be held accountable.

In response to disputes of this kind, the Indonesian civil law framework, which is deeply rooted in the Roman-Dutch legal tradition (*Civil Law*), still relies heavily on conventional paradigms. Indonesian positive law relies on Article 1365 of the Civil Code (KUHPerdata) as the primary bulwark and universal instrument for filing a lawsuit for damages resulting from an Unlawful Act (PMH). This article explicitly states, "Every unlawful act that results in loss to another person requires the person who caused the loss through his or her fault to compensate for that loss."

These provisions require a clear element of causality and an element of error (*debt*) attached to the perpetrator. The problem is, the dogmatic foundation of Article 1365 is the concept of "fault" itself. This doctrine was historically and philosophically designed for human legal subjects (*natural person*), who have free will (*free will*), moral awareness, as well as the ability to have evil intentions (*deceit*) or forgetfulness (*blame*).

This is where the legal clash lies.*AI*, however sophisticated, is a computational entity that possesses none of these human attributes; it has no consciousness, conscience, or intentions. *AI cannot* be said to be "negligent" or "intentional" in the conventional criminal or civil law sense. Consequently, when AI causes losses autonomously beyond the predictions of its creator, then our legal framework is forced to face a conceptual vacuum *conceptual vacuum*) serious. The absence of a legal subject who can be blamed based on the principle of liability *based on fault has* the potential to create injustice, where victims do not receive redress (*restoration in full*) simply because the law has failed to adapt to technological developments. Therefore, this research is very urgent to reconstruct the principle of civil liability to make it relevant to the challenges of the artificial intelligence era.

This article focuses on a critical and in-depth analysis of the inability (*inadequacy*) fundamentals of the conventional civil law regime, particularly Article 1365 of the Civil Code (KUHPerdata), in adjudicating and resolving disputes over losses caused by autonomous entities such as Artificial Intelligence or *Artificial Intelligence* (*AI*). The urgency of this discussion arises because Indonesian positive law is still based on an anthropocentric paradigm that positions humans as the only legal subjects capable of bearing responsibility, while the reality of technology has given birth to non-human entities capable of acting independently.

The main thesis put forward in this study is that forcing the application of the element of "error" (*fault-based liability*) in the case of loss due to *AI is* not only irrelevant but will also lead to a legal deadlock (*legal impasse*). Furthermore, rigid adherence to this doctrine has the potential to create a denial of justice (*denial of justice*) for victims, where the real losses suffered by the community cannot be recovered simply because of the limitations of existing legal construction.

Traditionally and dogmatically, Article 1365 of the Civil Code adheres to the principle of liability based on fault. To be able to claim compensation under this article, the plaintiff bears the burden of proof (*burden of proof*) to prove four cumulative elements: (1) The existence of an unlawful act (PMH); (2) The existence of a real loss; (3) The existence of a causal relationship (*causal relationship*) between the act and the loss; and (4) There is an element of "fault" in the perpetrator. This cumulative nature confirms that these four elements are an inseparable whole.

The legal consequences are fatal: failure to prove even one element will invalidate the entire claim for damages. In the context of conventional litigation between individuals, proving the element of fault may be relatively measurable. However, in the context of AI, the fourth element, namely "error" (*debt*), transformed into a major obstacle that is almost impossible to penetrate.

This problem becomes very complex when we try to attribute errors to algorithms. If a system of *AI.* For example, if an autonomous car causes a fatal accident, where does the legal fault lie? Doctrinally, fault requires an element of mens *rea* (intention) or negligence, which assumes awareness. A crucial question then arises in the chain of responsibility: Does the fault lie with the programmer who wrote the millions of lines of code at the beginning of creation? Or does the burden fall on manufacturers who mass-produce them? Can operators or end users who simply press the "on" button be blamed?

