

**THE VALIDITY AND LEGAL RECOGNITION OF CONTRACTS
MADE BY ARTIFICIAL INTELLIGENCE
UNDER INDONESIAN LAW**

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Abstract

In the era of globalization, the digital transformation era, the advancement of Artificial Intelligence (AI) has enabled computer systems to perform cognitive functions similar to human capabilities, including analyzing, drafting, and even executing contracts autonomously. This technological shift has profoundly influenced the paradigm of contract law in Indonesia, which traditionally adhered to a classical normative approach and now faces the necessity to adapt to digital innovations. This study examines the legal validity and recognition of contracts created by or with the assistance of AI, particularly in reference to Articles 1320 and 1338 of the Indonesian Civil Code (KUHPerdata). Employing a normative juridical method, the study analyzes primary and secondary legal sources and compares selected international regulatory frameworks. The findings reveal that while AI may enhance efficiency in contract formation, its non-human legal status poses challenges regarding legal capacity, intent, and accountability. Thus, there is a pressing need for specific regulations and reinforcement of legal principles, such as legality and accountability, to ensure legal protection and certainty for all parties involved in AI-assisted contracts under Indonesian law.

Keywords: contract validity, artificial intelligence, civil law, Indonesian legal system, legality, accountability.

Abstrak

Di era globalisasi, era transformasi digital, kemajuan Kecerdasan Buatan (AI) telah memungkinkan sistem komputer untuk melakukan fungsi kognitif yang mirip dengan kemampuan manusia, termasuk menganalisis, menyusun, bahkan mengeksekusi kontrak secara mandiri. Pergeseran teknologi ini sangat mempengaruhi paradigma hukum kontrak di Indonesia, yang secara tradisional menganut pendekatan normatif klasik dan kini menghadapi kebutuhan untuk beradaptasi dengan inovasi digital. Studi ini mengkaji keabsahan hukum dan

pengakuan kontrak yang dibuat oleh atau dengan bantuan AI, khususnya mengacu pada Pasal 1320 dan 1338 Kitab Undang-Undang Hukum Perdata (KUHPerdata). Menggunakan metode yuridis normatif, penelitian ini menganalisis sumber hukum primer dan sekunder dan membandingkan kerangka peraturan internasional yang dipilih. Temuan ini mengungkapkan bahwa meskipun AI dapat meningkatkan efisiensi dalam pembentukan kontrak, status hukumnya yang non-manusia menimbulkan tantangan terkait kapasitas hukum, niat, dan akuntabilitas. Dengan demikian, ada kebutuhan mendesak akan peraturan khusus dan penguatan prinsip-prinsip hukum, seperti legalitas dan akuntabilitas, untuk memastikan perlindungan dan kepastian hukum bagi semua pihak yang terlibat dalam kontrak berbantuan AI berdasarkan hukum Indonesia.

Kata kunci: validitas kontrak, kecerdasan buatan, hukum perdata, sistem hukum Indonesia, legalitas, akuntabilitas.

A. Introduction

The advancement of digital technology has brought significant transformations across various aspects of human life, including the field of law. One of the most prominent innovations is the emergence of Artificial Intelligence (AI). AI refers to computational systems designed to emulate human thinking and behavior by processing data, recognizing patterns, and making automated decisions.

In practice, AI is increasingly being utilized to perform tasks that were traditionally executed by humans, such as legal data analysis, contract drafting, and providing legal recommendations. In certain jurisdictions, AI-based platforms have even been deployed for resolving minor disputes and delivering online legal assistance. This signifies the onset of a paradigm shift in legal practice, particularly within the realms of civil and administrative law (Siregar, 2024).

Nevertheless, these developments also raise distinct challenges, especially concerning legal validity and accountability. The Indonesian legal system, in principle, only recognizes natural persons and legal entities as valid legal subjects. Consequently, a question arises: Can a contract drafted—or even agreed upon—by an AI system be deemed legally valid? Can AI represent legal will and capacity as required under Article 1320 of the Indonesian Civil Code? (Zahira, 2025)

Furthermore, in the context of state administration, the use of automated decision-making technologies such as AI necessitates special caution. The principles of legality and accountability in administrative law mandate that every governmental action must have a clear legal basis and be subject to responsibility. Thus, the integration of AI into legal practice is not merely a technological matter, but also a juridical and ethical issue that warrants in-depth examination (Wahyudi, 2021).

