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Topic: Human Right Issues of Artificial Intelligence (AI) Gaps and Challenges, and Affected Future Legal Development in Various Countries

The Utilization of Artificial Intelligence in the Design and Legality of Contracts According to Positive Law in Indonesia

Sukriyanto¹⁾, Bambang Tri Bawono²⁾ & Jawade Hafidz³⁾

¹⁾ Faculty of Law, Universitas Islam Sultan Agung (UNISSULA) Semarang, Indonesia, E-mail: Sukriyanto@gmail.com

²⁾ Faculty of Law, Universitas Islam Sultan Agung (UNISSULA) Semarang, Indonesia, E-mail: bambang@unissula.ac.id

³⁾ Faculty of Law, Universitas Islam Sultan Agung (UNISSULA) Semarang, Indonesia, E-mail: jawade@unissula.ac.id

Abstract. *The development of the current use of technology in the legal field by focusing on artificial intelligence in contract law. The utilization of artificial intelligence in the contract law sector aims to obtain efficiency and accuracy in making contract designs. Based on this, the authors are interested in conducting more profound research on the concept of utilizing artificial intelligence and how it works in the contract law sector. This research uses the normative law writing method. The research results explain that artificial intelligence in the legal sector is called legal- tech to facilitate contract drafter in designing, reviewing, and analyzing contracts through the smart contract feature. The smart contract feature has the ability as a contract generator system to create a complete contract design along with a legal analysis of the contracts and The research results explain that artificial intelligence in the legal sector is called legal-tech to facilitate contract drafter in designing, reviewing, and analyzing contracts through the smart contract feature. The smart contract feature has the ability as a contract generator system to create a complete contract design along with a legal analysis of the contract and to determine whether contracts made by AI fulfill the validity requirements in accordance with the provisions of Article 1320 of the Civil Code. As well as providing a better understanding of the legal implications and regulations relating to the use of AI in contract drafting*

Keywords: Artificial Intelligence; Contract Drafting; Contract Law.

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1. Introduction

Over the past two decades, a profound technological shift has been underway, driven by advancements in software and hardware. A key aspect of this progress is the merging of the virtual world with the real through the Internet of Things (IoT).¹ The latest development is an extreme change in perspective from "connected things" to "connected intelligence." Every emergence of scientific and technological revolution has been reflected not only in technology but also in shifts in human social structures, morals, law, and education throughout history. AI is coordinated with various disciplines, assuming a significant part in history and can influence the fate of mankind.²

Artificial intelligence, or AI for short, is a computer system that has a specific algorithm that allows it to act like a human. Artificial intelligence (AI) has the ability to correctly interpret external data, manage data, and use the processed results for specific purposes known as artificial intelligence, or intelligence added to a computing system.³

Contracts are becoming increasingly important in the business world, being created faster and faster over time. However, even though contracts contain important rights and obligations in business, organizations, and consumers, they are rarely read, reviewed, and understood thoroughly and in detail.⁴ Contracts created by AI become problematic because the status of AI does not yet have a clear legal position in positive law in Indonesia. According to the provisions of Article 1320 of the Civil Code, the conditions for the validity of a contract are legal capacity. A contract that is not valid is not applicable and cannot be enforced, therefore, the validity of a contract created by AI is a legal problem because it contradicts positive law in Indonesia.

The use of artificial intelligence to assist in the drafting of contracts is one of the uses of Legal Tech that is currently being developed by many countries around the world.⁵ The use of legal tech is to simplify the work of contract drafters in designing, reviewing, and analyzing contracts (smart contracts).⁶ The smart contract feature has the capability as a contract generator system to create a complete draft contract with a legal analysis of the contract. This feature offers accuracy in the standard form of a correct and standardized contract, legal diction, and precise language, so that the fairness and balance of the parties concerning the substance are regulated in detail.