Complexity peaks when considering the nature of machine *learning*, where *AI* able to modify its own behavior based on new data. Is it fair to blame the creator for the decisions *AI makes* beyond the initial algorithm's predictions? Or should we start considering the radical concept that the error lies in AI itself, that "learns" wrong behavior from the data set it receives? The ambiguity of the legal subject and the difficulty of proving the element of fault in non-biological entities is what creates a legal vacuum. Victims are faced with a "black box" *black box* who cannot be held civilly responsible. Therefore, this study aims to comprehensively dissect this legal impasse and offer an alternative paradigm. This study will evaluate whether the shift from liability *based on fault* to *strict liability* (absolute responsibility) or the concept of electronic personhood can be a just solution to fill the legal vacuum in Indonesia.

2. PROBLEM

Departing from academic concerns about the lag of law amidst the pace of technology, this research poses two fundamental questions that place justice for humans at the center of the analysis:

1. What are the technical characteristics of Artificial *Intelligence* (*AI*), especially the aspects of autonomy and opacity (*black box*), deconstructing the meaning of "error" (*debt*) in Article 1365 of the Civil Code, and its implications for the victim's powerlessness in proving human responsibility behind machine decisions?
2. How to reconstruct a civil liability paradigm that is more responsive and oriented towards humanitarian values (*human-centric)* as an alternative or complement to Article 1365 of the Civil Code, to guarantee fair restoration of rights for people affected by systemic losses due to AI?

3. RESEARCH METHOD

This research is designed as normative legal research (*normative legal research*) or

what is often referred to as doctrinal legal research. The selection of this type of research is based on the characteristics of legal science as a science of *its kind*, where the primary focus is on examining law as an autonomous system of norms. This research does not intend to test hypotheses based on field data or societal behavior (sociological), but rather focuses on an inventory of positive law, the discovery of legal principles, and the synchronization of legal regulations related to civil liability resulting from artificial intelligence.

The specifications of this research are prescriptive and analytical. The prescriptive nature is intended to provide arguments for the research results regarding what should be (*that should*) is applied in the face of a lack of related norms of *AI*, not just showing what happened (*that be*). The goal is to formulate concrete solutions and offer new concepts (*Law to be established*) to solve the legal issues faced.

4. DISCUSSION

1. Dogmatic Deconstruction of the Element of "Error" (*Debt*) in the Dimension of Artificial Intelligence

Article 1365 of the Civil Code (KUHPerdata) has so far stood firmly a grand norm in Indonesian civil liability law. This article lays the foundation that any loss arising from an unlawful act must be compensated by the perpetrator, with the absolute condition of the existence of an element of "fault" (*debt*). Doctrinally, this element of error is divided into two main derivations: intent (*deceit*) and negligence or forgetfulness (*blame*) . Both forms of wrongdoing, in traditional legal construction, require a certain psychological state or state of mind of the perpetrator. That is, the law assumes that the perpetrator is a subject who has ethical awareness and the cognitive capacity to distinguish between right and wrong actions, so that he deserves to be "blamed" for his actions.

However, when this classical doctrine is confronted with the reality of Artificial Intelligence technology (*Artificial Intelligence/AI*), the legal construction is experiencing fundamental shocks and is even threatened with collapse. This is caused by the ontological inconsistency between the technical characteristics of *AI* with the subjective conditions of the offense.

a. The Collapse of the Concept of Negligence (*Blame*) in Algorithmic Logic

The biggest challenge arises when trying to apply the concept of negligence (*blame*) in cases of losses caused by AI. In civil law, the standard of negligence is measured objectively based on the behavior of a "reasonably prudent person" (*reasonable person standard*) in the same situation. A programmer or developer *AI* is considered negligent if they fail to predict a risk that should have been predictable (*foreseeable risks*) or fail to apply appropriate standards of care.

The problem is, technological developments of *AI*, especially those based on deep learning (*deep learning*) and artificial neural networks (*neural networks*), allow the system to learn independently from data and develop decision-making patterns that were not explicitly programmed by its creator. This ability often results in what is known as emergent behavior, or behavior that appears suddenly and unexpectedly, which even the creator could not have anticipated at the time of *phase* development. If a loss arises as a result of the behavior of *AI,* which is completely unpredictable (*unforeseeable*), then dogmatically, the element of negligence is dropped and not fulfilled. The law cannot impose blame on someone for something that is beyond

the limits of human reason's ability to predict. In this scenario, the programmer may have acted with great care and complied with all existing security protocol standards, but *AI* these entities continue to "learn" and evolve into autonomously dangerous entities. As a result, there is a vacuum of accountability (*liability gap*) where the loss occurs without any party being legally responsible.