Based on this background, the present study aims to examine the legal validity and recognition of contracts involving AI from the perspective of Indonesian civil law, while also assessing the necessity of regulatory reform aligned with administrative legal principles and global technological dynamics. With clear regulations, Indonesia can harness the potential of AI optimally while maintaining the integrity of its legal system in the era of the Fourth Industrial Revolution (Made & Miranda, 2024).

B. Research Methodology

This study employs a normative legal research method, grounded in a doctrinal approach to examine the prevailing legal norms within the Indonesian legal system. The methodology incorporates two main approaches: the statute approach and the conceptual approach. The statute approach is applied to analyze relevant statutory provisions, particularly Article 1320 and Article 1338 of the Indonesian Civil Code (Kitab Undang-Undang Hukum Perdata/KUHPerdata), as well as provisions contained in Law Number 11 of 2008 in conjunction with Law Number 19 of 2016 concerning Electronic Information and Transactions. Meanwhile, the conceptual approach is used to explore scholarly views on the legal status of AI and legal principles such as legality, accountability, and volition within the contexts of contract and administrative law. The legal sources used in this study consist of primary legal materials such as legislation and relevant court decisions and secondary legal materials, including academic journals, textbooks, and legal commentaries. Data collection was conducted through a systematic library research method. All legal materials gathered were analyzed qualitatively, by examining the interrelation between prevailing legal norms and the actual implementation of artificial intelligence technology in contract formation. The objective is to describe the current legal position of Indonesia while formulating prescriptive juridical recommendations to address legal challenges in the digital era (HS, 2018).

C. Theoretical Framework of Artificial Intelligence

1. Definition and Classification of Artificial Intelligence.

Artificial Intelligence (AI) is generally understood as a system designed to emulate human cognitive processes and behavior. These systems operate through data processing, pattern recognition, and automated decision-making, thereby enabling them to perform cognitive functions such as reasoning, learning, and problem-solving. As technology evolves, AI has been applied across various sectors, including transportation, healthcare, economics, and law (Amelia et al., 2024).

Although the concept of AI has been introduced since the 1950s, there is still no universally agreed-upon definition. This is due to the dynamic nature of AI and the diverse perspectives held by computer scientists, legal

practitioners, and policymakers. Nevertheless, there is a general consensus that AI aims to automate processes that previously required human intelligence, either through pre-programmed systems or those based on machine learning algorithms (Ravizki, 2022).

According to Stuart Russell and Peter Norvig, AI can be classified based on logical and behavioral approaches into four categories:

- a. Systems that think like humans
- b. Systems that act like humans
- c. Systems that think rationally
- d. Systems that act rationally

This classification provides deeper insight into the operational framework and autonomy level of AI systems. For instance, a chatbot that responds to users using language patterns falls under the category of systems that act like humans, while autonomous vehicles that react to their surrounding environment belong to the category of systems that act rationally.

In addition to behavioral classifications, AI is also categorized based on levels of intelligence into three main forms:

- a. Narrow AI (ANI): AI designed for specific tasks, such as facial recognition or automated recommendations.
- b. General AI (AGI): AI capable of performing various cognitive tasks at a human-like level (still theoretical).
- c. Super AI (ASI): AI that surpasses human intelligence and has not yet been realized in practice (Abqori & Riswandi, 2024).

2. The Legal Position of AI in the Indonesian Legal System

Within the Indonesian legal system, Artificial Intelligence (AI) is currently regarded as a technological instrument rather than an entity with legal rights and obligations. In other words, AI has not yet been recognized as a legal subject. Under Indonesia's positive law, legal subjectivity remains limited to two main entities: natural persons (*natuurlijke persoon*) and legal entities (*rechtspersoon*), as stipulated in civil law doctrine (Zahira, 2025).