¹ Ji Sun Park et al., "Smart Contract-Based Review System for an IoT Data Marketplace," Sensors The Utilization of Artificial Intelligence in the Design and Legality ...
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The legal position of AI needs to be regulated in the positive legal system in Indonesia. This regulation can be applied to a special law on AI as a legal subject, such as a legal entity. This regulation is intended to provide legal certainty regarding the person responsible for AI in terms of its legal acts, and the identity of AI can be made through an authentic deed.⁷ To position AI as a legal subject, there are two theories that can be transplanted, namely the fiction theory and the concession theory, which are basically theories of legal entities. Both theories view AI's actions as binding on the legal subject of the legal entity or individual who created or used it. AI in the development of law in the world is known as Legal tech. The application of AI to assist contract designers in designing, reviewing, and analyzing contracts is one of the uses of Legal Tech that is currently being developed by many countries around the world.⁸

The ability of AI to draft contracts raises a legal issue, namely whether contracts created by Artificial intelligence have the same legal validity as contracts created by humans. This is important to understand because in Indonesia, positive law regulates the requirements and principles that must be met for a contract to be considered valid, such as agreement between the parties involved, the existence of a tradable object, and a purpose that does not conflict with law and morality.

2. Research Methods

This study employs a normative legal research method to address the issue at hand. The research generates legal references in the form of concepts for the utilization of artificial intelligence (AI) in the legal contract sector, the development and challenges of its

(Switzerland) 18, no. 10 (2018): p.1–16

² Yuchen Jiang et al., "Quo Vadis Artificial Intelligence," Discover Artificial Intelligence 2, no. 1 (2022), P.23-24

³ Margaret A Goralski and Tay Keong, "The International Journal of Artificial Intelligence and Sustainable Development" 18, no. June 2019 (2020), P169

⁴ Mattias Rättzén, "AUTOMATED CONTRACT REVIEW : CHALLENGES AND OUTCOMES OF A DATA ANNOTATION FRAMEWORK," 2022, Jurnal hukum P.225

⁵ Aditya Kurniawijaya et al April 2021 "THE UTILIZATION OF ARTIFICIAL INTELLIGENCE IN DRAFTING CONTRACTS AND ITS IMPACT ON THE LEGAL SECTOR IN INDONESIA" Jurnal hukum P.25

⁶ Kurniawijaya et al 2020, "THE UTILIZATION OF ARTIFICIAL INTELLIGENCE IN DRAFTING CONTRACTS AND ITS IMPACT ON THE LEGAL SECTOR IN INDONESIA." Jurnal hukum P.123

⁷ MRMF Failaq, "Transplantation of Fiction Theory and Legal Entity Concession to Animals and Artificial Intelligence as Legal Subjects: 1. Legal Subjects: Rights and Obligations" Jurnal Hukum Dan HAM Wara Sains 1, no. 02 (2022): P.121

⁸ Kurniawijaya et al., "THE UTILIZATION OF ARTIFICIAL INTELLIGENCE IN DRAFTING CONTRACTS AND ITS IMPACT ON THE LEGAL SECTOR IN INDONESIA. Jurnal hukum P.32-33

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implementation in Indonesia, and an exploration of the legality of contracts created by AI under Indonesian positive law.

The research type used is a normative juridical approach. This research approach utilizes a statute approach and a conceptual approach. The legal materials used consist of primary legal materials, including laws governing civil matters and laws regulating AI. Secondary legal materials include journals and scientific articles discussing the legal status of AI and legal tech.

The technique for collecting legal materials in normative legal research is carried out through library research, which involves secondary data as the basis for research by tracing regulations and other literature related to the research problem. The data analysis method⁹ used is descriptive analysis. By understanding the legality of AI-generated contracts under Indonesian positive law, this research aims to provide a better understanding of the legal and regulatory implications of using AI in contract creation. The results of this study can serve as a basis for developing

3. Results and Discussion

3.1. 1. The Concept of Utilizing Artificial Intelligence in the Indonesian Contract Law Sector

Terminologically, Minsky defines artificial intelligence as a machine that is capable of doing various things like humans in using their intelligence. Artificial intelligence is designed to describe the quality of human life, such as work planning, problem solving, reasoning, recognition of ideas or concepts, stimulating thinking skills, and various other activities that can spur fast and efficient work.¹⁰ Furthermore, Stuart Russell and Peter Norvig argue that the capabilities of artificial intelligence can be grouped into four, namely: systems that can think like humans, systems that can act like humans, systems that can think rationally, and systems that can act rationally.¹¹

⁹ K Benuf and M Azhar, "Methodology of Legal Research As an Instrument to Unravel Contemporary Legal Problems," *Hukum: Jurnal Ilmu Hukum* 1 (2020), P.54

¹⁰ Darshan Bhora and Kuldeep.Shravan, "Demystifying the Role of Artificial Intelligence in Legal Practice," *Nirma University Law Journal* 8, no. 2 (2019): P.1–13.