b. Problem "*Black Box*" and Information Asymmetry in Proof
Furthermore, even if we assume that there are gaps of negligence in the development process of AI, the civil procedural law system places victims in a very disadvantageous position. In the applicable civil procedural law (Article 163 HIR/283 RBg), the plaintiff bears the burden of proof (*burden of proof atau burden of proof*) to prove the case. The victim must prove a causal relationship between the developer's error and the losses he suffered. This is where the technical problem becomes a legal nightmare: the problem black *box.* Deep learning algorithms often operate like highly opaque black boxes, where the decision-making process between input and output cannot be transparently explained, even by experts. How can a lay victim possibly prove the existence of errors or logical flaws in millions of lines of programming code or trace errors in trillions of data parameters on a *neural network*? Without adequate algorithmic transparency, plaintiffs are faced with extreme and unfair information; on one hand, a *diabolical test* (impossible proof). The victim will never be able to prove the specific location of the developer's "error." This condition creates developer *asymmetry* holding full control over technology and information, while on the other hand, the victim bears the burden of proof without access to adequate evidence.

c. Impossibility *AI* as an Independent Legal Subject
Faced with this deadlock, speculative discourse has emerged to make *AI* an independent legal subject (*electronic personhood*) so that *AI itself* bears the "wrongdoing." However, this argument is legally premature and unacceptable within the current framework of Indonesian positive law. The Indonesian legal system adheres to the principle of duality of legal subjects, which only recognizes humans (*natural persons*) and legal entities as the bearers of rights and obligations.
Ontologically, *AI is* an object (zaak) or tool, not a moral entity. It does not have consciousness (*consciousness*), free will (*free will*), or legal capacity to be responsible for its actions *AI* do not have its own assets to pay compensation, and cannot face the legal sanctions. Therefore, imposing the concept of fault on AI is a fallacy. The logical consequence of the entire explanation above is that Article 1365 of the Civil Code, with its reliance on the element of human error, has become a blunt and outdated instrument in dealing with disputes in the digital era. Without reform, victims of medical malpractice by surgical robots or victims of autonomous car accidents will be thrown out of court without compensation, simply because they failed to prove where the human "error" lies behind these complex machines.

2. Paradigm Reconstruction: Towards Risk-Based Responsibility (*Risk-Based Liability*)

The failure of the error-based paradigm (*fault-based liability*) in providing legal protection for victims requires a breakthrough in thinking. Substantive justice must not be halted or set aside simply because the pace of technological development is moving

faster than the evolution of the law itself. The law must be progressive and adaptive. Therefore, the most logical solution, and one that has begun to be considered in various advanced jurisdictions, is a paradigm shift from fault-based liability to strict *liability* (absolute liability) or at least risk-based liability