Article 1320 of the Indonesian Civil Code states that for an agreement to be valid, there must be "the consent of the parties" and "legal capacity to enter into a contract." These two requirements are subjective in nature and presume that contracting parties must possess intent and legal responsibility. In this context, AI does not fulfill the elements of will and legal capacity, since its actions are entirely dependent on human programming and input (J.N., 2024).

Nevertheless, AI systems have become increasingly sophisticated in replicating decision-making processes, including generating legal contracts through automated mechanisms such as smart contracts and contract generators. This capability raises new legal questions: Can a contract generated by AI without explicit human involvement be deemed valid? And in the event of a dispute, who bears responsibility for the content or consequences of such contracts?

Some jurisdictions have attempted to address these issues through progressive legal approaches. Japan, for instance, has developed a legal framework that grants limited legal status to digital entities under specific conditions. Similarly, the European Union, through the EU Artificial Intelligence Act, is formulating principles of accountability and oversight for high-risk AI systems. Indonesia, however, has yet to establish a legal framework specifically regulating AI either as a contracting actor or as a decision-making system in administrative processes (Wahyudi, 2021).

Due to this regulatory vacuum, all legal responsibility for AI actions remains with the individuals or institutions that develop and operate the system. This approach reflects the principle of non-delegable responsibility, which holds that liability cannot be transferred to automated systems. This principle is particularly crucial in public sector and legal services to ensure human oversight and legal protection for affected parties (I.G.N., 2022).

Accordingly, under Indonesian law, AI should be positioned solely as a legal tool subject to human will and supervision. Given the rapid evolution of technology, there is a need to strengthen regulations that define the boundaries of AI's role in legal practice, including contractual and administrative processes. Clear legal provisions will ensure legal certainty, safeguard the rights of society, and uphold the principles of legality and justice in the application of modern legal technologies (Abqori & Riswandi, 2024).

3. Legal Subject and Contractual Capacity

In the Indonesian legal context, a contract is considered valid only when the contracting parties are recognized legal subjects and possess the necessary legal capacity. As stipulated in Article 1320 of the Indonesian Civil Code, a valid agreement must contain both subjective elements consent of the parties and legal competence and objective elements a specific object and a lawful cause. The subjective elements inherently require the presence of legal will and legal responsibility, which presuppose that the actors are capable of understanding, intending, and bearing the consequences of their actions.

Given this framework, AI cannot be regarded as a legal subject due to its lack of independent volition and capacity. AI operates based on pre-programmed instructions and machine learning models developed by humans. It neither understands nor intends legal consequences in the human sense. Therefore, AI cannot be held legally responsible, nor can it be said to exercise free will or act with legal intent (J.N., 2024).

As such, any legal transaction or contract that involves AI must include direct validation and control by a human legal subject—whether an individual or a legal entity. Contracts autonomously generated or executed by AI, without human oversight, would not meet the subjective requirements and could be deemed invalid or unenforceable under current Indonesian law.

The implications of this are particularly relevant in contexts where smart contracts or AI-based systems operate independently, potentially without clear documentation of human authorization. In such cases, the

question of who holds legal accountability becomes problematic, especially when disputes arise from errors, ambiguities, or omissions in AI-generated agreements.

This reinforces the importance of ensuring that AI systems remain within the legal control of humans. As long as AI is not recognized as a legal subject, the principle of human-centered responsibility must prevail. Contractual capacity cannot be ascribed to a system that lacks consciousness, moral agency, and legal standing. Therefore, the legal validity of AI-involved contracts continues to hinge upon the participation and acknowledgment of a human legal actor throughout the process.

D. Research and Discussion

1. The Role of AI in Contract Formation

Artificial Intelligence (AI) is increasingly being utilized in legal practice to assist in the formation of contracts. Through the use of technologies such as contract generators, smart contract platforms, and automated legal review systems, AI enables users to draft legal agreements more efficiently and consistently. These systems can analyze large volumes of legal data, identify standard clauses, and even suggest modifications based on risk assessments or compliance requirements.