¹¹ Stuart Russell and Peter Norvig, *Artificial Intelligence : A Modern Approach*, Third Edit. (Upper Saddle River: Prentice Hall, 2020). P.123-124

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Artificial intelligence has experienced rapid development because many research results have been published and have produced practical products that are marketed globally, thus bringing benefits to users.

The utilization of artificial intelligence in the legal sector has reached the field of contract law. A contract is a legal relationship between two or more parties based on an agreement to give rise to legal consequences in the form of rights and obligations that must be fulfilled by the parties involved¹². Parties in designing a contract must fulfill five principles as stated in the Civil Code (KUH Perdata). First, the principle of freedom to contract based on Article 1338 paragraph (1) of the Civil Code. Second, the principle of consensualism based on Article 1320 paragraph (1) of the Civil Code. Third, the principle of legal certainty or the principle of *pacta sunt servanda* relating to the consequences of an agreement. Fourth, the principle of good faith based on Article 1338 paragraph (3) of the Civil Code¹³. Fifth, the principle of personality based on Article 135 and Article 1340 of the Civil Code.

This feature intelligence concept uses a deep learning system or technique that consists of an algorithm for high-level abstraction modeling on data using non-linear transformation functions arranged in layers and in-depth as used in various applications for image recognition, sound, and text classification based on meta-data, so that automatically this deep learning will display a direct representation of the input data, whether in the form of images, videos, or text, in order to support its role as a Contract Generator Systems¹⁴

The use of the deep learning concept allows the AI-based contract design feature to further improve the ability to compile standard contract forms, analysis, selection of diction, and the variety of types of contracts that it can create. The more often the contract design software is used, the more data is input into the software, where the system will store the data as a knowledge enrichment. AI will combine machine learning and the ability to learn from data without rule-based programming. Furthermore, the more knowledge or data that the device has, the smarter the device will be. The use of artificial intelligence in contract design shows many benefits in the legal field, especially in terms of efficiency of time and costs, as well as human resources. Currently, the ability of artificial intelligence as a lawyer's assistant is still not

¹² Salim H.S., *Contract Design & Memorandum of Understanding (MoU)* (Jakarta: Sinar Grafika, 2007). P.22

¹³ Andi Sri Rezky Wulandari and Abd. Basir, "Application of Profit Sharing Principle in Financing at Islamic Banks According to Islamic Banking Law," *Khatulistiwa Law Review* 1, no. 1 (2020): P.61–76.

¹⁴ Lincoln Tsang et al., "The Impact of Artificial Intelligence on Medical Innovation in the European Union and United States," *Intellectual Property & Technology Law Journal* 29, no. 8 (2017): P.1–8.

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perfect, but it does not rule out the possibility of not stopping developing in terms of quality, ability, and time.

AI can be considered a legal subject according to several theories above, which make AI have a legal status as an object or legal entity. However, the owner or user of AI is responsible for the actions of AI. Contracts made by AI are considered valid under Indonesian positive law, because they meet the requirements of validity in accordance with article 1320 of the Civil Code. AI's ability to design, review, and analyze contract documents can assist in the creation of contracts. The development of AI is considered a breakthrough in law that allows AI to become a legal subject. AI can act without human consciousness, which has proven its ability to outperform human capabilities in several aspects. AI can be considered a legal subject with the creation of a special law for AI, similar to a legal entity. This aims to provide legal certainty regarding AI's actions and to recognize AI's identity through authentic deeds.¹⁵

Regulations created for AI must be based on the principles of humanity and justice for society, in accordance with the principles of progressive law.¹⁶ In general, large companies around the world have developed AI as a tool to help create contracts, this provides benefits in the form of efficiency of time, effort and cost.