a. Urgency of Implementing Stri*ct Liability* (R *risk liability*)
   The concept of strict liability offers an elegant way out of the complexities of proving fault. Under this regime, the plaintiff is relieved of the obligation to prove the existence of an element of "fault" or negligence on the part of the defendant. The focus of proof is significantly simplified. The plaintiff only needs to prove three essential elements: (1) the existence of actual harm, (2) that the harm was in fact caused by the operation of the system of *AI*, and (3) the defendant is the entity responsible for the operation or development of *AI*.
   This shift shifts the philosophy of accountability from one based on "morality" (punishing the guilty) to one based on "risk allocation" and economic justice. The economic logic is simple: *Where there are advantages, there are disadvantages.*, Whoever reaps the benefits must also bear the burden of risk. The corporation, developer, or operator who creates and operates *AI* is the party that gains economic benefits (*profit*) from the efficiency of the technology. Therefore, they are the parties most deserving of bearing the risk of losses that arise from it.
   In addition to reasons of distributive justice, this assignment of responsibility is also based on risk management capacity. Technology companies are in the best position (*cheapest cost avoider*) to manage these risks, either through improving product safety testing standards before market launch, or through risk-sharing mechanisms such as product liability insurance.
   The application of this principle is actually not something new in the Indonesian civil law system. The Civil Code has recognized the embryo of absolute responsibility or risk responsibility in several special articles, although limited. For example, Article 1367 paragraph (1) regulates the employer's responsibility for the actions of his subordinates (vicarious liability), Article 1368 regulates the responsibility of animal owners for losses caused by their animals, and Article 1371 concerns the responsibility of owners of collapsed buildings. These principles show that our civil law actually has room for flexibility to impose responsibility without the need to prove direct fault from the owner, which only needs to be expanded in scope to accommodate "technological risks" as an analogy to animal or building risks.
b. Middle Way: Reversal of the Burden of Proof (*Reversal of Burden of Proof*)
   However, the implementation of strict liability. Purely, it is often feared that it is too radical and has the potential to hinder the pace of technological innovation because it burdens the industry with too great a risk. As a middle ground solution (*middle ground*) which balances consumer protection and the interests of innovation, the law can still use the construction of Unlawful Acts, but with crucial modifications to the procedural law, namely: reversal of the burden of proof (*reversal of the burden of proof*).
   In this modified scheme, the victim's position is lessened. The victim only needs to prove the existence of harm and causality, *prima facie* that *AI is* the cause of the loss. After that, the burden of proof shifts entirely to the other party, the *develope*r or

operator. They are the ones who are required to prove in court that they are "not guilty", namely that they have carried out all due diligence efforts (*due diligence*), comply with the highest safety standards, and that the loss occurred as a result of unavoidable external factors (*force majeure*).

This model at least provides a solution to the problem of the black *box and* information gaps that hinder access to justice for victims. This is the approach adopted in the *EU AI Liability Directive in* the European Union, which introduced the "presumption of causality" to ease the burden on victims without eliminating the principle of fault. Therefore, Indonesian law needs to immediately adopt a similar approach to ensure legal certainty and justice in the era of artificial intelligence.

5. CLOSURE

1. Conclusion

Based on the comprehensive analysis presented previously, this study concludes that the current Indonesian civil law framework is experiencing fundamental disruption due to the presence of Artificial Intelligence technology (*Artificial Intelligence/AI*). Inherent characteristics of *AI*, particularly the nature of autonomy in decision-making and algorithmic opacity (*black box*), have effectively negated the validity of Article 1365 of the Civil Code (KUHPerdata). Conventional legal construction that bases responsibility on the element of "fault" (*debt*) humans have proven incompatible with the nature of technology, which is capable of acting outside the direct intervention of its creator.

As a result, the element of error, which is the heart or condition *without which nothing from* Article 1365 of the Civil Code it becomes almost impossible for the victim to prove in court. The inability of the law to reach non-human subjects creates a legal vacuum serious, which in turn harms the public's sense of justice and threatens legal certainty in the digital economic ecosystem. Therefore, maintaining the doctrinal status quo is no longer relevant. The new paradigm that urgently needs to be implemented in the national legal system is a philosophical shift from fault-based liability (*fault-based liability*) towards absolute responsibility (*strict liability* or *risk liability*). This shift is based on the principle of fairness and distributive justice; that the burden of the risk of loss should be allocated to the party that creates the risk and enjoys the economic benefits from it, namely the developer or system operator, and not be unfairly imposed on the victim who is in a powerless position.

2. Suggestion

To address these legal challenges, this study recommends strategic steps for stakeholders:

a. For Legislators (DPR and Government): Immediate and fundamental legislative reform is needed. Relying on partial judicial interpretation of Article 1365 of the Civil Code will not be sufficient to provide long-term legal certainty. Indonesia needs to immediately formulate and pass a special law (*special law*) regarding civil liability AI. This regulation must explicitly adopt the principle of strict *liability*, especially those applied in a limited manner to the category of high-risk AI, such as autonomous vehicles and robotic medical devices.