The use of AI in contract formation is particularly prevalent in commercial sectors where speed, standardization, and efficiency are highly valued. For example, financial institutions and digital service providers may employ AI to generate agreements for routine transactions or user terms. In these instances, AI does not act as a party to the contract, but as a tool that streamlines the drafting and review process.

Despite these advantages, AI remains a passive instrument that lacks legal personality. It does not possess intent, legal understanding, or the capacity to enter into binding legal relations. Therefore, while AI can generate the content of a contract, it cannot fulfill the legal requirement of mutual consent (*consensus ad idem*) as mandated by Indonesian civil law. The validity of any AI-generated contract must still be anchored in human oversight and authorization.

This human validation is essential to uphold the enforceability of contracts and to ensure that the rights and obligations contained within are properly attributable to recognized legal subjects. Without such validation, there is a risk that the contract may be challenged or rendered void, especially in cases where errors, omissions, or legal ambiguities are present in the AI-generated content.

In essence, AI serves as an auxiliary mechanism in the contract formation process. Its role is complementary, not substitutive. The legal responsibility for contracts produced with the assistance of AI continues to reside with the individuals or entities that direct its use. This underscores the necessity of maintaining human control and accountability in all AI-assisted legal processes.

2. Analysis of Article 1320 of the Indonesian Civil Code in AI-Based Contracts.

Article 1320 of the Indonesian Civil Code sets out four essential conditions for the validity of a contract: (1) mutual consent of the parties, (2) legal capacity to enter into a contract, (3) a specific object, and (4) a lawful cause. These conditions are divided into subjective elements (consent and capacity) and objective elements (object and cause). A failure to fulfill the subjective elements may result in the contract being voidable, while a failure to fulfill the objective elements renders the contract null and void from the outset.

When examined through the lens of AI-assisted contract formation, the two subjective elements mutual consent and legal capacity pose the greatest legal obstacles. AI, by its very nature, lacks volition, consciousness, and legal awareness. It does not possess the cognitive ability to give or withhold consent, nor can it comprehend the legal implications of its actions. Consequently, AI cannot meet the requirement of “consent of the parties” as envisioned by Article 1320.

Furthermore, AI cannot be said to have “legal capacity,” as it is not recognized as a legal subject under Indonesian law. Legal capacity presupposes moral agency and the ability to be held accountable, both of which are absent in autonomous systems. Thus, a contract generated entirely by AI without any human intervention would fail to meet the legal standards set forth in Article 1320.

While AI may fulfill the objective requirements of a contract such as identifying a specific object and ensuring that the agreement concerns a lawful matter it still requires human involvement to satisfy the subjective elements. For this reason, any AI-generated contract must involve a natural person or legal entity who reviews, consents to, and assumes responsibility for the agreement.

In summary, Article 1320 serves as a legal safeguard to ensure that contracts are not only technically sound but also underpinned by human will and responsibility. The application of this article in the context of AI reinforces the principle that human agency remains indispensable in the formation of legally binding agreements. Contracts involving AI must be human-centered in order to maintain their validity and enforceability under Indonesian civil law.

3. Legal Challenges in AI-Generated Contracts

The integration of Artificial Intelligence (AI) into contract creation introduces a range of complex legal challenges. While AI systems offer increased efficiency and accuracy in generating contracts, their involvement raises fundamental concerns regarding responsibility, transparency, and legal certainty.

The primary issue lies in the attribution of legal responsibility. If an error occurs in a contract generated by AI such as ambiguous wording, misinterpretation of data, or inclusion of unlawful terms it

is not immediately clear who should bear the legal consequences. Given that AI lacks legal subjectivity, it cannot be held accountable. Under the current legal framework in Indonesia, the responsibility defaults to the human users or institutions that design, implement, or supervise the AI system. This model reflects the principle of non-delegable responsibility, which maintains that liability cannot be transferred to an automated system.

Another pressing concern is the lack of transparency and explainability in AI decision-making processes. Many AI systems, especially those based on deep learning, function as “black boxes,” producing outcomes without providing clear reasoning. In legal contexts, this opacity complicates efforts to audit, dispute, or rectify contractual terms, thereby undermining legal certainty and procedural fairness.