Law firms currently rely on paralegals and researchers to search for data, index, discovery and information processing. However, by using AI, law firms can save time, workload and a faster judicial process.¹⁷

3.2. Legal Implications of Using Artificial Intelligence (AI) in Contract Formation in Indonesia

The advancement of technology in the past two decades, including the development of AI, has fundamentally changed the way we interact with technology. AI has been used in various fields, including contract design, raising questions about the validity of AI-generated contracts. This research focuses on understanding AI as a legal subject. Although AI is a technology created by humans, it has the ability to design, analyze, and create contracts with a level of competence

¹⁵ Jaya and Goh, "Juridical Analysis of the Position of Artificial Intelligence as a Legal Subject in Indonesian Positive Law." *Jurnal hukum* 2020 P.43

¹⁶ Qur'ani Dewi Kusumawardani, "Progressive Law And The Development Of Artificial Intelligence Technology," *Veritas et Justitia* 5, no. 1 (2019): P.166.

¹⁷ *Ibid* P.34

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that increasingly approaches human capabilities. Therefore, this research attempts to determine whether AI can be considered a legal subject or merely a legal object.

The European Parliament's White Paper on Artificial Intelligence takes an approach to promote European innovation capacity in AI while supporting the development and adoption of ethical and trustworthy AI. AI should work for people and be a force for good in society¹⁸. The human rights organization, Algorithm Watch, emphasizes that the implementation of specific regulations for AI should not be dependent on the type of technology, but rather focus on its impact on individuals and society. They call for any new regulations to be identified in accordance with the impact caused by AI.

The Indonesian government can learn from the European approach to AI development. Regulations should consider the aspects of supervision, technical security, privacy and data management, justice, community and environmental well-being, and accountability. These principles focus on how to use AI ethically,¹⁹ legally, and morally. AI as a technology is permanent and consistent, easy to implement, and can perform many tasks. Specifically, the use of AI will be more creative and innovative.

AI can be used in various stages of the contract formation process, from semi-automatic drafting to contract management. The ability of AI to process information about the object of the agreement and the responsibility of the parties entering into the agreement are also discussed in the context of Indonesian positive law. The development of AI is not something that should be hindered or stopped; Indonesia must embrace AI and promote it as an aspect of legal history in terms of using AI.²⁰

The use of legal technology, including AI, in legal practice also requires appropriate regulation. Legal technology can improve efficiency in contract creation and analysis, but it needs to be regulated to comply with applicable legal principles and to maintain fairness and legal certainty. Existing principles and rules of contract design must remain relevant in the use of AI. While AI can assist in the contract design process, principles such as good faith, risk allocation, and

¹⁸ European Commission, "On Artificial Intelligence - A European Approach to Excellence and Trust EN," *Journal of Chemical Information and Modeling* 53, no. 9 (2020): P.1689–1699

¹⁹ Keng Siau and Weiyu Wang, "Artificial Intelligence (AI) Ethics: Ethics of AI and Ethical AI," *Journal of Database Management* 31, no. 2 (2020): P.74–87,

²⁰ Niteesh Kumar Upadhyay and Mahak Rathee, "Impact of Artificial Intelligence on Intellectual Property Rights," *Proceedings of International Young Scholars Workshop*.9 (2020): P.52–71"

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compensation must still be observed. Additionally, personal data protection is a major concern, especially when using AI in contract formation. Applicable regulations, such as the Personal Data Protection Act, must be complied with to protect the privacy and security of information contained in contracts.

To address the ambiguity regarding the legal status of AI, consideration should be given to creating specific regulations governing AI as a legal subject. This would help provide a clearer and more definitive framework for the use of AI in contract law in Indonesia. To address this complexity, it is essential to involve various experts, including legal, technological, and ethical experts, in the process of creating and implementing regulations that are consistent with the development of AI in contract formation. Good regulation will ensure that the use of AI in contract law remains within the boundaries of applicable law and maintains fairness and legal certainty.

4. Conclusion

The research shows that AI can be considered a legal subject by considering various theories that regulate it as a legal entity or object. However, the unclear legal status of AI remains a challenge, and special regulations need to be considered to regulate AI as a legal subject. The validity of AI contracts must meet the applicable legal requirements, including a clear agreement, AI's legal capacity, the object of the contract, and a valid reason. The principles and principles of existing contract design must also be applied in the use of AI in contract creation. Personal data protection also needs to be considered in this context. Based on the description of the conclusion in this study, the researcher suggests the need to create specific regulations governing the legal status of AI as a legal subject in Indonesia to provide a clear framework, as well as research the impact of using AI in contract creation on efficiency, privacy, and data security. In addition, research should explore the legal requirements that must be met by AI in contract creation, consider the ethical implications of using AI, and develop more sophisticated AI technology in future legal practice.

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