b. For Law Enforcement Officials (Judges): During the transition period, awaiting the enactment of new legislation, the judiciary plays a vital role. Judges are encouraged to make legal discoveries (*legal findings*) that are progressive and dare to break through the rigidity of the text of the law. Judges can apply progressive legal construction by using analogy (analogical interpretation) of Article 1367 (employer's responsibility) or Article 1368 (animal owner's responsibility) of the Civil Code against the owner.*AI*. In addition, the application of the principle of reversal of the burden of proof (*reversal of the burden of proof*) is highly recommended in procedural law to balance the positions of the parties and ensure the victim of *AI* still gets proper rights restoration.
c. For Legal Academics and Researchers: Legal discourse on *AI* in Indonesia is still in its early stages. Furthermore, more in-depth research is needed to map the risk taxonomy of AI, determining which categories are subject to the regime's strict liability and which remain relevant to the fault regime. In addition, a study of the mandatory insurance mechanism *(or public compensation funds) needs to be encouraged to find the most appropriate model that balances victim protection without compromising* the national technological innovation climate.

6. BIBLIOGRAPHY

1. Books

Ali, Achmad. *Menguak Teori Hukum (Legal Theory) dan Teori Peradilan (Judicialprudence).* Jakarta: Kencana, 2009.

Fuady, Munir. *Perbuatan Melawan Hukum: Pendekatan Kontemporer*. Bandung: Citra Aditya Bakti, 2013.

Hernoko, Agus Yudha. *Hukum Perjanjian: Asas Proporsionalitas dalam Kontrak Komersial*. Jakarta: Kencana, 2010.

Ibrahim, Johnny. *Teori dan Metodologi Penelitian Hukum Normatif*. Malang: Bayumedia Publishing, 2006.

Marzuki, Peter Mahmud. *Penelitian Hukum*: Edisi Revisi. Jakarta: Kencana Prenada Media Group, 2017.

Mertokusumo, Sudikno. *Mengenal Hukum: Suatu Pengantar*. Yogyakarta: Cahaya Atma Pustaka, 2010.

Mertokusumo, Sudikno. *Penemuan Hukum: Sebuah Pengantar*. Yogyakarta: Cahaya Atma Pustaka, 2014.

Prodjodikoro, Wirjono. *Perbuatan Melanggar Hukum: Dipandang dari Sudut Hukum Perdata*. Bandung: Mandar Maju, 2000.

Soekanto, Soerjono, dan Sri Mamudji. *Penelitian Hukum Normatif: Suatu Tinjauan Singkat*. Jakarta: RajaGrafindo Persada, 2015.

Subekti, R. *Hukum Perjanjian*. Jakarta: Intermasa, 2005.

Suseno, Sigid. *Yurisdiksi Tindak Pidana Siber*. Bandung: Refika Aditama, 2012.

Susskind, *Richard. Online Courts and the Future of Justice*. Oxford: Oxford University Press, 2019.

Turner, Jacob. *Robot Rules: Regulating Artificial Intelligence*. Cham: Palgrave Macmillan, 2019.

2. Journal

Barfield, Woodrow. "Liability for Autonomous and Artificially Intelligent Robots." Paladyn, Journal of Behavioral Robotics 9, no. 1 (2018): 193-203.

Bostrom, Nick, dan Eliezer Yudkowsky. "The Ethics of Artificial Intelligence." The Cambridge Handbook of Artificial Intelligence (2014): 316-334.

Casey, Anthony J., dan Anthony Niblett. "Self-Driving Laws." University of Toronto Law Journal 66, no. 4 (2016): 429-442.

Disemadi, Hari Sutra. "Lenses of Legal Research: A Descriptive Essay on Legal Research Methodologies." Journal of Judicial Review 24, no. 2 (2022): 289-304.

Scherer, Matthew U. "Regulating Artificial Intelligence Systems: Risks, Challenges, Competencies, and Strategies." Harvard Journal of Law & Technology 29, no. 2 (2016): 353-400.

Sihombing, Eka N.A.H. "Tanggung Jawab Perdata Artificial Intelligence." Jurnal Hukum & Pembangunan 49, no. 3 (2019): 746-761.

Wagner, Gerhard. "Robot Liability." Dalam Tort Law and Economics, diedit oleh Michael Faure, 27-57. Edward Elgar Publishing, 2009.