Moreover, the absence of digital traceability or audit trails in AI systems hinders evidentiary processes in court. If a contract dispute arises, parties may struggle to reconstruct how a particular contractual clause was generated or justified by the AI. This evidentiary gap weakens the enforceability of AI-generated contracts and may disincentivize their broader adoption in high-stakes legal transactions.

Comparative legal developments show that some jurisdictions are already working to mitigate these challenges. For instance, the European Union’s draft Artificial Intelligence Act mandates rigorous accountability and transparency standards for high-risk AI systems. However, Indonesia currently lacks a dedicated regulatory framework that addresses the legal use of AI in contract law.

In light of these challenges, it is imperative for Indonesia to develop legal norms that govern AI’s role in contract formation. This includes defining the boundaries of AI involvement, establishing mandatory human oversight mechanisms (human-in-the-loop), and ensuring the availability of audit tools to track AI activity. Legal reform in this area will not only protect the rights of contracting parties but also enhance public trust in the use of AI within legal processes.

E. Conclusion

This study reveals that the integration of Artificial Intelligence (AI) into the practice of contract law in Indonesia presents both substantial opportunities and critical legal challenges. On the one hand, AI offers significant benefits by increasing efficiency, precision, and consistency in the contract drafting process. AI systems can assist in generating standardized agreements, detecting potential legal risks, and improving access to legal services through automation. On the other hand, the legal status of AI remains problematic. As AI is not recognized as a legal subject under Indonesian law, it lacks the legal capacity and volition required to enter into binding legal agreements. According to Article 1320 of the Indonesian Civil Code, the validity of a contract requires mutual consent and legal competence two conditions that AI cannot independently fulfill. Consequently, AI may only serve as a supporting tool in

the contract-making process, with all legal responsibility resting on the human users or legal entities that operate the AI. Moreover, the absence of specific regulations governing AI in contract formation results in a normative vacuum that can potentially undermine legal certainty. In scenarios where AI acts without sufficient human oversight, issues of liability, transparency, and evidentiary support become significant obstacles to contract enforceability. Thus, the current position of AI in Indonesian law should remain as an auxiliary instrument (legal tool), not as an independent legal actor. Human involvement must be present at every stage of contract creation to ensure compliance with legal norms and principles. The findings of this study emphasize the urgent need for regulatory reform that explicitly defines the limits and responsibilities surrounding AI usage in legal contexts. Through such measures, Indonesia can harness the benefits of technological advancement while safeguarding the integrity of its legal system in the digital era.

F. Recommendations

The utilization of Artificial Intelligence (AI) in legal processes particularly in the drafting of contracts is an inevitable development in the digital era. However, to ensure that this transformation aligns with the foundational principles of law, it is essential to formulate comprehensive and specific regulations governing the use of AI in legal contexts.

First, it is imperative that legislation be introduced to clarify the legal status, responsibilities, and boundaries of AI in contract law. Such regulations should emphasize that AI is not a legal subject but a tool operating under human direction and supervision. This legal distinction is critical in maintaining human-centered accountability and ensuring that contracts retain their enforceability under the law (Wahyudi, 2021).

Second, the principle of human-in-the-loop must be institutionalized in all AI-assisted legal transactions. Human intervention should be mandatory at key decision-making points to prevent AI systems from acting autonomously in ways that may conflict with legal norms or ethical standards. This safeguards both procedural fairness and legal responsibility (I.G.N., 2022).

Third, AI systems used in the drafting and execution of contracts must be equipped with auditability and traceability features. The ability to review and verify AI decision-making processes is essential in addressing disputes, correcting errors, and upholding the evidentiary integrity of AI-generated legal documents (Sinulingga, 2024).

Fourth, legal literacy on digital technologies—including AI—must be enhanced among legal professionals, public administrators, and the general public. Educational initiatives, technical training, and professional development programs are necessary to ensure that all stakeholders are equipped to navigate the ethical, legal, and practical implications of AI in law (Made & Miranda, 2024).

By implementing these measures, Indonesia can proactively adapt its legal framework to the digital transformation, ensuring that technological innovation

is accompanied by legal certainty, justice, and the protection of fundamental rights.

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